

GEOLOGICAL SURVEY OF NEW JERSEY.

FINAL REPORT

OF THE

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VOL. II.

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ZOOLOGY.

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**PART 2.**

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ZOOLOGY.

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## CATALOGUE OF INSECTS FOUND IN NEW JERSEY.

BY JOHN B. SMITH.

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## CATALOGUE OF INSECTS FOUND IN NEW JERSEY.

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### INTRODUCTION.

Any faunal list making pretense to completeness, must be based upon years of careful collecting and observation, not by one, but by many individuals. In my work of compiling the present list I have been hampered in every possible direction, and incompleteness of the work will, I hope, be not entirely charged as incompetence in the compiler. The labor on material for the list has been confined to the few spare hours I could gather from a summer's active field-work, and to about three weeks' work in compiling the results obtained from my correspondents. New Jersey offers quite distinct contrasts in her geological features, and, as this influences the botany to a very large extent, it necessarily also affects the character of the insect fauna. There are no large general collections of insects in the State, and records of this kind were shut off. Collectors of insects are few, and are massed in two or three localities, hence many parts of the State are entirely unexplored, and the contrasts between the fauna of the sandy pine-barren region and of the rocky Orange mountain district are not well brought out. Collectors lacking, little material has come into the hands of the systematists, and hence there are few references in the literature to New Jersey as the home of species. Pennsylvania and New York are constantly referred to. New Jersey seldom. The material for a list of insects was therefore not to be sought in literature. In Philadelphia there are a number of active collectors who do a large part of their collecting in this State. From some of these I have obtained most valuable lists of captures. The excursions made by these gentlemen were generally confined to the Camden and Gloucester county region, or extended to the sea-shore—a part of the pine

(3)

#### 4 GEOLOGICAL SURVEY OF NEW JERSEY.

barrens was therefore covered, but not nearly as thoroughly as desirable. Unfortunately these gentlemen were all collectors of *Coleoptera* or of *Lepidoptera*, and in *Lepidoptera* of only small portions of the order. So far as the fauna of the pine barrens is concerned, we know absolutely nothing of it save in *Coleoptera* and *Lepidoptera*. In Newark and its immediate vicinity are a number of collectors who have formed an Entomological Society, which holds semi-monthly meetings. This society and its members have furnished me valuable lists giving the collective experiences of its members. These lists are cited in the following pages as the "Newark List," and the species are generally taken not many miles from the city of Newark. As this includes territory from salt marshes to mountain, further specialization in future lists will be desirable. As in Philadelphia, all the collectors confine themselves to *Coleoptera* or *Lepidoptera*, and in *Lepidoptera* none collect the micros, so called. The only collector who has a general collection of any size is Mr. M. S. Crane, of Caldwell, and from him I had lists in *Hymenoptera*, *Hemiptera*, *Diptera*, *Orthoptera*, *Neuroptera*, *Coleoptera* and *Lepidoptera*, which proved of the greatest assistance to me. In the cities of New York and Brooklyn there are a considerable number of entomologists and collectors who do a great deal of their collecting in New Jersey, and some of these have added materially to the completeness of the present list. As usual, these gentlemen confine themselves to *Coleoptera* and *Lepidoptera*. Had the time been less pressing I could probably have gotten further aid from these gentlemen, but the collecting season and immediately after are bad times to expect aid from entomologists. It will be noticed that, except in *Coleoptera* and *Lepidoptera*, New Jersey is practically unexplored, and even in the collected orders, northern and northwestern New Jersey are entirely unrepresented. These facts must be my excuse for any incompleteness in the list. So far as my own collections are concerned, I must say that I lived in the city of Brooklyn during the period of my most enthusiastic collecting days and that many a pleasant day was passed in the hills back of Montclair, in the woods near Fort Lee, or in early spring along the foot of the Palisades from Hoboken to Weehawken and further north. I have also spent many pleasant days on Dr. Brakeley's plantations in Ocean county and have taken many good species there. As I collected in all orders, I have been able to add considerable to all lists, from my own experience.

To specialize: In the *Hymenoptera* I have used Mr. E. T. Cres-

## CATALOGUE OF INSECTS.

5

son's classification and list as a guide, and have included all the species marked by him as occurring in New Jersey, as well as those so distributed that their occurrence in the State is certain. Mr. M. S. Crane furnished me with a very good list of his captures, and, supplemented by my own experience, this added to the accuracy of the list. Finally, by the courtesy of the American Entomological Society, I was enabled to examine the E. T. Cresson collection of *Hymenoptera*, from which I gleaned many New Jersey species, and Mr. Geo. B. Cresson, the curator of the Society, kindly gave me a list of specimens recently taken near Westville, all of which aided in completing the list.

In *Coleoptera*, the Henshaw check list has been my guide. Messrs. Charles Liebeck and Henry W. Wenzel, of Philadelphia, have furnished me most excellent annotated lists of the species taken by them. The Newark list was very full in some families and forms an important part of the record. In the *Carabidae*, a list of the species taken near New York by Mr. F. G. Schaupp, which I aided in compiling some years ago, furnished many species. In the families of rove and water beetles (*Staphylinidae*, *Dytiscidae*, *Hydrophilidae*, &c.), all the general lists were poor, and as my own collection, now in the United States National Museum, contained many species from this State, I obtained, through the courtesy of Mr. Howard, acting for Professor Riley, a list of these species in the National Museum.

Mr. M. L. Linell, Professor Riley's aide in the museum, also kindly furnished me with a partial list of his collections in New Jersey, and these were very valuable.

Dr. John Hamilton, of Allegheny, Pennsylvania, had passed a short season in September at Brigantine Beach for some years past, and his list of captures was of extreme interest. Mr. C. H. Roberts, who makes rather a specialty of aquatic *Coleoptera*, furnished me with a list of the New Jersey specimens in his collection, which largely supplemented the other lists. Mr. W. Julich, of New York, gave a most excellent list of *Rhynchophora* taken by himself. Mr. Fred. C. Paulmier, of Madison, N. J., furnished me a list of captures, which, though small in extent, was still valuable as adding facts in the distribution of some species. A few days spent in collecting at Anglesea, near Cape May, in company with Messrs. E. A. Schwarz, of Washington, and H. W. Wenzel, of Philadelphia, produced a large number of species which were kindly determined and listed by Mr. Schwarz. Finally, to the courtesy of Dr. Horn I owe an opportunity of examining his

## 6 GEOLOGICAL SURVEY, OF NEW JERSEY.

extensive collection, and from this I obtained many records not on other lists. The list in *Coleoptera* is very fairly complete in most families. Mr. Samuel Henshaw, of Cambridge, also sent me a short list containing several species not elsewhere noted.

In *Lepidoptera*, the list furnished by the Newark society was the base. In the *Rhopalocera*, Mr. E. M. Aaron, of Philadelphia, gave me a most valuable list, and the records in the lists and works of Messrs. Strecker, Edwards and Scudder, supplemented by my own experience, have made this part of the list almost complete. Mr. Scudder's order of genera has been followed.

In the *Sphingid* and *Zygænid* families, my own works have been followed, and I believe the list to be nearly complete. In the balance of the Macro-Lepidoptera, Mr. Grote's list has been, in the main, followed; the Newark list being supplemented chiefly by my own experience. In the *Geometridæ* and *Pyralidæ*, Rev. Geo. D. Hulst, of Brooklyn, has furnished the material for the list almost as it stands. In the *Tortricidæ*, Professor Fernald's catalogue has given me most of the information. In the *Tineidæ*, Mr. Wm. Beutenmüller, of the American Museum of Natural History, has furnished the entire list, which is based almost exclusively upon his own collections and observation. Mr. Simon Seib, of Newark, gave me a list containing many dates, and this has been utilized as far as possible.

In the *Diptera*, Baron Osten-Sacken's catalogue has been my guide, supplemented in the *Syrphidæ* by Dr. S. W. Williston's excellent monograph. Mr. Crane furnished me with a record of his captures in this order, and this, in addition to my own observations, gives a basis of fact to this part of the list.

In the *Orthoptera*, Mr. Lawrence Bruner, of Lincoln, Nebraska, has kindly furnished the list, which I have used exactly as he sent it, simply adding the records obtained from Mr. Crane and my own collecting. All the matter in brackets [ ] represents additions by myself.

In the *Hemiptera-Heteroptera*, Uhler's check list has been my guide, supplemented by Mr. Crane's records and my own collections.

In the *Hemiptera-Homoptera*, Mr. W. H. Ashmead, of Jacksonville, Fla., has kindly furnished the list, and very little, indeed, has been added to it by Mr. Crane's records and my own collecting.

In the *Neuroptera*, Dr. Hagen's synopsis has been my guide. Mr. Crane's list contained many species. I took many myself during the

## CATALOGUE OF INSECTS.

7

season. In running over the collection of the American Entomological Society I obtained a few records not otherwise obtainable.

The *Thysanura* have been entirely omitted, since there have been absolutely no collections made and no lists exist.

For much the same reasons all reference to the sub-class *Arachnida* and *Myriapoda* has been omitted, though the *Arachnida* at least are well represented in the State.

Finally, I desire to thank, most sincerely, the gentlemen who by their courtesy and assistance have enabled me to give to the present catalogue its measure of completeness.

## CATALOGUE OF INSECTS.

**Family TENTHREDINIDÆ.****Sub-Family CIMBICINÆ.****CIMBEX, Oliv.**

**C. americana, Leach.**

Common at Caldwell—Crane.

**TRICHIOSOMA, Leach.**

**T. triangulum, Kirby.**

**ZARÆA, Leach.**

**Z. americana, Cress.**

**Z. inflata, Norton.**

**ABIA, Leach.**

**A. cerasi, Fitch.**

**ACORDULECERA, Say.**

**A. dorsalis, Say.**

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**Sub-Family HYLOTOMINÆ.****SCHIZOCERUS, Latr.**

**S. ebenus, Norton.**

**S. plumiger, Klug.**

**S. sericeus, Norton.**

## 8 GEOLOGICAL SURVEY OF NEW JERSEY.

**ATOMACERA, Say.****A. ruficollis**, Norton.**THEMOS, Norton.****T. hyaline**, Norton.**HYLOTOMA, Latr.****H. abdominalis**, Leach.**H. cœrulea**, Norton.**H. humeralis**, Beauv.

New Jersey specimens are in Mr. Cresson's collection.

**H. macleayi**, Leach.**H. pectoralis**, Leach.**H. rubiginosa**, Beauv.**H. rubra**, Klug.**H. scapularis**, Klug.

Rare at Caldwell—Crane.

**Sub-Family TENTHREDININÆ.****OLADIUS, Illig.****C. isomera**, Harris.**PRIOPHORUS, Dahlb.****P. æqualis**, Norton.**PRISTIPHORA, Latr.****P. grossulariæ**, Walsh.**P. identidem**, Norton.**P. tibialis**, Norton.**EUURA, Newn.****E. orbitalis**, Norton.**E. salicis-nodus**, Walsh.**E. salicis-ovum**, Walsh.

## CATALOGUE OF INSECTS.

9

**ORÆSUS, Leach.****C. latitarsus,** Norton.**NEMATUS, Jur.****N. aureopectus,** Norton.**N. bivittatus,** Norton.**N. chloreus,** Norton.**N. concolor,** Norton.**N. corniger,** Norton.

New Jersey specimens are in Mr. Cresson's collection.

**N. erythrogaster,** Norton.**N. fulvipes,** Norton.**N. integer,** Say.

New Jersey specimens are in Mr. Cresson's collection.

**N. lateralis,** Norton.**N. longulicornis,** Norton.**N. luteolus,** Norton.**N. luteotergum,** Norton.**N. pallicornis,** Norton.**N. proximatus,** Norton.**N. ribesii,** Scop.

I have taken this in the State, myself. It is the common currant slug. Common at Caldwell—Crane.

**N. similaris,** Norton.**N. subalbatus,** Norton.**N. trilineatus,** Norton.**N. trivittatus,** Norton.**N. ventralis,** Say.

New Jersey specimens are in Mr. Cresson's collection.

**N. vertebratus,** Say.**MESSA, Leach.****M. hyalina,** Norton.**FENUSA, Leach.****F. ambigua,** Norton.

## 10 GEOLOGICAL SURVEY OF NEW JERSEY.

**EMPHYTUS, Klug.**

- E. apertus**, Norton.  
**E. cinctipes**, Norton.  
**E. inornatus**, Say.  
**E. mellipes**, Norton.

**HARPIPHORUS, Hartig.**

- H. maculatus**, Norton.  
**H. semicornis**, Say.  
**H. tarsatus**, Say.  
**H. testaceus**, Norton.  
**H. varianus**, Norton.  
**H. versicolor**, Norton.

**DOLERUS, Jur.**

- D. abdominalis**, Norton.  
    Taken at Caldwell by Mr. Crane.  
**D. albifrons**, Norton.  
    Taken at Caldwell by Mr. Crane.  
**D. apricus**, Norton.  
    I have taken this myself in New Jersey.  
**D. arvensis**, Say.  
    I have taken this at New Brunswick, in early spring; not common.  
**D. bicolor**, Beauv.  
    New Jersey specimens are in Mr. Cresson's collection.  
**D. collaris**, Say.  
**D. maculicollis**, Norton.  
**D. sericeus**, Say.  
**D. similis**, Norton.  
**D. unicolor**, Beauv.  
    Taken at Caldwell by Mr. Crane.

## CATALOGUE OF INSECTS.

11

## BLENNOCAMPA, Hartig.

*B. capitalis*, Norton.*B. pygmaea*, Say.

I have taken this in New Jersey.

## MONOPHADNUS, Hartig.

*M. caryæ*, Norton.*M. tiliæ*, Norton.

New Jersey specimens are in Mr. Cresson's collection.

*M. marginicollis*, Norton.*M. medius*, Norton.

Recorded from New Jersey.

*M. rubi*, Harris.*M. tiliæ*, Norton.

## PHYMATOCERA, Dahlb.

*P. fumipennis*, Norton.

New Jersey specimens are in Mr. Cresson's collection.

*P. nubilipennis*, Norton.*P. rufidus*, Norton.

## HOPLOCAMPA, Hartig.

*H. halcyon*, Norton.

## CALIROA, Costa.

*C. obsoleta*, Norton.

## MONOSTEGIA, Costa.

*M. ignota*, Norton.*M. quercus-alba*, Norton.*M. rosæ*, Harris.

I have taken this in New Jersey.

## ERIOCAMPA, Hartig.

*E. cerasi*, Peck.

I have seen this in the State.

*E. fasciata*, Norton.

## 12 GEOLOGICAL SURVEY OF NEW JERSEY.

**SELANDRIA, Leach.****S. flavipes**, Norton.

New Jersey specimens are in Mr. Cresson's collection.

**S. media**, Norton.

New Jersey specimens are in Mr. Cresson's collection.

**ALLANTUS, Jur.****A. basilaris**, Say.

I have taken this myself, not rarely.

**LABIDIA, Prov.****L. originalis**, Norton.**SIOBLA, Cam.****S. excavata**, Norton.**MACROPHYA, Dahlb.****M. albomaculata**, Norton.**M. epinota**, Say.**M. externa**, Say.

Taken by Mr. Crane, at Caldwell.

**M. flavicoxæ**, Norton.

New Jersey specimens are in Mr. Cresson's collection.

**M. formosa**, Klug.

New Jersey specimens are in Mr. Cresson's collection.

**M. fuliginea**, Norton.**M. goniphora**, Say.**M. incerta**, Norton.Mr. Cresson has specimens from all surrounding States, and  
the species is almost certain to occur here.**M. intermedia**, Norton.**M. nigra**, Norton.**M. pannosa**, Say.**M. pulchella**, Klug.

Mr. Cresson has specimens from all surrounding States.

## CATALOGUE OF INSECTS.

13

**M. tibiator**, Norton.

New Jersey specimens are in Mr. Cresson's collection.

**M. trisyllaba**, Norton.

New Jersey specimens are in Mr. Cresson's collection.

**M. trosula**, Norton.**M. varia**, Norton.**PACHYPROTASIS**, Hartig.**P. omega**, Norton.**TAXONUS**, Hartig.**T. albidopictus**, Norton.**T. dubitatus**, Norton.**T. multicolor**, Norton.**T. nigrisoma**, Norton.**T. unicinctus**, Norton.**STRONGYLOGASTER**, Dahlb.**S. apicalis**, Say.**S. epicera**, Say.**S. mellosus**, Norton.**S. pallidicornis**, Norton.**S. pallipes**, Say.**S. pinguis**, Norton.**S. rufocinctus**, Norton.**S. tacitus**, Say.**S. terminalis**, Say.**TENTHREDO**, Linn.**T. angulata**, Norton.**T. angulifera**, Norton.**T. eximia**, Norton.**T. flavomarginis**, Norton.**T. grandis**, Norton.**T. lineata**, Prov.**T. lobata**, Norton.

## 14 GEOLOGICAL SURVEY OF NEW JERSEY.

*T. mellina*, Norton.*T. ruficolor*, Norton.*T. rufipes*, Say.*T. rufopectus*, Norton.

Taken at Caldwell by Mr. Crane; also in Mr. Cresson's collection from the State.

*T. rufopediba*, Norton.*T. signata*, Norton.*T. tricolor*, Norton.*T. verticalis*, Say.**TENTHREDOPSIS, Costa.***T. atroviolacea*, Norton.

Mr. Cresson has specimens from New Jersey.

*T. confusa*, Norton.*T. semilutea*, Norton.

New Jersey specimens are in Mr. Cresson's collection.

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**Sub-Family LYDINÆ.****LOPHYRUS, Latr.***L. abbotii*, Leach.*L. akhurstii*, Norton.

Recorded from New Jersey only.

*L. lecontei*, Fitch.**LYDA, Fabr.***L. apicalis*, Westw.*L. discolor*, Cress.*L. excavata*, Norton.*L. fasciata*, Norton.*L. inconspicua*, Norton.*L. luteicornis*, Norton.*L. maculiventris*, Norton.

## CATALOGUE OF INSECTS.

15

- L. ocreata*, Say.  
*L. pallimacula*, Norton.  
*L. plagiata*, Klug.  
*L. tesselata*, Klug.
- 

## Sub-Family XYELINÆ.

## XYELA, Dalm.

- X. minor*, Norton.
- 

## Family UROCERIDÆ.

## CEPHUS, Latr.

- C. abbreviatus*, Say.  
*C. integer*, Norton.  
*C. trimaculatus*, Say.

## ORYSSUS, Latr.

- O. sayi*, Westw.  
*O. terminalis*, Newn.

## XIPHYDRIA, Latr.

- X. abdominalis*, Say.  
*X. albicornis*, Harris.  
*X. attenuata*, Norton.

New Jersey specimens are in Mr. Cresson's collection.

- X. tibialis*, Say.

## UROCERUS, Geoff.

- U. abdominalis*, Harr.  
*U. albicornis*, Fabr.  
*U. cressoni*, Norton.

New Jersey specimens are in Mr. Cresson's collection.

- U. cyaneus*, Fabr.  
*U. edwardsii*, Brullé.  
*U. flavigornis*, Fabr.  
*U. nigricornis*, Fabr.

New Jersey specimens are in Mr. Cresson's collection.

## 16 GEOLOGICAL SURVEY OF NEW JERSEY.

**TREMEX, Jur.****T. columba, Linn.**

Reported as injuring pear trees during the summer of 1889.  
I have taken it at Greenville and at New Brunswick. It occurs  
all over the State. Common at Caldwell—Crane.

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**Family CYNIPIDÆ.****Sub-Family IBALIINÆ.****IBALIA, Latr.****I. ensiger, Norton.****I. maculipennis, Hald.****Sub-Family CYNIPINÆ.****RHODITES, Hartig.****R. bicolor, Harr.****R. dichlocerus, Harr.**

Taken at Caldwell by Mr. Crane.

**R. ignota, O. S.****R. radicum, O. S.****R. rosæ, Linn.****R. verna, O. S.****DIASTROPHUS, Hartig.****D. nebulosus, O. S.****D. radicum, Bass.****D. similis, Bass.****AMPHIBOLIPS, Reinh.****A. ilicifoliae, Bass.****A. inania, O. S.****A. spongifica, O. S.**

Taken at Caldwell by Mr. Crane.

## CATALOGUE OF INSECTS.

17

**ANDRICUS, Hartig.**

- A. clavula, Bass.**
- A. cornigera, O. S.**
- A. seminator, Harris.**
- A. chinquapin, Fitch.**
- A. fusiformis, O. S.**
- A. tubicola, O. S.**

**CYNIPS, Linn.**

- C. batatus, Fitch.**

**BIORHIZA, Westw.**

- B. nigra, Fitch.**

**LOXAULUS, Mayr.**

- L. mammula, Bass.**

**HOLCASPIS, Mayr.**

- H. globulus, Fitch.**
- H. rugosa, Bass.**

**DRYOPHANTA, Först.**

- D. polita, Bass.**

Recorded from New Jersey.

- D. papula, Bass.**

- D. ignota, Bass.**

**NEUROTERUS, Hartig.**

- N. majalis, Bass.**

- N. saltatorius, H. Edw.**

**Sub-Family INQUILINÆ.****PERICLISTUS, Först.**

- P. sylvestris, O. S.**

**CEROPTRES, Hartig.**

- C. petiolicola, O. S.**

- C. tuber, Fitch.**

B

## 18 GEOLOGICAL SURVEY OF NEW JERSEY.

**SYNERGUS, Hartig.**

- S. campanula**, O. S.  
**S. dimorphus**, O. S.  
**S. lœviventris**, O. S.  
**S. lana**, Fitch.  
**S. lignicola**, O. S.  
**S. oneratus**, Harris.
- 

**Sub-Family ALLOTRIINÆ.****ALLOTRIA, Westw.**

- A. avenæ**, Fitch.  
**A. tritici**, Fitch.
- 

**Sub-Family FIGITINÆ.****EUCOILA, Westw.**

- E. pedata**, Say.

**FIGITES, Latr.**

- F. impatiens**, Say.
- 

**Family EVANIIDÆ.****AULACUS, Jur.**

- A. fasciatus**, Say.  
**A. stigmaterus**, Cress.

Recorded from New Jersey.

**FŒNUS, Fabr.**

- F. tarsatorius**, Say.

**EVANIA, Fabr.**

- E. appendigaster**, Linn.

**HYPTIA, Illig.**

- H. reticulatum**, Say.  
Caldwell—Crape.

## CATALOGUE OF INSECTS.

19

## Family ICHNEUMONIDÆ.

## Sub-Family ICHNEUMONINÆ.

## ICHNEUMON, Linn.

*I. acerbus*, Cress.*I. agnitus*, Cress.*I. annulatus*, Prov.*I. annulipes*, Cress.*I. apertus*, Cress.*I. ater*, Cress.*I. azotus*, Cress.*I. brevicinctor*, Say.*I. brevipennis*, Cress.*I. brontœus*, Cress.*I. cœruleus*, Cress.

New Jersey specimens are in Mr. Cresson's collection.

*I. centrator*, Say.

I have taken this myself within New Jersey.

*I. cincticornis*, Cress.*I. citrifrons*, Cress.*I. comes*, Cress.*I. comptus*, Say.

Taken at Caldwell by Mr. Crane.

*I. confirmatus*, Cress.*I. consignatus*, Cress.*I. creperus*, Cress.*I. devinctor*, Say.*I. duplicatus*, Say.

I have taken this myself in the State.

*I. extrematatis*, Cress.*I. feralis*, Cress.*I. finitimus*, Cress.*I. flavidornis*, Cress.

I have taken this myself in the State.

*I. flavizonatus*, Cress.

## 20 GEOLOGICAL SURVEY OF NEW JERSEY.

I. *funestus*, Cress.

I. *fuscifrons*, Cress.

I. *galenus*, Cress.

New Jersey specimens are in Mr. Cresson's collection.

I. *germanus*, Cress.

I. *grandis*, Brullé.

I. *helvipes*, Cress.

I. *insolens*, Cress.

I. *instabilis*, Cress.

Specimens from New Jersey are in Mr. Cresson's collection.

I. *jejonus*, Cress.

I. *jucundus*, Brullé.

I. *laetus*, Brullé.

New Jersey specimens are in Mr. Cresson's collection.

I. *leucanise*, Fitch.

I. *leviculus*, Cress.

I. *lewisii*, Cress.

I. *libens*, Cress.

New Jersey specimens are in Mr. Cresson's collection.

I. *longulus*, Cress.

I. *maius*, Cress.

I. *malacus*, Say.

Mr. Cresson has this from New Jersey.

I. *merus*, Cress.

I. *milvus*, Cress.

I. *mimicus*, Cress.

I. *muoronatus*, Prov.

I. *munificus*, Cress.

I. *nanus*, Cress.

New Jersey specimens are in Mr. Cresson's collection.

I. *navus*, Say.

I. *nigratorius*, Fabr.

I. *orpheus*, Cress.

I. *otiosus*, Say.

New Jersey specimens are in Mr. Cresson's collection.

## CATALOGUE OF INSECTS.

21

*I. paratus*, Say.*I. parvus*, Cress.*I. pepticus*, Cress.

Recorded from New Jersey and specimens are in Mr. Cresson's collection.

*I. pomilius*, Prov.*I. pulcher*, Brullé.*I. residuus*, Say.*I. rubicundus*, Cress.*I. rufiventris*, Brullé.

Specimens from New Jersey are in Mr. Cresson's collection.

*I. saucius*, Cress.*I. scitulus*, Cress.*I. seminiger*, Cress.

New Jersey specimens are in Mr. Cresson's collection.

*I. signatipes*, Cress.*I. soror*, Cress.*I. subcyaneus*, Cress.

Taken at Caldwell by Mr. Crane.

*I. subdolus*, Cress.*I. sublatus*, Cress.*I. succinctus*, Brullé.

Common at Caldwell. I have taken or seen it everywhere in the State.

*I. trogiformis*, Cress.

New Jersey specimens are in Mr. Cresson's collection.

*I. unifasciatorius*, Say.

Taken at Caldwell by Mr. Crane.

*I. utilis*, Cress.*I. variegatus*, Cress.*I. velox*, Cress.

Mr. Cresson has it from New Jersey.

*I. versabilis*, Cress.

## 22 GEOLOGICAL SURVEY OF NEW JERSEY.

- I. *vescus*, Prov.
- I. *viola*, Cress.
- I. *volens*, Cress.
- I. *w-album*, Cress.
- I. *wilsoni*, Cress.
- I. *zebratus*, Cress.

## HOPLISMENUS, Grav.

- H. *morulus*, Say.

New Jersey specimens are in Mr. Cresson's collection.

## AMBLYTELES, Wasm.

- A. *anceps*, Cress.
- A. *detritus*, Brullé.

Specimens from New Jersey are in Mr. Cresson's collection.

- A. *excultus*, Cress.

New Jersey specimens are in Mr. Cresson's collection.

- A. *fraternus*, Cress.
- A. *improvisus*, Cress.

Recorded from New Jersey, and specimens in Mr. Cresson's collection.

- A. *indistinctus*, Prov.

- A. *luctus*, Cress.

- A. *nubivagus*, Cress.

- A. *ormenus*, Cress.

- A. *rufizonatus*, Cress.

Recorded from New Jersey, and specimen in Mr. Cresson's collection.

- A. *semiceruleus*, Cress.

- A. *subrufus*, Cress.

- A. *suturalis*, Say.

Taken at Caldwell by Mr. Crane. New Jersey specimens are also in Mr. Cresson's collection.

- A. *ultus*, Cress.

## CATALOGUE OF INSECTS.

23

## TROGUS, Grav.

*T. brullei*, Cress.*T. copei*, Cress.*T. exesorius*, Brullé.

Taken by me in New Jersey. Common near Caldwell—  
Crane.

*T. nubilipennis*, Hald.*T. obsidianator*, Brullé.

I have taken this in New Jersey near Montclair.

## PLATYLABUS, Wesm.

*P. thoracicus*, Cress.

## EURYLABUS, Wesm.

*E. agilis*, Cress.

## PHÆOGENES, Wesm.

*P. fungor*, Norton.*P. hebe*, Cress.*P. hebrus*, Cress.*P. helvolus*, Cress.

## CENTETERUS, Wesm.

*C. tuberculifrons*, Prov.

## COLPOGNATHUS, Wesm.

*C. helvus*, Cress.

## Sub-Family CRYPTINÆ.

## STILPNUS, Grav.

*S. americanus*, Cress.

## PHYGADEUON, Grav.

*P. vulgaris*, Cress.

## 24 GEOLOGICAL SURVEY OF NEW JERSEY.

## CRYPTUS, Fabr.

- C. alacris*, Cress.  
*C. americanus*, Cress.  
*C. contiguus*, Cress.  
*C. extrematis*, Cress.  
*C. limatus*, Cress.  
*C. nuncius*, Say.  
*C. persimilis*, Cress.  
*C. semirufus*, Brullé.  
*C. subolavatus*, Say.

## MESOSTENUS, Grav.

- M. albomaculatus*, Cress.  
*M. americanus*, Cress.  
*M. thoracicus*, Cress.

## HEMITELES, Grav.

- H. nemativorus*, Walsh.  
*H. tenellus*, Say.  
*H. utilis*, Norton.

## APTESIS, Först.

- A. micropterus*, Say.

## PEZOMACHUS, Grav.

- P. dimidiatus*, Cress.  
*P. gentilis*, Cress.  
*P. gracilis*, Cress.  
*P. macer*, Cress.  
*P. obscurus*, Cress.  
Recorded from New Jersey only.  
*P. unicolor*, Cress.

## CATALOGUE OF INSECTS.

25

## Sub-Family OPHIONINÆ.

## OPHION, Fabr.

*O. bificeolatum*, Brullé.*O. bilineatum*, Say.

Not common at Caldwell—Crane. Specimens are in Cresson's collection from New Jersey.

*O. glabratum*, Say.*O. macrurum*, Linn.

I have taken this in New Jersey myself. Common at Caldwell—Crane.

*O. purgatum*, Say.

I have taken this in New Jersey.

## THYREODON, Brullé.

*T. morio*, Fabr.

## NOTOTRACHYS, Marsh.

*N. ejuncidus*, Say.

## EXOCHILUM, Wesm.

*E. fuscipenne*, Norton.

I have taken this not uncommonly in the State.

*E. mundum*, Say.

Common at Caldwell—Crane.

## HETEROPELMA, Wesm.

*H. flavicornis*, Brullé.

I have taken this in the State.

*H. datanæ*, Riley.

## ANOMALON, Grav.

*A. anale*, Say.*A. curtum*, Norton.*A. laterale*, Brullé.*A. metallicum*, Norton.

## 26 GEOLOGICAL SURVEY OF NEW JERSEY.

- A. nigritum**, Norton.
- A. nigrorufum**, Norton.
- A. prismaticum**, Norton.
- A. relictum**, Fabr.
- A. semirufum**, Norton.

**OPHELTES**, Holmgr.

- O. glaucopterus**, Linn.

**PANISCUS**, Grav.

- P. geminatus**, Say.  
Common at Caldwell—Crane.

**CAMPOPLEX**, Grav.

- C. alius**, Norton.
- C. argenteus**, Norton.
- C. diversus**, Norton.

**LIMNERIA**, Holm.

- L. compressa**, Cresson.  
**L. distincta**, Cress.  
Recorded from New Jersey only.
- L. dubitata**, Cress.
- L. flavigaster**, Cress.
- L. fugitiva**, Say.
- L. major**, Cress.
- L. obscura**, Cress.
- L. oxytela**, Cress.
- L. subrubida**, Cress.  
Recorded from New Jersey.
- L. tibiator**, Cress.  
Recorded from New Jersey.
- L. valida**, Cress.
- L. vicina**, Cress.  
Recorded from New Jersey.

## CATALOGUE OF INSECTS.

27

## MESOCHORUS, Grav.

*M. americanus*, Cress.*M. luteipes*, Cress.

Recorded in the United States from New Jersey only.

*M. melleus*, Cress.*M. obliquus*, Cress.*M. scitulus*, Cress.

## THERSILLOCHUS, Holmgr.

*T. conotrachelii*, Riley.

## EXETASTES, Grav.

*E. scutellaris*, Cress.

## CERATOSOMA, Cress.

*C. fasciata*, Cress.

## Sub-Family TRYPHONINÆ.

## MESOLEPTUS, Grav.

*M. bicolor*, Cress.*M. concolor*, Cress.

Recorded in the United States from New Jersey only.

*M. cultus*, Cress.

Recorded from New Jersey only.

*M. decens*, Cress.*M. discolor*, Cress.*M. flavifrons*, Cress.

Recorded from New Jersey only.

*M. fucatus*, Cress.*M. honestus*, Cress.

Recorded from New Jersey.

**28 GEOLOGICAL SURVEY OF NEW JERSEY.****M. peregrinus,** Cress.

Recorded from New Jersey.

**M. propinquus,** Cress.**M. sedulus,** Cress.

Recorded from New Jersey.

**M. unicolor,** Cress.**MESOLEIUS, Holmgr.****M. submarginatus,** Cress.**TRYPHON, Grav.****T. affinis,** Cress.

Recorded from New Jersey.

**T. americanus,** Cress.**T. analis,** Cress.**T. capitatus,** Cress.**T. communis,** Cress.**T. pleuralis,** Cress.

Recorded from New Jersey only.

**GRYPOCENTRUS, Ruthe.****G. nasutus,** Cress.**EUCEROS, Grav.****E. flavescens,** Cress.**POLYBLASTUS, Hartig.****P. subcrassus,** Cress.**ERROMENUS, Holmgr.****E. crassus,** Cress.

Recorded from New Jersey.

**E. dimidiatus,** Cress.

Recorded from New Jersey.

## CATALOGUE OF INSECTS.

29

## CTENISCUS, Hal.

- C. flavicoxæ*, Cress.  
*C. orbitalis*, Cress.

## EXYSTON, Schiodte.

- E. clavatus*, Cress.

## EXOCHOIDES, Cress.

- E. trifasciata*, Cress.

## EXOCHUS, Grav.

- E. dorsalis*, Cress.  
 Recorded from New Jersey only.  
*E. fulvipes*, Cress.  
*E. propinquus*, Cress.  
*E. semirufus*, Cress.

## BASSUS, Grav.

- B. agilis*, Cress.  
*B. frontalis*, Cress.  
*B. sycophanta*, Walsh.

## METOPIUS, Grav.

- M. pollinctorius*, Say.
- 

## Sub-Family PIMPLINÆ.

## AROTES, Grav.

- A. amoenus*, Cress.  
*A. decorus*, Say.  
*A. venustus*, Cress.

## RHYSSA, Grav.

- R. albomaculata*, Cr.  
 Mr. Cresson's collection contains New Jersey specimens.  
*R. persuasoria*, Linn.

## 30 GEOLOGICAL SURVEY OF NEW JERSEY.

**THALESSA, Holmgr.****T. atrata, Fabr.**

Common throughout the State. Caldwell—Crane.

**T. lunator, Fabr.**

Less common, but equally wide-spread.

**T. nitida, Cress.**

Has been taken on the Palisades near Fort Lee.

**T. nortonii, Cress.**

Rare at Caldwell—Crane.

**EPIPHIALTES, Grav.****E. albipes, Cress.**

Recorded from New Jersey.

**E. irritator, Fabr.****E. rex, Kriech.****E. tuberculatus, Fourc.****THERONIA, Holmgr.****T. melanocephala, Brullé.****PIMPLA, Fabr.****P. alboricta, Cress.****P. annulicornis, Cress.****P. annulipes, Brullé.**

I have taken this in New Jersey. Caldwell—Crane.

**P. conquisitor, Say.**

I have taken this in New Jersey.

**P. indagatrix, Walsh.****P. inquisitor, Say.**

I have seen this from the State. Not common at Caldwell—Crane.

**P. notanda, Cress.**

Recorded from the State. Specimens with Mr. Cresson.

## CATALOGUE OF INSECTS.

31

*P. pedalis*, Cress.

Rare at Caldwell—Crane.

*P. picticornis*, Cress.

Recorded from the State. Specimens in Collection Cresson.

*P. rufopectus*, Cress.*P. rufovariata*, Cress.

Recorded from the State. Specimens with Mr. Cresson.

*P. scriptifrons*, Cress.*P. tenuicornis*, Cress.

Specimens from New Jersey are in Mr. Cresson's collection.

*P. pterelas*, Say.

Specimens from New Jersey are in Mr. Cresson's collection.

## POLYSPHINCTA, Grav.

*P. limata*, Cress.

Recorded from New Jersey.

## GLYPTA, Grav.

*G. animosa*, Cress.*G. erratica*, Cress.*G. rufiscutellaria*, Cress.

New Jersey specimens are in Mr. Cresson's collection.

*G. scitula*, Cress.

Recorded from New Jersey only. Specimen in Mr. Cresson's collection.

*G. simplicipes*, Cress.*G. vulgaris*, Cress.

Specimens from New Jersey are in the Cresson collection.

## ARENTRA, Holmgr.

*A. nigrita*, Walsh.*A. ventralis*, Cress.

## CYLLOCERIA, Schiodte.

*C. occidentalis*, Cress.

## 32 GEOLOGICAL SURVEY OF NEW JERSEY.

**LAMPRONOTA, Curtis.***L. agilis*, Cress.*L. americana*, Cress.*L. insita*, Cress.

Recorded from New Jersey. Specimens with Mr. Cresson.

*L. occidentalis*, Cress.*L. parva*, Cress.*L. pleuralis*, Cress.*L. pulchella*, Cress.

Recorded from New Jersey only. Specimens with Mr. Cresson.

*L. punctulata*, Cress.*L. rubrica*, Cress.

New Jersey specimens are in the Cresson collection.

*L. tegularis*, Cress.*L. varia*, Cress.**MENISCUS, Schiödte.***M. elegans*, Cress.*M. mirabilis*, Cress.*M. scutellaris*, Cress.**PHYTODIETUS, Grav.***P. distinctus*, Cress.*P. vulgaris*, Cress.**EUXORIDES, Cress.***E. americanus*, Cress.**XYLONOMUS, Grav.***X. albopictus*, Cress.*X. stigmapterus*, Say.**ODONTOMERUS, Grav.***O. bicolor*, Cress.*O. mellipes*, Say.

New Jersey specimens are in Collection Cresson.

## CATALOGUE OF INSECTS.

33

## LABENA, Cress.

*L. grallator*, Say.

## GROTEA, Cress.

*G. anguina*, Cress.

## Family STEPHANIDÆ.

## MEGISCHUS, Brullé.

*M. rufipes*, Say.

## Family BRACONIDÆ.

## Sub-Family BRACONINÆ.

## BRACON, Fabr.

*B. dichrous*, Brullé.*B. erythrogaster*, Brullé.*B. eurygaster*, Brullé.*B. ligator*, Say.*B. pectinator*, Say.*B. simplex*, Cress.

## Sub-Family HECABOLINÆ.

## HECABOLUS, Curtis.

*H. lycti*, Cress.*H. minimus*, Cress.*H. utilis*, Cress.

## Sub-Family RHOGADINÆ.

## RHOGAS, Nees.

*R. abdominalis*, Cress.

New Jersey specimens are in the Cresson collection.

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**34 GEOLOGICAL SURVEY OF NEW JERSEY.**

**R. aciculatus,** Cress.

New Jersey specimens are in the Cresson collection.

**R. burrus,** Cress.

**R. intermedius,** Cress.

New Jersey specimens are in the Cresson collection.

**R. lectus,** Cress.

New Jersey specimens are in the Cresson collection.

**R. terminalis,** Cress.

Taken at Caldwell—Crane.

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**Sub-Family SIGALPHINÆ.****SIGALPHUS, Latr.**

**S. curculionis,** Fitch.

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**Sub-Family CHELONINÆ.****PHANEROTOMA, Wesm.**

**P. tibialis,** Hald.

**CHELONUS, Jur.**

**C. basilaris,** Say.

**C. lunatus,** Hald.

**C. sericeus,** Say.

**C. sobrinus,** Hald.

**SPHÆROPYX, Hal.**

**S. bicolor,** Cress.

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**Sub-Family MICROGASTERINÆ.****APANTELES, Forst.**

**A. acronyctæ,** Riley.

I have bred this species during the present (1889) season.

## CATALOGUE OF INSECTS.

35

*A. carpatus*, Say.*A. congregatus*, Say.

Occurs in New Jersey quite commonly.

*A. limenitidis*, Riley.**MICROPLITIS, Först.***M. gortynæ*, Riley.**MICROGASTER, Latr.***M. oleracea*, Taylor.**Sub-Family AGATHIDINÆ.****AGATHIS, Latr.***A. haematoxides*, Brullé.

New Jersey specimens are in the Cresson collection.

*A. liberator*, Brullé.*A. semirubra*, Brullé.

New Jersey specimens are in the Cresson collection.

*A. vulgaris*, Cress.

Caldwell—Crane.

**EARINUS, Wesm.***E. limitaris*, Say.**MICRODUS, Nees.***M. annulipes*, Cress.*M. earinoides*, Cress.*M. imitatus*, Cress.

Specimens from New Jersey are with Mr. Cresson.

*M. simillimus*, Cress.

New Jersey specimens are in the Cresson collection.

**Sub-Family EUPHORINÆ.****EUPHORUS, Nees.***E. mellipes*, Cress.

Recorded from New Jersey. Specimens in the Cresson collection.

## 36 GEOLOGICAL SURVEY OF NEW JERSEY.

**Sub-Family METEORINÆ.****METEORUS, Hal.**

**M. communis**, Cress.

Recorded from New Jersey. Specimens with Mr. Cresson.

**M. dimidiatus**, Cress.

New Jersey specimens are in Mr. Cresson's collection.

**M. pallitarsis**, Cress.

Recorded from New Jersey only. Specimens with Mr. Cresson.

**M. vulgaris**, Cress.

Specimens from New Jersey are in the Cresson collection.

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**Sub-Family CALYPTINÆ.****EUBADIZON, Nees.**

**E. americanus**, Cress.

Recorded from New Jersey.

**CALYPTUS, Hal.**

**C. major**, Cress.

**C. tibiator**, Cress.

Recorded from New Jersey only. Specimens with Mr. Cresson.

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**Sub-Family TOXONEURINÆ.****TOXONEURA, Say.**

**T. populator**, Say.

**T. tibiator**, Say.

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**Sub-Family HELCONINÆ.****HELCON, Nees.**

**H. dentipes**, Brulle.

**GYMNOSCELUS, Först.**

**G. americanus**, Cress.

## CATALOGUE OF INSECTS.

37

## Sub-Family MACROCENTRINÆ.

## MACROCENTRUS, Curtis.

*M. delicatus*, Cress.

## Sub-Family APHIDIINÆ.

## PRAON, Hal.

*P. avenaphis*, Fitch.*P. polygonaphis*, Fitch.*P. viburnaphis*, Fitch.

## TOXARES, Westw.

*T. triticaphis*, Fitch.

## TRIOXYS, Hal.

*T. cerasaphis*, Fitch.*T. populaphis*, Fitch.*T. salicaphis*, Fitch.

## APHIDIUS, Nees.

*A. lactucaphis*, Fitch.

## Family CHALCIDIDÆ.

## Sub-Family LEUCOSPIDINÆ.

## LEUCOSPIS, Fabr.

*L. affinis*, Say.Caldwell—Crane. Specimens in the Cresson collection, from  
New Jersey.*L. integra*, Hald.*L. shuckardi*, Westw.

## Sub-Family CHALCIDINÆ.

## SMICRA, Spin.

*S. bracata*, Sanb.

Caldwell, rare—Crane.

## 38 GEOLOGICAL SURVEY OF NEW JERSEY.

*S. igneoides*, Kirby.  
*S. maculata*, Fabr.  
*S. mariae*, Riley.  
*S. microgaster*, Say.  
*S. nigrifex*, Wlk.  
*S. tourina*, Cress.

**CHALCIS, Fabr.**

*C. flavipes*, Fabr.

New Jersey specimens are in Collection Cresson.

**PHASGONOPHORA, Westw.**

*P. sulcata*, Westw.

**Sub-Family PERILAMPINÆ.****PERILAMPUS, Latr.**

*P. hyalinus*, Say.  
Caldwell, common—Crane.  
*P. triangularis*, Say.  
*P. violaceous*, Dalm.

**Sub-Family EURYTOMINÆ.****EURYTOMA, Illig.**

*E. diastrophi*, Walsh.  
*E. lanulæ*, Fitch.  
*E. studiosa*, Say.

**DECATOMA, Spin.**

*D. hyalipennis*, Walsh.  
*D. varians*, Walsh.

**ISOSOMA, Walk.**

*I. hordei*, Harr.  
*I. tritici*, Riley.  
*I. vitis*, Saund.

## CATALOGUE OF INSECTS.

39

## Sub-Family TORYMINÆ.

**DIOMORUS**, Wlk.  
**D. zabriakii**, Crees.

**TORYMUS**, Dalm.  
**T. sea**, Wlk.  
**T. chrysochlora**, O. S.  
**T. harrisii**, Fitch.  
**T. tubicola**, O. S.

## Sub-Family EUPELMINÆ.

**EUPELMUS**, Dalm.  
**E. allynii**, French.

## Sub-Family ENCYRTINÆ.

**RHOPUS**, Först.  
**R. cocois**, Smith.

**APHYCUS**, Mayr.  
**A. brunneus**, Howard.  
Recorded from New Jersey only.

**ENCYRTUS**, Dalm.  
**E. bucculatricis**, Howard.  
**E. turni**, Pack.

**COPIDOSOMA**, Ratz.  
**C. gelechiae**, Howard.  
**C. intermedium**, Howard.  
Recorded from New Jersey.  
**C. truncatellum**, Dalm.

**CHILONEURUS**, Westw.  
**O. albicornis**, Howard.

## 40 GEOLOGICAL SURVEY OF NEW JERSEY.

**Sub-Family APHELININÆ.****COCCOPHAGUS, Westw.***C. ater*, Howard.*C. lecanii*, Fitch.**APHELINUS, Dalm.***A. mali*, Hald.*A. mytilaspidis*, Le B.**Sub-Family PIRENINÆ.****MACROGLENES, Westw.***M. querci-globuli*, Fitch.*M. querci-pisi*, Fitch.**Sub-Family TRIDYMINÆ.****SEMIOTELLUS, Westw.***S. chalcidephagus*, Walsh.*S. clisiocampæ*, Fitch.**Sub-Family SPALANGINÆ.****SPALANGIA, Latr.***S. querci-lanæ*, Fitch.**Sub-Family PTEROMALINÆ.****MERISUS, Wlk.***M. destructor*, Say.**PTEROMALUS, Swed.***P. gelechiæ*, Webst.*P. onerati*, Fitch.

## CATALOGUE OF INSECTS.

41

*P. puparum*, Linn.*P. querci-pilulæ*, Fitch.*P. tabacum*, Fitch.

## Sub-Family ELACHISTINÆ.

## EUPLECTRUS, Westw.

*E. catocalæ*, Howard.*E. comstockii*, Howard.*E. plathypense*, Howard.

## Sub-Family EULOPHINÆ.

## HULOPHUS, Geoff.

*E. theclæ*, Pack.

## Sub-Family TRICHOGRAMMINÆ.

## TRICHOGRAMMA, Westw.

*T. fraterna*, Fitch.*T. odontotæ*, Howard.*T. orgyiae*, Fitch.*T. pretiosa*, Riley.

## Family PROCTOTRUPIDÆ.

## Sub-Family BETHYLINÆ.

## SOLEROCHROA, Först.

*S. thoracica*, Westw.

## Sub-Family CERAPHRONINÆ.

## CERAPHRON, Jur.

*C. triticum*, Taylor.

**42 GEOLOGICAL SURVEY OF NEW JERSEY.****Sub-Family SCELIONINÆ.****TELENOMUS, Hal.****T. bifidus, Riley.****T. orgyiae, Fitch.**

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**Sub-Family PLATYGASTRINÆ.****PLATYGASTER, Latr.****P. error, Fitch.**

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**Sub-Family MYMARINÆ.****AMITUS, Hald.****A. aleurodinus, Hald.****ERETMOCERUS, Hald.****E. corni, Hald.**

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**Sub-Family DIAPRINÆ.****COPTERA, Say.****C. polita, Say.****DIAPRIA, Latr.****D. apicalis, Say.**

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**Family PELECINIDÆ.****PELECINUS, Latr.****P. polyturator, Dru.**

Caldwell, common—Crane. Occurs throughout New Jersey quite commonly.

## CATALOGUE OF INSECTS.

43

## Family CHRYSIDIDÆ.

## Sub-Family ELAMPINÆ.

## OMALUS, Panz.

- O. coruscans*, Norton.
- O. iridescentis*, Norton.
- O. laeviventris*, Cress.
- O. sinuosus*, Say.

## NOTOZUS, Forst.

- N. marginatus*, Patton.
- N. viridicyaneus*, Norton.

## HEDYCHRIDIUM, Perrin.

- H. dimidiatum*, Say.
- H. viride*, Cress.

## HEDYCHRUM, Latr.

- H. obsoletum*, Say.
  - H. violaceum*, Brullé.
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## Sub-Family CHRYSIDINÆ.

## CHRYSIS, Linn.

- C. coeruleans*, Fabr.  
New Jersey specimens are with Mr. Cresson.

- C. frey-gessneri*, Grib.
- C. hilaris*, Dahlb.
- C. inaequidens*, Dahlb.
- C. intricata*, Brullé.
- C. nitidula*, Fabr.
- C. nortoni*, Aaron.
- C. parvula*, Fabr.

Not common at Caldwell—Crane.

- C. amaragdula*, Fabr.
- C. tota*, Aaron.
- C. verticalis*, Patton.

## 44 GEOLOGICAL SURVEY OF NEW JERSEY.

**Family FORMICIDÆ.****CAMPONOTUS, Mayr.**

- C. atriceps**, Smith.  
**C. castaneus**, Latr.  
    Caldwell—Crane.  
**C. esuriens**, Smith.  
    Caldwell—Crane.  
**C. herculaneus**, Smith.  
    Caldwell—Crane.  
**C. lateralis**, Latr.  
**C. marginatus**, Latr.  
    Caldwell—Crane.  
**C. pubescens**, Fabr.  
**C. sylvaticus**, Oliv.

**POLYERGUS, Latr.**

- P. lucidus**, Mayr.

**FORMICA, Linn.**

- F. exsectoides**, Forel.  
**F. fusca**, Linn.  
    Caldwell—Crane.  
**F. gnava**, Buck.  
**F. gracilis**, Buck.  
**F. integra**, Nyl.  
    Caldwell—Crane. Also in Cresson collection.  
**F. occidentalis**, Buck.  
**F. pallidefulva**, Latr.  
    Recorded from New Jersey.  
**F. pratensis**, De G.  
**F. rufa**, Linn.  
    Caldwell, common—Crane. I have seen this not uncommon throughout the State.  
**F. sanguinea**, Latr.  
    New Jersey specimens are in the Cresson collection.

## CATALOGUE OF INSECTS.

45

*F. schaufussi*, Mayr.

Caldwell, common—Crane.

*F. truncicola*, Nyl.**LASIUS, Fabr.***L. brunneus*, Latr.*L. claviger*, Roger.

Caldwell—Crane.

*L. flavus*, De G.

Caldwell—Crane.

*L. interjectus*, Mayr.

Caldwell—Crane.

*L. niger*, Linn.

Caldwell, common—Crane.

*L. umbratus*, Nyl.

Caldwell, common—Crane.

**BRACHYMYRMEX, Mayr.***B. heeri*, Forel.**PRENOLEPIS, Mayr.***P. nitens*, Mayr.

Caldwell—Crane.

*P. vividula*, Nyl.**DORYMYRMEX, Mayr.***D. pyramicus*, Roger.**TAPINOMA, Forst.***T. sessile*, Say.

Caldwell, common—Crane.

**DOLIOCHODERUS, Lund.***D. mariae*, Forel.

Recorded from New Jersey.

*D. postulatus*, Mayr.

Recorded from New Jersey.

## 46 GEOLOGICAL SURVEY OF NEW JERSEY.

**Family PONERIDÆ.****PONERA, Latr.**

- P. contracta,** Latr.  
**P. gilva,** Roger.  
**P. pennsylvanica,** Buck.

**DISCOTHYREA, Roger.**

- D. testacea,** Roger.

**AMBLYOPONE, Brich.**

- A. pallipes,** Hald.
- 

**Family MYRMICIDÆ.****ATTÀ, Fabr.**

- A. tardigrada,** Buck.  
 Recorded from New Jersey.

**APHÆNOGASTER, Mayr.**

- A. fulva,** Roger.  
 Caldwell—Crane.  
**A. pennsylvanica,** Buck.  
**A. treatæ,** Forel.  
 Recorded from New Jersey. Specimen with Mr. Cresson.

**POGONOMYRMEX, Mayr.**

- P. transversus,** Mayr.  
 Caldwell—Crane. Heretofore only recorded from Florida and Georgia.

**MYRMICA, Latr.**

- M. dimidiata,** Say.  
**M. lævinodis,** Nyl.  
**M. opposita,** Say.

## CATALOGUE OF INSECTS.

47

**M. punctiventris**, Roger.

Recorded from New Jersey.

**M. scabrinodis**, Nyl.

Caldwell—Crane.

**M. sulcinodis**, Nyl.

Recorded from New Jersey.

**TETRAMORIUM**, Mayr.**T. cespitum**, Linn.**STENAMMA**, Westw.**S. neoarcticum**, Mayr.**MYRMECINA**, Curtis.**M. latreillii**, Curtis.**MONOMORIUM**, Mayr.**M. minutum**, Mayr.**M. molesta**, Say.**M. pharaonis**, Linn.**PHEIDOLE**, Westw.**P. morrisi**, Forel.**P. pennsylvanica**, Roger.**P. vinelandica**, Forel.

Recorded from New Jersey.

**SOLENOPSIS**, Westw.**S. debilis**, Mayr.

Recorded from New Jersey.

**S. fugax**, Latr.

Caldwell—Crane.

**S. madara**, Roger.**S. sulfurea**, Roger.**CREMASTOGASTER**, Lund.**C. laeviuscula**, Mayr.**C. lineolata**, Say.

Caldwell—Crane.

**C. scutellaris**, Oliv.

## 48 GEOLOGICAL SURVEY OF NEW JERSEY.

**Family MUTILLIDÆ.****MUTILLA, Linn.****M. bifasciata**, Swed.**M. dubitata**, Smith.

Westville—Cresson.

**M. hexagona**, Say.**M. ornativentris**, Cress.

Westville—Cresson.

**M. rufa**, St. Farg.**M. scrupea**, Say.**M. thoracica**, Blake.**SPHÆROPHTHALMA, Blake.****S. balteola**, Blake.**S. canadensis**, Blake.

Westville—Cresson.

**S. cypris**, Blake.

Westville—Cresson.

**S. fenestrata**, St. Farg.**S. ferrugata**, Fabr.

Caldwell, rare—Crane. Westville—Cresson.

**S. macra**, Cress.New Jersey specimens are in the Cresson collection. It has  
heretofore been recorded from Texas only.**S. mutata**, Blake.

Westville—Cresson.

**S. occidentalis**, Linn.

Westville—Cresson.

**S. pennsylvanica**, St. Farg.**S. scævola**, Blake.

Caldwell, common—Crane. Westville—Cresson.

**S. simillima**, Smith.

Caldwell, common—Crane.

**MYRMOSA, Latr.****M. unicolor**, Say.

## CATALOGUE OF INSECTS.

49

## Family SCOLIIDÆ.

## TIPHIA, Fabr.

*T. inornata*, Say.

Caldwell, common—Crane. New Brunswick; not common.

## MYZINE, Latr.

*M. ephippium*, Fabr.*M. haemorrhoidalis*, Fabr.*M. interrupta*, Say.

Westville—Cresson.

*M. marginata*, Say.*M. obscura*, Fabr.

Westville—Cresson.

*M. sexcincta*, Fabr.

I have taken this commonly in New Jersey.

## SCOLIA, Fabr.

*S. bicincta*, Fabr.

Westville—Cresson.

*S. dubia*, Say.

Westville—Cresson.

*S. nobilitata*, Fabr.

## ELIS, Fabr.

*E. plumipes*, Dru.

Caldwell—Crane.

*E. quadrinotata*, Fabr.

New Jersey specimens are in Mr. Cresson's collection.

*E. trifasciata*, Fabr.

## Family POMPILIDÆ.

## POMPILUS, Fabr.

*P. sethiopa*, Cress.

Caldwell, not common—Crane.

D

## 50 GEOLOGICAL SURVEY OF NEW JERSEY.

**P. americanus**, Beauv.

Caldwell, rare—Crane.

**P. stramentarius**, Dahlb.

**P. atrox**, Dahlb.

Caldwell, not common—Crane.

**P. biguttatus**, Fabr.

New Jersey specimens are in the Cresson collection.

**P. bipartitus**, St. Farg.

**P. brevicornis**, Cress.

**P. cylindricus**, Cress.

**P. ephippiger**, Smith.

**P. ferrugineus**, Say.

**P. funereus**, St. Farg.

**P. humilis**, Cress.

**P. ingenuus**, Cress.

**P. interruptus**, Cress.

**P. marginatus**, Say.

New Jersey specimens are in the Cresson collection.

**P. maurus**, Cress.

**P. philadelphicus**, St. Farg.

**P. scelestus**, Cress.

**P. subviolaceus**, Cress.

**P. tenebrosus**, Cress.

**P. tropicus**, Linn.

New Jersey specimens are in the Cresson collection.

**P. virginensis**, Cress.

PRIOCNE~~MIS~~, Schiödte.

**P. alienatus**, Smith.

New Jersey specimens are in the Cresson collection.

**P. conicus**, Say.

**P. fortis**, Cress.

**P. fulvicornis**, Cress.

**P. germanus**, Cress.

## CATALOGUE OF INSECTS.

51

*P. maculipennis*, Smith.*P. nebulosus*, Dahlb.*P. pompilius*, Cress.

Recorded from New Jersey. Specimens in Collection Cresson.

*P. subopacus*, Cress.*P. unifasciatus*, Say.**AGHENIA**, Schiodte.*A. architecta*, Say.*A. bombycinia*, Cress.

Caldwell—Crane.

*A. calcarata*, Cress.*A. iridipennis*, Cress.

Recorded from New Jersey.

*A. mellipes*, Say.*A. pulchripennis*, Cress.**PLANICEPS**, Latr.*P. niger*, Cress.**CHROPALUS**, Latr.*C. bipunctata*, Say.

Caldwell, rare—Crane.

*C. fraterna*, Smith.*C. longipes*, Smith.**PEPSIS**, Fabr.*P. elegans*, St. Farg.**Family SPHECIDÆ.****AMMOPHILA**, Kirby.*A. arvensis*, St. Farg.*A. conditor*, Smith.*A. gracilis*, St. Farg.

Caldwell, rare—Crane.

## 52 GEOLOGICAL SURVEY OF NEW JERSEY.

- A. gryphus**, Smith.  
Caldwell, common—Crane.
- A. intercepta**, St. Farg.  
Westville—Cresson.
- A. procera**, Klug.
- A. urnaria**, Klug.  
Caldwell, not common—Crane.
- A. violaceipennis**, St. Farg.

**PHELOPHEUS**, Latr.

- P. cementarius**, Dru.  
Caldwell, common—Crane. Westville—Cresson.

**CHALYBION**, Dahlb.

- C. cæruleum**, Linn.

**CHLORION**, Latr.

- C. cæruleum**, Dru.  
Caldwell, common—Crane.

**ISODONTIA**, Patton.

- I. philadelphica**, St. Farg.  
Caldwell—Crane. Westville—Cresson.
- I. tibialis**, St. Farg.  
Caldwell, not common—Crane. Westville—Cresson.

**SPHEX**, Linn.

- S. orcesus**, St. Farg.
- S. dimidiata**, St. Farg.
- S. ichneumonea**, Linn.  
Common everywhere in New Jersey. Caldwell—Crane.
- S. instabilis**, Smith.
- S. pennsylvanica**, Linn.  
Common everywhere in New Jersey.
- S. violaceipennis**, St. Farg.

## CATALOGUE OF INSECTS.

53

## PRIONONYX, Dahlb.

*P. atrata*, St. Farg.

Caldwell, not common—Crane.

*P. thomae*, Fabr.

Westville—Cresson.

## Family AMPULICIDÆ.

## RHINOPSIS, Westw.

*R. canaliculata*, Say.

## Family LARRIDÆ.

## ASTATA, Latr.

*A. bicolor*, Say.

New Jersey specimens are in the Cresson collection.

*A. unicolor*, Say.

Westville—Cresson.

## LYRODA, Say.

*L. subita*, Say.

Westville—Cresson.

## LARRA, Latr.

*L. analis*, Fabr.*L. argentata*, Beauv.

Westville—Cresson.

*L. distincta*, Smith.

Westville—Cresson.

*L. pennsylvanica*, Beauv.

Westville—Cresson.

*L. terminata*, Smith.

## 54 GEOLOGICAL SURVEY OF NEW JERSEY.

**TACHYTES, Panz.****T. aurulentus, Fabr.****T. distinctus, Smith.****T. mandibularis, Patton.**

Westville—Cresson.

**Family BEMBECIDÆ.****SPHECIUS, Dahlb.****S. speciosus, Dru.**Not uncommon throughout New Jersey. Caldwell, common  
—Crane.**STIZUS, Latr.****S. servillii, St. Farg.****BEMBEX, Fabr.****B. americana, Fabr.****B. fasciata, Fabr.****MICROBEMBEX, Patton.****M. monodonta, Say.**

Caldwell, common—Crane.

**MONEDULA, Latr.****M. carolina, Fabr.****M. quadrifasciata, Say.****M. ventralis, Say.****Family NYSSONIDÆ.****GORYTES, Latr.****G. nebulosus, Pack.**

Recorded from New Jersey.

**HOPLISUS, St. Farg.****H. fulvipennis, Smith.**

## CATALOGUE OF INSECTS.

55

**EUSPONGUS, St. Farg.****E. bipunctatus, Say.****ALYSON, Jur.****A. melleus, Say.**

Recorded from New Jersey. Specimens in Cresson collection.

**A. oppositus, Say.**

Westville—Cresson.

**NYSSON, Latr.****N. lateralis, Pack.****N. opulentus, Gerts.****Family PHILANTHIDÆ.****PHILANTHUS, Fabr.****P. barbatus, Smith.****P. bilunatus, Cress.****P. dubius, Cress.****P. politus, Say.**

Westville—Cresson.

**P. punctatus, Say.**

Caldwell, common—Crane. Westville—Cresson.

**P. solivagus, Say.****P. ventilabris, Cress.****EUCERCERIS, Cress.****E. laticeps, Cress.****E. zonatus, Say.****CERCERIS, Latr.****C. bicornuta, Guer.****C. clypeata, Dahlb.****C. compacta, Cress.**

Caldwell—Crane.

**C. dentirifrons, Cress.**

## 56 GEOLOGICAL SURVEY OF NEW JERSEY.

*C. deserta*, Say.

Caldwell, common—Crane. Common everywhere in the State.

*C. fumipennis*, Say.

Westville—Cresson.

*C. venator*, Cress.

Westville—Cresson. Other specimens in Cresson collection, from other parts of New Jersey.

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Family **MIMESIDÆ**.**MIMESA**, Shuck.*M. cressonii*, Pack.

Recorded from New Jersey. Specimens in the Cresson collection.

*M. denticulata*, Pack.*M. pauper*, Pack.

Westville—Cresson.

**PSEN**, Latr.*P. leucopus*, Say.*P. niger*, Pack.Family **PEMPHREDONIDÆ**.**SPILOMENA**, Shuck.*S. pusilla*, Say.**STIGMUS**, Jur.*S. americanus*, Pack.*S. fraternus*, Say.**CEMONUS**, Jur.*C. inornatus*, Pack.

New Jersey specimens are in the Cresson collection.

## CATALOGUE OF INSECTS.

57

**PEMPHREDON, Latr.***P. concolor*, Say.*P. marginatus*, Say.**PASSALICHOUS, Shuck.***P. annulatus*, Say.*P. mandibularis*, Cress.**Family CRABRONIDÆ.****TRYPOXYLON, Latr.***T. clavatum*, Say.*T. frigidum*, Smith.

New Jersey specimens are in the Cresson collection.

*T. pennsylvanicum*, Sauss.*T. politum*, Say.

Caldwell—Crane. Westville—Cresson.

*T. rubrocinctum*, Pack.

Westville—Cresson.

*T. tridentatum*, Pack.

Recorded from New Jersey.

**RHOPALUM, Kirby.***R. pedicellatum*, Pack.**CRABRO, Fabr.***C. ater*, Cress.*C. brunneipes*, Pack.*C. chrysarginus*, St. Farg.*C. decim-maculatus*, Say..

Caldwell, common—Crane.

*C. denticulatus*, Pack.*C. effosus*, Pack.*C. frigidus*, Smith.

## 58 GEOLOGICAL SURVEY OF NEW JERSEY.

**C. interruptus**, St. Farg.

New Jersey specimens are in the Cresson collection.

**C. maculatus**, Fabr.

**C. obscurus**, Smith.

New Jersey specimens are in the Cresson collection.

**C. pauper**, Pack.

**C. producticollis**, Pack.

Recorded from New Jersey only. Specimens in the Cresson collection.

**C. quadrangularis**, Pack.

**C. sex-maculatus**, Say.

Caldwell, common—Crane.

**C. singularis**, Smith.

Westville—Cresson.

**C. stirpicola**, Pack.

Recorded from New Jersey by Packard. Specimens in the Cresson collection.

**C. trapezoideus**, Pack.

Westville—Cresson.

**C. villosifrons**, Pack.

Recorded from New Jersey by Packard. Specimens in the Cresson collection.

**THYREOPUS**, St. Farg.

**T. advenus**, Smith.

**T. cibrellifer**, Pack.

**T. latipes**, Smith.

**T. tumidus**, Pack.

Westville—Cresson.

**ANACRABRO**, Pack.

**A. ocellatus**, Pack.

Westville—Cresson.

**OXYBELUS**, Latr.

**O. emarginatus**, Say.

Specimens from New Jersey are in the Cresson collection.

## CATALOGUE OF INSECTS.

59

*O. mucronatus*, Pack.

Caldwell—Crane.

*O. quadri-notatus*, Say.

Specimens from New Jersey are in the Cresson collection.

## Family EUMENIDÆ.

## ZETHUS, Fabr.

*Z. spinipes*, Say.

Caldwell—Crane.

## EUMENES, Latr.

*E. agilis*, Sauss.*E. fraternus*, Say.

Caldwell, common—Crane.

*E. globulosus*, Sauss.

New Jersey specimens are in the Cresson collection.

## MONOBIA, Sauss.

*M. quadridentata*, Linn.

Caldwell, common—Crane.

## NORTONIA, Sauss.

*N. symmorphia*, Sauss.

Caldwell, not common—Crane.

## ODYNERUS, Latr.

*O. albomarginatus*, Sauss.*O. albophalearatus*, Sauss.

Westville—Cresson.

*O. annulatus*, Say.*O. anormis*, Say.*O. arvensis*, Sauss.*O. birenimaculatus*, Sauss.*O. boscii*, St. Farg.

## 60 GEOLOGICAL SURVEY OF NEW JERSEY.

*O. campestris*, Sauss.

*O. capra*, Sauss.

Caldwell, not common—Crane.

*O. conformis*, Sauss.

*O. debilis*, Sauss.

*O. dorsalis*, Sauss,

*O. foraminatus*, Sauss.

Caldwell, not common—Crane. Westville—Cresson.

*O. fulvipes*, Sauss.

*O. huro*, Sauss.

*O. leucomelas*, Sauss.

*O. megaera*, St. Farg.

Caldwell—Crane.

*O. pedestris*, Sauss.

Caldwell, not common—Crane.

*O. pennsylvanicus*, Sauss.

Westville—Cresson.

*O. perennis*, Sauss.

New Jersey specimens are in the Cresson collection.

*O. philadelphicus*, Sauss.

Caldwell—Crane.

*O. quadrisectus*, Say.

*O. spinolæ*, Sauss.

*O. tigris*, Sauss.

Caldwell, not common—Crane. Westville—Cresson.

*O. turpis*, Sauss.

*O. unifasciatus*, Sauss.

Caldwell, common—Crane.

*O. vagus*, Sauss.

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**Family VESPIDÆ.****POLISTES, Latr.**

*P. annularis*, Linn.

*P. instabilis*, Sauss.

## CATALOGUE OF INSECTS.

61

*P. metricus*, Say.

Caldwell, common—Crane. Common everywhere in the State.

*P. nestor*, Fabr.*P. pallipes*, St. Farg.

Common everywhere in the State.

*P. rubiginosus*, St. Farg.*P. variatus*, Cress.

New Jersey specimens are in the Cresson collection.

## VESPA, Linn.

*V. arenaria*, Fabr.*V. borealis*, Kirby.

Caldwell, common—Crane.

*V. crabro*, Linn.

Caldwell, not common—Crane.

*V. carolina*, Dru.*V. communis*, Sauss.*V. cuneata*, Fabr.*V. diabolica*, Sauss.

Westville—Cresson.

*V. germanica*, Fabr.

I have taken this everywhere in New Jersey. Caldwell, common—Crane.

*V. infernalis*, Sauss.*V. maculata*, Linn.

Common everywhere in the State. Caldwell, common—Crane.

*V. pennsylvanica*, Sauss.*V. serripes*, Fabr.*V. vidua*, Sauss.

Westville—Cresson.

*V. vulgaris*, Linn.

Caldwell, not common—Crane.

## 62 GEOLOGICAL SURVEY OF NEW JERSEY.

**Family ANDRENIDÆ.****COLLETES, Latr.**

- C. americana*, Cress.  
*C. compacta*, Cress.  
*C. inaequalis*, Say.  
*C. propinqua*, Cress.  
*C. valida*, Cress.

**PROSOPIS, Fabr.**

- P. affinis*, Smith.  
 Caldwell—Crane.  
*P. antennata*, Cress.  
 Recorded from New Jersey only.  
*P. modestus*, Say.  
*P. sparsa*, Cress.  
*P. verticalis*, Cress.

**SPHECOIDES, Latr.**

- S. arvensis*, Patton.  
*S. dichroa*, Smith.  
 Caldwell—Crane.  
*S. falcifer*, Patton.

**HALICTUS, Latr.**

- H. albitarsis*, Cress.  
*H. imitatus*, Smith.  
*H. ligatus*, Say.  
 Caldwell, common—Crane.  
*H. pilosus*, Smith.

**AUGOCHLORA, Smith.**

- A. fervida*, Smith.  
*A. purus*, Say.  
 Caldwell, common—Crane.  
*A. vividula*, Smith.

## CATALOGUE OF INSECTS.

63

**AGAPOSTEMON, Smith.**

- A. nigricornis,** Fabr.  
Caldwell, not common—Crane.  
**A. pulchra,** Smith.  
**A. radiatus,** Say.  
**A. sericea,** Först.

**ANDRENA, Fabr.**

- A. fimbriata,** Smith.  
**A. fragilis,** Smith.  
**A. hilaris,** Smith.  
**A. integra,** Smith.  
**A. perplexa,** Smith.  
**A. placida,** Smith.  
**A. simplex,** Smith.  
**A. valida,** Say.

**CILISSA, Leach.**

- C. americana,** Smith.
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**Family APIDÆ.****CALLIOPSIS, Smith.**

- C. andreniformis,** Smith.  
**C. pauper,** Cress.

**PERDITA, Smith.**

- P. octomaculata,** Say.  
Westville—Cresson. New Jersey specimens also in Cresson collection.

**NOMADA, Fabr.**

- N. affabilis,** Cress.  
**N. articulata,** Smith.  
**N. bisignata,** Say.  
Caldwell, not common—Crane.

## 64 GEOLOGICAL SURVEY OF NEW JERSEY.

*N. electa*, Cress.

*N. festiva*, Cress.

Recorded from New Jersey only. Specimens in Collection Cresson.

*N. imbricata*, Smith.

*N. incerta*, Cress.

New Jersey specimens are in the Cresson collection.

*N. luteola*, St. Farg.

New Jersey specimens are in the Cresson collection.

*N. modesta*, Cress.

*N. placida*, Cress.

*N. ruficornis*, Linn.

*N. texana*, Cress.

Westville—Cresson.

*N. torrida*, Smith.

*N. vespiformis*, Först.

*N. vincita*, Say.

New Jersey specimens are in the Cresson collection.

**EPEOLUS, Latr.**

*E. concavus*, Cress.

*E. donatus*, Smith.

Westville—Cresson.

*E. fumipennis*, Say.

*E. lunatus*, Say.

Westville—Cresson. Also in Cresson collection, from New Jersey.

*E. mercatus*, Fabr.

*E. remigatus*, Fabr.

Westville—Cresson.

**CÆLIOXYX, Latr.**

*C. alternata*, Say.

*C. altilis*, Cress.

New Jersey specimens are in the Cresson collection.

## CATALOGUE OF INSECTS.

65

- C. dubitata*, Smith.  
*C. lateralis*, Cress.  
*C. lucrosa*, Cress.  
*C. modesta*, Smith.  
*C. moesta*, Cress.  
*C. 8-dentata*, Say.  
    Caldwell, rare—Crane.  
*C. rufitarsis*, Smith.  
*C. sodalis*, Cress.

## OSMIA, Panz.

- O. albiventris*, Cress.  
    Caldwell—Crane. New Jersey specimens are in Collection Cresson.  
*O. atriventris*, Cress.  
    New Jersey specimens are in Collection Cresson.  
*O. cognata*, Cress.  
*O. faceta*, Cress.  
*O. frigida*, Smith.  
*O. latitarsis*, Cress.  
*O. lignaria*, Say.  
    Caldwell, rare—Crane. New Jersey specimens are in Collection Cresson.  
*O. purpurea*, Cress.  
*O. rustica*, Cress.  
*O. vicina*, Cress.  
*O. simillima*, Smith.  
    Caldwell, common—Crane.

## HERIADES, Spin.

- H. carinatum*, Cress.  
    New Jersey specimens are in Collection Cresson.  
*H. variolosum*, Cress.

E

## 66 GEOLOGICAL SURVEY OF NEW JERSEY.

**ALCIDAMEA, Cress.****A. producta, Cress.**

Caldwell—Crane. New Jersey specimens are in Collection Cresson.

**ANTHIDIUM, Fabr.****A. notatum, Latr.**

New Jersey specimens are in Collection Cresson.

**MEGACHILE, Latr.****M. addenda, Cress.**

New Jersey specimens are in the Cresson collection.

**M. brevis, Say.**

Caldwell, common—Crane.

**M. exilis, Cress.**

New Jersey specimens are in the Cresson collection.

**M. frigida, Smith.**

Westville—Cresson.

**M. latimanus, Say.**

Caldwell, common—Crane. Westville—Cresson.

**M. melanophæsa, Smith.**

Westville—Cresson.

**M. mendica, Cress.**

Caldwell, not common—Crane. Westville—Cresson.

**M. montivaga, Cress.****M. morio, Smith.****M. optiva, Cress.****M. perbrevis, Cress.**

New Jersey specimens of this species, heretofore recorded only from Texas, are in the Cresson collection.

**M. pruina, Smith.****M. pugnata, Say.**

New Jersey specimens are in the Cresson collection.

**M. relativa, Cress.****M. sayi, Cress.**

## CATALOGUE OF INSECTS.

67

## CERATINA, Latr.

**C. dupla**, Say.

Caldwell, not common—Crane. Westville—Cresson.

## MELISSODES, Latr.

**M. aurigenia**, Cress.**M. bimaculata**, St. Farg.

Westville, common—Cresson.

**M. compta**, Cress.

Westville—Cresson.

**M. dentiventris**, Smith.**M. desponsa**, Smith.

New Jersey specimens are in the Cresson collection.

**M. obliqua**, Say.**M. pennsylvanica**, St. Farg.**M. rustica**, Say.

Westville—Cresson.

## XENOGLOSSA, Smith,

**X. pruinosa**, Say.

## EMPHOR, Patton.

**E. bombiformis**, Cress.

## ENTECHNIA, Patton.

**E. taurea**, Say.

## ANTHOPHORA, Latr.

**A. abrupta**, Say.

Caldwell, common—Crane.

**A. bomboides**, Kirby.**A. pyralitarsis**, Dours.

## XYLOCOPA, Latr.

**X. virginica**, Dru.

Common all over the State.

## 68 GEOLOGICAL SURVEY OF NEW JERSEY.

**APATHUS, Newn.**

- A. ashtoni**, Cress.  
Caldwell—Crane.  
**A. citrinus**, Smith.  
**A. elatus**, Fabr.  
Caldwell—Crane.  
**A. laboriosus**, Fabr.  
Caldwell—Crane.

**BOMBUS, Latr.**

- B. affinis**, Cress.  
Greenwood Lake, rare—Crane.  
**B. borealis**, Kirby.  
**B. carolinus**, Linn.  
**B. consimilis**, Cress.  
Caldwell, not common—Crane.  
**B. fervidus**, Fabr.  
**B. pennsylvanicus**, De G.  
Caldwell, common—Crane.  
**B. ridingsii**, Cress.  
**B. separatus**, Cress.  
Caldwell, common—Crane.  
**B. ternarius**, Say.  
**B. terricola**, Kirby.  
**B. vagans**, Smith.  
Caldwell, rare—Crane.  
**B. virginicus**, Oliv.  
Caldwell, common—Crane.

**APIS, Linn.**

- A. mellifica**, Linn.  
Common everywhere in New Jersey.

## CATALOGUE OF INSECTS.

69

## ORDER COLEOPTERA.

## Family CICINDELIDÆ.

## CICINDELA, Linn.

*O. unipunctata*, Fabr.

Atco, Woodstown, rare—Liebeck. Gloucester county, rare—Wenzel.

*O. modesta*, Dej.

Gloucester, Camden and Atlantic counties, locally common—Wenzel. Gloucester, Egg Harbor, moderately abundant—Liebeck. Brigantine Beach, mainland—Hamilton. Newark. I have taken it at Greenville, and in Ocean county. The species is very local, but usually not rare where it occurs. It appears in May, and again in September.

*O. sexguttata*, Fabr.

Gloucester, Camden and Atlantic counties, common—Wenzel. Generally distributed—Liebeck. Newark. Madison. This species occurs rather commonly all over the State, and frequents woods rather than open sand.

*Var. consentanea*, Dej.

Atco, rare—Liebeck. Brigantine Beach, mainland, abundant—Hamilton. This is usually extremely rare and quite different from the typical form.

*Var. patruela*, Dej.

Specimens from New Jersey are in Dr. Horn's collection.

*O. purpurea*, Oliv.

Generally distributed, moderately abundant—Liebeck. Gloucester, Camden and Atlantic counties, not common—Wenzel. Caldwell—Crane. Newark. Madison. I have found this in Ocean county and near Jersey City, along roads in sandy meadows.

*O. ancocisconensis*, Harris.

Caldwell, rare, one specimen only taken—Crane.

## 70 GEOLOGICAL SURVEY OF NEW JERSEY.

*C. generosa*, Dej.

Gloucester, Camden and Atlantic counties, common locally—Wenzel. Gloucester, moderately abundant—Liebeck. Newark, Ocean county, Greenville—Smith. Brigantine Beach, in September, abundant—Hamilton. Also rather local, but quite generally distributed.

*C. vulgaris*, Say.

Gloucester, Camden and Atlantic counties, common—Wenzel. Generally distributed, moderately abundant—Liebeck. Brigantine Beach, in September, abundant—Hamilton. Caldwell, common—Crane. Not on the Newark list, and I have not myself taken it.

*C. repanda*, Dej.

Common everywhere. Reported on all lists and everywhere as abundant. I have seen it in all parts of the State visited.

*Var. 12-guttata*, Dej.

Gloucester, moderately abundant—Liebeck. Gloucester and Camden counties, common—Wenzel. Newark. Caldwell, rare—Crane.

*C. hirticollis*, Say.

Gloucester, Camden and Atlantic counties, common—Wenzel. Gloucester, sea-shore, common—Liebeck. Brigantine Beach, in September, common—Hamilton. Madison. I have taken it at Sandy Hook, Long Branch and Five-Mile Beach. It will be found common everywhere along the coast. It is not on the Newark list.

*C. punctulata*, Fabr.

Common everywhere, and reported on all lists. It is found even in cities, along side streets, and is perhaps the most abundant and widely distributed of all the species of the genus.

*C. tortuosa*, Dej.

Atlantic City, rare—Liebeck.

*C. dorsalis*, Say.

Occurs all along the sea-shore from Sandy Hook to Cape May; common.

*C. marginata*, Fabr.

Atlantic county, not common—Wenzel. Delaware Bay, rare—Liebeck. I have not taken it in this State, but have found

## CATALOGUE OF INSECTS.

71

it on Long Island, along the muddy margins of ponds near the shore; always scarce.

*O. lepida*, Dej.

Atlantic City, not common—Liebeck, Wenzel. Brigantine Beach, in September, not abundant—Hamilton. It has also been taken at Sandy Hook. Mr. Wenzel informs me that the species lives in holes made beneath little tufts of long grass.

*C. marginipennis*, Dej.

Essex, and along the Delaware—Wenzel.

*C. abdominalis*, Fabr.

Dacosta, rare—Liebeck. Atlantic, rare—Wenzel.

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## Family CARABIDÆ.

## OMOPHRON, Latr.

*O. labiatum*, Fabr.

Camden, rare—Liebeck. Atlantic county, not common—Wenzel. Brigantine Beach, in September—Hamilton.

*O. americanum*, Dej.

Atlantic county, not common—Wenzel. Gloucester, rare—Liebeck. Greenville, June and September—Schaupp. Caldwell, rare—Crane.

*O. tessellatum*, Say.

Atlantic county, not common—Wenzel.

## CYCHRUS, Fabr.

*C. stenostomus*, Web.

Gloucester, rare—Wenzel. Rare, no exact locality—Liebeck. Caldwell, rare—Crane. Palisades, May and June, under stones—Schaupp. Newark.

*Var. lecontei*, Dej.

Gloucester, rare—Wenzel. Westville, rare—Liebeck. Madison. Newark. Palisades, under stones, May and June—Schaupp.

## 72 GEOLOGICAL SURVEY OF NEW JERSEY.

*C. elevatus*, Fabr.

Cape May county, rare—Wenzel. Egg Harbor, Anglesea, rare—Liebeck. Newark.

*C. viduus*, Dej.

Newark; on the list without comment. Fort Lee, rare—Linell.

**CARABUS**, Linn.*C. sylvosus*, Say.

Gloucester, rare—Liebeck, Wenzel. Camden county, rare—Wenzel. Greenville, in June, rare—Schaupp. Newark.

*C. serratus*, Say.

Gloucester, rare—Liebeck. Gloucester and Camden counties, not common—Wenzel. Caldwell, rare—Crane. Hoboken, Palisades, June to September—Schaupp. Newark. Madison. This species is more usually at the base of trees, hiding among the grass. It is quite frequently taken at night, while “sugaring” for moths, being attracted by the bait.

*C. limbatus*, Say.

Rare at Gloucester—Liebeck, Wenzel; and Camden—Wenzel. Newark. Greenville, May and September—Schaupp. Caldwell, common—Crane. This was the common species at Lehaway, Ocean county, on the cranberry bogs.

*C. vinctus*, Weber.

Generally distributed, common—Liebeck. Camden, Gloucester and Atlantic counties, common—Wenzel. Caldwell, common—Crane. Newark. Palisades. Jersey City. New Brunswick. The most common of the genus, and the most general under stones and logs.

**CALOSOMA**, Weber.*C. externum*, Say.

Gloucester, rare—Liebeck. Gloucester, Camden, Atlantic and Cape May counties, not common—Wenzel. Newark, Greenville, June and September, rare, under stones—Schaupp.

*C. scrutator*, Fabr.

Generally distributed, abundant—Liebeck. Same localities as *externum*, common—Wenzel. Cast up on Brigantine Beach

## CATALOGUE OF INSECTS.

73

in September—Hamilton. Caldwell, common—Crane. Madison. Newark. Often on trees—Schaupp. This species is not often found in fields under stones, and is rather a tree climber and caterpillar hunter. It is quite commonly cast up by the tide along the sea-shore.

*C. willcoxi*, Lec.

Cape May county, not common—Wenzel. Atlantic City, rare—Liebeck. Newark.

*C. sayi*, Dej.

Camden, Gloucester, Atlantic and Cape May counties, rare—Wenzel. Atlantic City, rare—Liebeck.

*C. calidum*, Fabr.

Same localities as above, common—Wenzel. Generally distributed, abundant—Liebeck. Caldwell, common—Crane. Madison. Newark. Occurs throughout the State under stones. It is much less commonly cast ashore than is *scrutator*.

## ELAPHRUS, Fabr.

*E. fuliginosus*, Say.

Snake Hill—Linell.

*E. ruscarius*, Say.

Camden and Gloucester counties, common—Wenzel. Westville, moderately abundant—Liebeck. June and July, Greenville. Mud flats behind Hoboken—Schaupp. Newark.

## BLETHISA, Bon.

*B. quadricollis*, Hald.

Caldwell, rare—Crane.

## NOTIOPHILUS, Dum.

*N. seneus*, Hbet.

Camden and Gloucester counties, common—Wenzel. Caldwell, rare—Crane.

*N. sibiricus*, Mots.

Newark. This species is not rare on Long Island among leaves in open woods. Madison.

## 74 GEOLOGICAL SURVEY OF NEW JERSEY.

## NEBRIA, Latr.

*N. pallipes*, Say.

Camden and Gloucester counties, common—Wenzel. Generally distributed, abundant—Liebeck. Fort Lee. Orange Mountains, June and September, along running water—Schaupp. This species is common along the margin of rocky streams under stones just at the edge of the water.

## PASIMACHUS, Bon.

*P. sublaevis*, Beauv.

Anglesea, rare—Wenzel, Liebeck. Brigantine Beach, island, September, frequent—Hamilton. I found a dead specimen in July, at Anglesea.

*P. elongatus*, Lec.

Atlantic county, rare—Wenzel.

*P. punctulatus*, Hald.

Egg Harbor, rare—Liebeck.

## SCARITES, Fabr.

*S. subterraneus*, Fabr.

Generally distributed, abundant—Liebeck. Brigantine Beach, island, in September, frequent—Hamilton. Caldwell, common—Crane. Newark. Madison. I have found it all over the State, though never in any large number.

*Var. substrriatus*, Hald.

Camden and Gloucester counties, common—Wenzel.

## DYSCHIRIUS, Bon.

*D. globulosus*, Say.

Generally distributed, rare—Liebeck. Camden and Gloucester counties, not common—Wenzel. Newark.

*D. terminatus*, Lec.

Atlantic City, rare—Liebeck, Wenzel.

*D. sphaericollis*, Say.

Gloucester, rare—Liebeck. Brigantine Beach, salt marshes, in September—Hamilton. Marshy meadows near Hoboken, April and September—Schaupp.

## CATALOGUE OF INSECTS.

75

*D. sellatus*, Lec.

Atlantic City, not common—Liebeck, Wenzel.

*D. pallipennis*, Say.

Atlantic City, rare—Liebeck. Salt marshes, Brigantine Beach, in September—Hamilton.

*D. filiformis*, Lec.

Salt marshes, Brigantine Beach, September—Hamilton.

*D. pumilus*, Dej.

Salt marshes, Brigantine Beach, September—Hamilton.

## CLIVINA, Latr.

*C. impressifrons*, Lec.

Generally distributed, rare—Liebeck.

*C. rubicunda*, Lec.

Atlantic City, rare—Liebeck.

*C. americana*, Dej.

Generally distributed, not rare—Liebeck. Marshy meadows near Hoboken, May and September—Schaupp.

*C. striatopunctata*, Dej.

Salt marshes, Brigantine Beach, September—Hamilton.

*C. ferrea*, Lec.

Gloucester, not common—Wenzel.

*C. convexa*, Lec.

Atlantic City, rare—Liebeck.

*C. bipustulata*, Fabr.

Generally distributed, moderately abundant—Liebeck. Camden and Gloucester counties, not common—Wenzel. Caldwell, rare—Crane.

## SCHIZOGENIUS, Putz.

*S. lineolatus*, Say.

Generally distributed, moderately abundant—Liebeck. Camden and Gloucester counties, not common—Wenzel. Under stones on banks of Passaic, June and September—Schaupp.

*S. ferrugineus*, Putz.

Salt marshes, Brigantine Beach, September—Hamilton.

## 76 GEOLOGICAL SURVEY OF NEW JERSEY.

ARDISTOMIS, Putz.**A. obliquata**, Putz.

Atlantic City, moderately abundant—Liebeck.

**A. viridis**, Say.

Generally distributed, moderately abundant—Liebeck. Camden and Gloucester counties, not common—Wenzel. Newark. Clifton, in June—Schaupp.

PANAGÆUS, Latr.**P. cruciatus**, Say.

Northern New Jersey, rare—Liebeck. Brigantine Beach, in September, frequent—Hamilton. Snake Hill, under stones, May and June—Schaupp.

**P. fasciatus**, Say.

Atlantic county, rare—Wenzel. Snake Hill, under stones, May and June—Schaupp. Caldwell, rare—Crane.

NOMIUS, Lap.**N. pygmaeus**, Dej.

Near Newark, one specimen—Bischoff.

BEMBIDIUM, Latr.**B. punctatostriatum**, Say.

Banks of Passaic, May and September—Schaupp.

**B. inaequale**, Say.

Westville, moderately abundant—Liebeck. Camden and Gloucester counties, not common—Wenzel. Banks of Passaic, May and September—Schaupp.

**B. nitidulum**, Dej.

Banks of Passaic, May and September—Schaupp.

**B. americanum**, Dej.

Camden and Gloucester counties, common—Wenzel. Gloucester, moderately abundant—Liebeck. Banks of Passaic, May and September—Schaupp. Raritan, at New Brunswick—Smith.

## CATALOGUE OF INSECTS.

77

**B. antiquum**, Dej.

Camden and Gloucester counties, not common—Wenzel. Banks of Passaic, May and September—Schaupp.

**B. chalceum**, Dej.

Banks of Passaic, May and September—Schaupp.

**B. nigrum**, Say.

Camden and Gloucester counties, not common—Wenzel. Banks of Passaic, May and September—Schaupp.

**B. planatum**, Lec.

Banks of Passaic, May and September—Schaupp.

**B. rupestre**, Dej.

Gloucester, moderately abundant—Liebeck. Camden and Gloucester counties, common—Wenzel. Newark.

**B. lacunarium**, Zimm.

Fort Lee, in running brooks—Linell.

**B. dorsale**, Say.

Gloucester county, rare—Wenzel.

**B. patruele**, Say.

Banks of Passaic, May and September—Schaupp.

**B. variegatum**, Say.

Camden and Gloucester counties, common—Wenzel. Gloucester, moderately abundant—Liebeck. Banks of Passaic, May and September—Schaupp. Newark—Bischoff.

**B. intermedium**, Kirby.

Gloucester, moderately abundant—Liebeck.

**B. versicolor**, Lec.

Camden and Gloucester counties, common—Wenzel. Banks of Passaic, May and September—Schaupp.

**B. pictum**, Lec.

Camden and Gloucester counties, common—Wenzel. Camden, moderately abundant—Liebeck.

**B. constrictum**, Lec.

Atlantic county, common—Wenzel. Brigantine Beach, September, abundant—Hamilton.

## 78 GEOLOGICAL SURVEY OF NEW JERSEY.

**B. contractum**, Say.

Atlantic City, not common—Wenzel, Liebeck. Brigantine Beach, September, not common—Hamilton. Anglesea, July—Schwarz.

**B. affine**, Say.

Camden, moderately abundant—Liebeck. Ocean county—Smith.

**B. quadrimaculatum**, Linn.

Camden and Gloucester counties, not common—Wenzel, Liebeck. The most abundant species in fields and gardens everywhere—Smith.

**B. semistriatum**, Hald.

Banks of Passaic, May and September—Schaupp.

**TACHYS**, Schaum.**T. proximus**, Say.

Sandy banks of Passaic, May and September—Schaupp. Generally distributed, moderately abundant—Liebeck.

**T. scitulus**, Lec.

Sandy banks of Passaic, May and September—Schaupp. Camden, Gloucester, common—Wenzel.

**T. occultator**, Casey.

Brigantine Beach, in September—Hamilton.

**T. leevus**, Say.

New Brunswick, rare—Smith.

**T. nanus**, Gyll.

Generally distributed, common—Wenzel, Liebeck. Newark. Brigantine Beach, mainland and island, September—Hamilton. Sandy banks of Passaic, May and September—Schaupp.

**T. flavicauda**, Say.

Generally distributed, common—Wenzel, Liebeck. I have taken this everywhere in the State, under bark of trees.

**T. tripunctatus**, Say.

Sandy banks of Passaic, May and September—Schaupp.

**T. capax**, Lec.

Ocean county, cranberry bogs, not common—Smith.

## CATALOGUE OF INSECTS.

79

*T. xanthopus*, Say.

Generally distributed, moderately abundant—Liebeck.

*T. incurvus*, Say.

Generally distributed, common—Liebeck, Wenzel. Sandy banks of Passaic, May and September—Schaupp. Brigantine Beach, September—Hamilton.

*T. fuscicornis*, Chd.

Brigantine Beach, September—Hamilton.

## PATROBUS, Dej.

*P. longicornis*, Say.

Generally distributed, moderately abundant—Liebeck. Camden and Gloucester counties, not common—Wenzel. Newark.

## POGONUS, Dej.

*P. texanus*, Chd.

Atlantic City—Collections Drs. Horn and Castle. According to Dr. Horn, this Texan species has been twice taken at Atlantic City.

## MYAS, Dej.

*M. coracinus*, Say.

Gloucester, rare—Wenzel. Newark.

*M. cyaneascens*, Dej.

Clifton, Fort Lee, June and July—Schaupp.

## PTEROSTICHUS, Bon.

*P. adoxus*, Say.

Camden, Gloucester, not common—Wenzel, Liebeck. Palisades—Schaupp. Brigantine Beach, mainland, September—Hamilton.

*P. rostratus*, Newn.

Palisades—Schaupp. New Jersey—Wenzel.

*P. diligendus*, Chd.

Palisades—Schaupp. Newark.

*P. honestus*, Say.

Foot of Palisades above Hoboken—Schaupp, Smith.

## 80 GEOLOGICAL SURVEY OF NEW JERSEY.

**P. lachrymosus**, Newn.

Palisades—Schaupp, Smith. Newark.

**P. coracinus**, Newn.

Newark.

**P. stygicus**, Say.

Generally distributed, moderately abundant—Liebeck. Camden and Gloucester counties, not common—Wenzel. Brigantine Beach, mainland and island, September—Hamilton.

**P. moestus**, Say.

Newark. Caldwell, common—Crane. New Brunswick; rare.

**P. sculptus**, Lec.

Atlantic City—Dr. Castle.

**P. sayi**, Brullé.

Generally distributed, common—Wenzel, Liebeck. Newark.

**P. lucublandus**, Say.

Generally distributed, common—Wenzel, Liebeck. Caldwell, common—Crane. Newark. Madison. Brigantine Beach, in September—Hamilton. Common along the shore, under wreckage, and abundant in tilled fields, under all shelter—Smith.

**P. ebeninus**, Dej.

Atlantic City, rare—Liebeck.

**P. caudicalis**, Say.

Generally distributed, moderately common—Liebeck.

**P. luctuosus**, Dej.

Rare, exact locality unknown—Liebeck.

**P. corvinus**, Dej.

Moderately common, generally distributed—Liebeck. Palisades—Schaupp.

**P. tartaricus**, Say.

Hoboken, rare—Linell.

**P. mutus**, Say.

Generally distributed, common—Liebeck. Palisades—Schaupp. Caldwell, common—Crane.

**P. erythropus**, Dej.

Generally distributed, rare—Liebeck. Atlantic county, common—Wenzel. Brigantine Beach, in September, common—

## CATALOGUE OF INSECTS.

81

Hamilton. Palisades—Schaupp. Newark. Common on cranberry bogs in Ocean county, May—Smith.

**P. patruelis**, Dej.

Generally distributed, rare—Liebeck. Camden and Gloucester counties, not common—Wenzel. Palisades—Schaupp. Newark. Common on cranberry bogs, Ocean county, May—Smith.

**EVARTHRUS**, Lec.**E. sigillatus**, Say.

Atlantic City, rare—Liebeck. Madison, not uncommon—Paulmier. Caldwell, rare—Crane.

**AMARA**, Bon.**A. avida**, Say.

Camden county, rare—Wenzel. Westville, Gloucester, rare—Liebeck. Palisades—Schaupp.

**A. exarata**, Dej.

Generally distributed, not uncommon—Liebeck. Caldwell, rare—Crane.

**A. latior**, Kirby.

On the Newark list.

**A. angustata**, Say.

Generally distributed, not uncommon—Liebeck. Palisades—Schaupp.

**A. pallipes**, Kirby.

Camden, Gloucester and Atlantic counties, common—Wenzel.

**A. impuncticollis**, Say.

Generally distributed, rather common—Wenzel, Liebeck. Caldwell, common—Crane. Newark. Palisades—Schaupp.

**A. basillaris**, Say.

New Jersey—Henshaw.

**A. cupreolata**, Putz.

New Jersey—Henshaw.

## 82 GEOLOGICAL SURVEY OF NEW JERSEY.

**A. interstitialis**, Dej.

Generally distributed, moderately abundant—Liebeck. Camden and Gloucester counties, not common—Wenzel. Palisades—Schaupp. Newark—Bischoff.

**A. obesa**, Say.

Sea-shore, not uncommon—Liebeck. Atlantic county, not common—Wenzel. Cape May, in July—Schwarz. Newark. Palisades—Schaupp.

**A. chalcea**, Dej.

Palisades—Schaupp.

**A. gibba**, Lec.

New Jersey—Henshaw.

**A. rubrica**, Hald.

On the Newark list.

**A. subænea**, Lec.

Brigantine Beach, in September—Hamilton.

**A. musculus**, Say.

Gloucester, sea-shore, not uncommon—Liebeck. Atlantic and Cape May counties, not common—Wenzel. Brigantine Beach, in September, frequent on herbage—Hamilton. Palisades—Schaupp.

**A. acutangula**, Putz.

Westville, rare—Liebeck.

**DIPLOCHILA**, Brullé.**D. laticollis**, Lec.

Atlantic City, rare—Liebeck. Palisades, May and June, not common—Schaupp, Smith.

**Var. major**, Lec.

Palisades, May and June, more rare than the typical form—Smith.

**DICÆLUS**, Bon.**D. dilatatus**, Say.

Fort Lee, Clifton, June and September, not rare—Schaupp. Generally distributed, not common—Wenzel. Caldwell, rare—Crane. Newark.

## CATALOGUE OF INSECTS.

83

*D. purpuratus*, Bon.

Camden county, rare—Wenzel. Clifton, June and July,  
rare—Schaupp. Newark. Madison.

*D. ovalis*, Lec.

Gloucester, Camden and Atlantic counties, not common—  
Wenzel. Westville, rare—Liebeck.

*D. elongatus*, Bon.

Generally distributed, not uncommon—Wenzel, Liebeck. Cald-  
well, common—Crane. Palisade woods—Schaupp. Newark.

*D. teter*, Bon.

Palisade woods—Schaupp.

*D. politus*, Dej.

Gloucester, Camden and Atlantic counties, not common—Wen-  
zel. Atlantic City, rare—Liebeck. Palisade woods—Schaupp.

## BADISTER, Clairv.

*B. notatus*, Hald.

Gloucester, rare—Liebeck.

*B. micans*, Lec.

Westville, rare—Liebeck.

## CALATHUS, Bon.

*C. gregarius*, Say.

Generally distributed, common—Wenzel, Liebeck. Brigan-  
tine Beach, mainland and island, September—Hamilton.  
Palisades, everywhere common—Schaupp.

*C. opaculus*, Lec.

New Jersey—Henshaw.

*C. impunctatus*, Say.

Atco, sea-shore, not common—Wenzel. Atlantic City, rare—  
Liebeck. Fort Lee, rare—Schaupp.

## PLATYNUS, Bon.

*P. angustatus*, Dej.

Fort Lee, not common—Schaupp. Ocean county, cranberry  
bogs, rare—Smith.

## 84 GEOLOGICAL SURVEY OF NEW JERSEY.

**P. decens, Say.**

Palisades, Fort Lee, common—Schaupp. Caldwell, common, Crane. Anglesea, July—Schwarz. Newark.

**P. sinuatus, Dej.**

Generally distributed, moderately common—Liebeck. Camden and Gloucester counties, not rare—Wenzel. Palisades, Fort Lee—Schaupp. Ocean county, cranberry bogs, rare—Smith.

**P. opaculus, Lec.**

Fort Lee, rare—Schaupp.

**P. tenuicollis, Lec.**

Atlantic City—Castle.

**P. cincticollis, Say.**

Generally distributed, moderately abundant—Liebeck. Camden and Gloucester counties, not uncommon—Wenzel. Fort Lee—Schaupp. Newark.

**P. reflexus, Lec.**

Generally distributed, moderately abundant—Liebeck. Fort Lee—Schaupp.

**P. extensicollis, Say.**

Generally distributed, common—Liebeck, Wenzel. Fort Lee, Clifton, Weehawken, common—Schaupp. Newark. Madison.

**P. decorus, Say.**

Generally distributed, moderately abundant—Liebeck. Camden and Gloucester counties, not uncommon—Wenzel. Palisades, common—Schaupp. Caldwell, common—Crane. Newark.

**P. atratus, Lec.**

Caldwell, very rare, one specimen only—Crane.

**P. melanarius, Dej.**

Camden and Gloucester counties, not uncommon—Wenzel. Fort Lee, Palisade woods—Schaupp. Newark.

**P. propinquus, G. & H.**

Camden and Gloucester counties, not uncommon—Wenzel.

**P. affinis, Kirby.**

Palisade woods—Schaupp. Caldwell, rare—Crane.

## CATALOGUE OF INSECTS.

85

*P. metalloscens*, Lec.

Palisade woods—Schaupp. Newark.

*P. cupripennis*, Say.

Generally distributed, common—Wenzel. Sea-shore, moderately abundant—Liebeck. Common in fields—Schaupp. Newark. Caldwell, common—Crane.

*P. excavatus*, Dej.

Generally distributed, rare—Liebeck. Palisades, rare—Schaupp.

*P. ferreus*, Hald.

Gloucester, rare—Liebeck. Palisades, rare—Schaupp.

*P. basalis*, Lec.

Hoboken, very rare—Linell.

*P. nutans*, Say.

Palisades, rare—Schaupp.

*P. octopunctatus*, Fabr.

Sea-shore, rare—Liebeck. Generally distributed, rare—Wenzel. Caldwell, rare—Crane. Palisades, rare—Schaupp. Newark.

*P. placidus*, Say.

Westville, Gloucester, moderately common—Liebeck. Palisades, not rare—Schaupp, Smith. Madison.

*P. obsoletus*, Say.

Sea-shore, quite common—Liebeck. Palisades—Schaupp. Newark.

*P. æruginosus*, Dej.

Generally distributed, not common—Wenzel. Under bark, Hoboken—Schaupp.

*P. crenistriatus*, Lec.

Palisades—Schaupp. Brigantine Beach, in September—Hamilton.

*P. rubripes*, Zimm.

Sea-shore, not uncommon—Liebeck, Wenzel. Brigantine Beach, in September—Hamilton. Palisades—Schaupp.

*P. punctiformis*, Say.

Generally distributed, moderately abundant—Liebeck, Wenzel. Brigantine Beach, in September, common—Hamilton.

## 86 GEOLOGICAL SURVEY OF NEW JERSEY.

Fort Lee, Palisades—Schaupp. Ocean county, cranberry bogs, rare—Smith. Anglesea—Wenzel.

*P. sordens*, Kirby.

Palisades—Schaupp.

*P. ruficornis*, Lec.

Generally distributed, not common—Wenzel, Liebeck. Palisades, Fort Lee—Schaupp.

*P. picipennis*, Kirby.

Hoboken, rare—Linell.

*P. lutulentus*, Lec.

Camden, rare—Liebeck. Hoboken, rare—Linell. Palisades—Schaupp. Newark. Cranberry bogs, rare—Smith.

## OLISTHOPUS, Dej.

*O. parvatus*, Say.

Generally distributed, rare—Wenzel. Atlantic City, rare—Liebeck.

*O. micans*, Lec.

Atlantic City, rare—Liebeck.

## ATRANUS, Lec.

*A. pubescens*, Dej.

Camden and Gloucester, rare—Wenzel. Westville, rare—Liebeck. Palisades, in June, rare—Schaupp. Fort Lee, in running brooks—Linell. Newark.

## LEPTOTRACHELUS, Latr.

*L. dorsalis*, Fabr.

New Jersey—Schaupp. I have seen isolated specimens of this species from different parts of the State.

## CASNOMIA, Latr.

*C. pennsylvanica*, Linn.

Generally distributed, rather common—Wenzel, Liebeck. Brigantine Beach, in September—Hamilton. Caldwell, common—Crane. Newark.

## CATALOGUE OF INSECTS.

87

**GALERITA, Fabr.*****G. janus*, Fabr.**

Generally distributed, moderately abundant—Wenzel, Liebeck. Brigantine Beach, in September—Hamilton. Caldwell, common—Crane. Newark. Madison.

***G. bicolor*, Dru.**

Generally distributed, more rare—Liebeck, Wenzel.

**TETRAGONODERUS, Dej.*****T. fasciatus*, Hald.**

Generally distributed, rare—Wenzel. Camden, rare—Liebeck.

**LEBIA, Latr.*****L. grandis*, Hentz.**

Generally distributed, common—Wenzel, Liebeck. New Jersey, July and September—Schaupp. Brigantine Beach, in September—Hamilton. Caldwell, common—Crane. Newark. Madison.

***L. atriventris*, Say.**

Generally distributed, rather common—Liebeck, Wenzel. New Jersey, July and September—Schaupp. Caldwell, common—Crane. Newark. Madison.

***L. tricolor*, Say.**

Atlantic City, rare—Liebeck.

***L. pulchella*, Dej.**

Sea-shore, rare—Liebeck. Gloucester and Atlantic counties, rare—Wenzel.

***L. cyanipennis*, Dej.**

Generally distributed, rare—Liebeck. Gloucester county, rare—Wenzel.

***L. marginicollis*, Dej.**

Dacosta, rare—Liebeck.

***L. viridis*, Say.**

Generally distributed, common—Wenzel, Liebeck. Greenville, Ridgewood, Passaic, June and July—Schaupp. Caldwell, rare—Crane. Newark. Madison.

## 88 GEOLOGICAL SURVEY OF NEW JERSEY.

*Var. moesta*, Lec.

Atco, rare—Liebeck.

*L. pumila*, Dej.

Generally distributed, rare—Liebeck. Greenville, Ridgewood, Passaic, June and July—Schaupp. Newark.

*L. pleuritica*, Lec.

Fort Lee, rare—Schaupp.

*L. viridipennis*, Dej.

Brigantine Beach, in September, frequent—Hamilton. Fort Lee—Schaupp. Newark.

*L. ornata*, Say.

Generally distributed, rare—Liebeck. Common—Wenzel. Greenville, Ridgewood, Passaic, June and July—Schaupp. Caldwell, rare—Crane. Anglesea, in July—Schaupp. Newark.

*L. analis*, Dej.

Generally distributed, not rare—Wenzel. Westville, rare—Liebeck. Fort Lee—Schaupp.

*L. fuscata*, Dej.

Generally distributed, rare—Liebeck. Greenville, Ridgewood, Passaic, June and July—Schaupp.

*L. scapularis*, Dej.

Generally distributed, not common—Wenzel, Liebeck. Fort Lee—Schaupp. Newark.

*L. vittata*, Fabr.

Generally distributed, rare—Liebeck. Madison.

*Var. spraguei*, Horn.

Collected in New Jersey—Castle.

*L. bivittata*, Fabr.

Sea-shore, rare—Liebeck.

**COPTODERA, Dej.**

*C. serrata*, Dej.

Sea-shore, rare—Liebeck.

## CATALOGUE OF INSECTS.

89

**DROMIUS, Bon.****D. piceus, Dej.**

Generally distributed, rare—Liebeck. Camden, Gloucester, not common—Wenzel. Hoboken, under bark—Schaupp. Newark.

**APRISTUS, Chd.****A. cordicollis, Lec.**

Gloucester, rare—Liebeck.

**BLEOHRUS, Mots.****B. nigrinus, Mann.**

Hoboken, under bark—Schaupp.

**METABLETUS, Schm.-Goeb.****M. americanus, Dej.**

Gloucester and Camden, rare—Wenzel.

**AXINOPALPUS, Lec.****A. biplagiatus, Dej.**

Hoboken, under bark—Schaupp.

**CALLIDA, Dej.****C. purpurea, Say.**

Dacosta, rare—Liebeck. Atlantic county, rare—Wenzel. Greenwood Lake, sometimes not uncommon.

**C. punctata, Lec.**

Caldwell, rare—Crane.

**PLOCHIONUS, Dej.****P. timidus, Hald.**

Generally distributed except along shore—Wenzel. Westville, not rare—Liebeck. Hoboken, under bark—Schaupp.

**P. amandus, Newn.**

Very rare, one specimen only, Caldwell—Crane. I have not seen this.

## 90 GEOLOGICAL SURVEY OF NEW JERSEY.

**PINACODERA, Schaum.****P. limbata, Dej.**

Camden and Gloucester counties, sea-shore—Wenzel. Sea-shore, not rare—Liebeck. Anglesea, in July—Schwarz. Newark.

**P. platicollis, Say.**

Gloucester and Camden counties, sea-shore—Wenzel. Westville, rare—Liebeck. Madison.

**CYMINDIS, Latr.****C. americana, Dej.**

Generally distributed, not rare—Wenzel. Sea-shore, rare—Liebeck.

**C. pilosa, Say.**

Generally distributed, moderately abundant—Liebeck. Camden and Gloucester counties, not common—Wenzel, Caldwell, common—Crane.

**C. neglecta, Hald.**

Camden and Gloucester, rare—Wenzel. Newark.

**APENES, Lec.****A. lucidula, Dej.**

Sea-shore, rare—Liebeck. Atlantic county, not common—Wenzel.

**A. sinuata, Say.**

Atlantic county, rare—Wenzel. Anglesea, rare—Liebeck. Newark—Bischoff. Both species will be found from Sandy Hook to Cape May.

**HELLUOMORPHA, Lap.****H. bicolor, Harris.**

Camden county, rare—Wenzel. Newark.

**H. ferruginea, Lec.**

Greenville, under logs, rare—Schaupp.

**BRACHYNUS, Web.****B. viridipennis, Dej.**

New Jersey—Schaupp. Newark.

## CATALOGUE OF INSECTS.

91

*B. minutus*, Harr.

Along the Palisades—Schaupp.

*B. perplexus*, Dej.

Along the Palisades—Schaupp.

*B. medius*, Harr.

Along the Palisades—Schaupp.

*B. quadripennis*, Dej.

Along the Palisades—Schaupp.

*B. conformis*, Dej.

Along the Palisades—Schaupp.

*B. cyanipennis*, Say.

Along the Palisades—Schaupp.

*B. alternans*, Dej.

Along the Palisades—Schaupp.

*B. fumans*, Fabr.Generally distributed, common—Wenzel, Liebeck. Caldwell,  
common—Crane. Along the Palisades—Schaupp. Madison.*B. similis*, Lec.

Brigantine Beach, in September—Hamilton.

*B. cordicollis*, Dej.Generally distributed, moderately abundant—Liebeck. Along  
the Palisades—Schaupp. Caldwell, common—Crane.

The species of *Brachynus* are ill defined, and not generally named in collections. It is therefore almost impossible to get an accurate list. The species collected by Mr. Schaupp may, however, be considered fairly reliable.

*CHLÆNIUS*, Bon.*C. erythropus*, Germ.

Atlantic county, rare—Wenzel.

*C. sericeus*, Först.Generally distributed, moderately abundant—Wenzel, Liebeck.  
Caldwell, common—Crane. Palisades, Fort Lee, Snake Hill,  
Ridgewood—Schaupp. Newark. Madison.

## 92 GEOLOGICAL SURVEY OF NEW JERSEY.

*C. laticollis*, Say.

Generally distributed, rare—Wenzel. Anglesea, rare—Liebeck. Brigantine Beach, in September—Hamilton. Caldwell, rare—Crane. Palisades, Fort Lee, Snake Hill, Ridgewood—Schaupp. The most abundant Carabid at Snake Hill—Linell.

*C. diffinis*, Chd.

Palisades, in spring—Schaupp.

*C. aestivus*, Say.

Generally distributed, rather common—Wenzel, Liebeck. Palisades, Fort Lee, Snake Hill, Ridgewood—Schaupp. Caldwell, common—Crane. Newark. Madison.

*C. prasinus*, Dej.

Caldwell, common—Crane.

*C. nemoralis*, Say.

Generally distributed, common—Wenzel, Sea-shore, moderately abundant—Liebeck. Caldwell, common—Crane. Palisades, in spring—Schaupp. Newark.

*C. tricolor*, Dej.

Generally distributed, moderately abundant—Liebeck. Palisades, in spring—Schaupp. Madison.

*C. pennsylvanicus*, Say.

Generally distributed, not common—Wenzel. Westville, rare—Liebeck. Palisades, in spring—Schaupp.

*C. impunctifrons*, Say.

Generally distributed, moderately abundant—Liebeck, Wenzel. Caldwell, very rare—Crane. Palisades, in spring.

*C. niger*, Rand.

Palisades, in spring, rare—Schaupp.

*C. purpuricollis*, Rand.

A New Jersey specimen is in Dr. Horn's collection.

*C. tomentosus*, Say.

Generally distributed, not common—Wenzel. Sea-shore, rare—Liebeck. Newark. Madison.

## CATALOGUE OF INSECTS.

93

***ANOMOGLOSSUS*, Chd.*****A. emarginatus*, Say.**

Generally distributed, not common—Wenzel. Sea-shore, moderately abundant—Liebeck. Fort Lee, Ridgewood, not rare—Schaupp. Caldwell, common—Crane.

***A. pusillus*, Say.**

Generally distributed, rather common—Wenzel. Rare—Liebeck. New Jersey, rare—Schaupp. Newark. Madison.

***BRACHYLOBUS*, Chd.*****B. lithophilus*, Say.**

Palisades, in March, rare—Schaupp. Gloucester, rare—Liebeck.

***LACHNOCREPIS*, Lec.*****L. parallelus*, Say.**

Gloucester, Westville, rare—Liebeck. Snake Hill, common—Linell.

***OODES*, Bon.*****O. amaroides*, Dej.**

Palisades, rare—Schaupp.

***O. americanus*, Dej.**

Palisades, common—Schaupp. Westville, rare—Liebeck.

***O. fluvialis*, Lec.**

Westville, Gloucester, rare—Liebeck. Camden, Gloucester, not rare—Wenzel.

***O. lecontei*, Chd.**

Camden and Gloucester counties, rare—Wenzel.

***GEOPINUS*, Lec.*****G. incrassatus*, Dej.**

Generally distributed in sandy districts along water—Wenzel. Westville, moderately abundant—Liebeck. Brigantine Beach, in September, frequent—Hamilton. Greenville, six inches deep, in sandy soil—Schaupp. Newark.

## 94 GEOLOGICAL SURVEY OF NEW JERSEY.

**ORATACANTHUS, Dej.****C. dubius, Beauv.**

Generally distributed, moderately abundant—Liebeck. In sandy districts along water-courses, common—Wenzel. Newark. New Brunswick.

**AGONODERUS, Dej.****A. lineola, Fabr.**

Generally distributed, rather common—Wenzel, Liebeck. Brigantine Beach, in September—Hamilton. Along Palisades—Schaupp. Caldwell, common—Crane. Newark.

**A. infuscatus, Dej.**

Generally distributed, not uncommon—Wenzel. Anglesea, rare—Liebeck. Brigantine Beach, in September—Hamilton.

**A. pallipes, Fabr.**

Generally distributed, common—Wenzel, Liebeck. Brigantine Beach, in September, frequent—Hamilton. Along the Palisades, common—Schaupp. Newark. Madison. In my experience, one of the most abundant Carabids in the State, flying to light, in spring.

**A. partiarius, Say.**

Generally distributed, rare—Liebeck. Along Palisades, in spring, common—Schaupp. Newark.

**A. pauperculus, Lec.**

Ocean county, common on cranberry bogs—Smith.

**A. indistinctus, Say.**

Anglesea, rare—Wenzel. Along the Palisades, rare—Schaupp.

**A. testaceus, Dej.**

Atlantic City—Castle.

**DISCODERUS, Lec.****D. parallelus, Hald.**

Atlantic City, not uncommon—Liebeck. Sea-shore, not common—Wenzel.

## CATALOGUE OF INSECTS.

95

## GYNANDROPUS, Dej.

*G. hylacis*, Say.

Generally distributed, not common—Wenzel. Atlantic City, not rare—Liebeck. Under bark of trees, Hoboken—Schaupp. Caldwell, common—Crane.

## HARPALUS, Latr.

*H. dichrous*, Dej.

Generally distributed, rather rare—Wenzel. Westville, rare—Liebeck. Caldwell, rare—Crane.

*H. vulpeculus*, Say.

Generally distributed, more common—Wenzel, Liebeck.

*H. autumnalis*, Say.

Sea-shore, rare—Liebeck.

*H. erraticus*, Say.

Generally distributed, moderately abundant—Liebeck, Wenzel. Brigantine Beach, in September, abundant—Hamilton. Passaic, Greenville—Schaupp.

*H. viridissimus*, Beauv.

Generally distributed, not rare—Wenzel. Sea-shore, rare—Liebeck. Newark. Madison.

*H. caliginosus*, Fabr.

Generally distributed, common—Wenzel, Liebeck, Schaupp. Brigantine Beach, in September, abundant—Hamilton. Caldwell, common—Crane. Newark.

*H. faunus*, Say.

Generally distributed, moderately abundant—Schaupp, Wenzel, Liebeck.

*H. convivus*, Lec.

New Brunswick, rare—Smith.

*H. vagans*, Lec.

Generally distributed, rather common—Schaupp, Wenzel, Liebeck.

*H. pennsylvanicus*, De G.

Generally distributed, common—Wenzel, Liebeck, Schaupp. Brigantine Beach, in September, abundant—Hamilton. Caldwell, common—Crane. Newark. Madison.

## 96 GEOLOGICAL SURVEY OF NEW JERSEY.

*Var. compar*, Lec.

Generally distributed, not so common as the type—Wenzel, Liebeck, Schaupp. Brigantine Beach—Hamilton. Caldwell, common—Crane.

*Var. erythropus*, Dej.

Along the Palisades, common—Schaupp.

*H. spadiceus*, Dej.

Along the Palisades, rather rare—Schaupp. Madison.

*H. fallax*, Lec.

New Jersey—Henshaw.

*H. pleuriticus*, Kirby.

Along the Palisades, common—Schaupp.

*H. herbivagus*, Say.

Generally distributed, rather common—Wenzel. Gloucester, Westville, rare—Liebeck. Brigantine Beach, in September—Hamilton. Madison. Ocean county, common on cranberry bogs—Smith.

*H. nitidulus*, Chd.

Sea-shore, rare—Liebeck.

**SELENOPHORUS, Dej.***S. pedicularius*, Dej.

Sea-shore, moderately abundant—Liebeck. Brigantine Beach, in September, frequent—Hamilton. Atlantic City—Castle. Ocean Beach—Paulmier.

*S. opalinus*, Lec.

Sea-shore, moderately abundant—Liebeck. Under leaves, in spring—Wenzel. Atlantic City—Castle. Ocean Beach—Paulmier.

*S. ovalis*, Dej.

Brigantine Beach, in September—Hamilton.

*S. ellipticus*, Dej.

Sea-shore, moderately common—Liebeck. Under leaves, in spring—Wenzel. Brigantine Beach, in September—Hamilton. Atlantic City—Castle.

## CATALOGUE OF INSECTS.

97

**STENOLOPHUS, Dej.****S. carbonarius, Brullé.**

Anglesea, Atlantic City, rare—Liebeck. Brigantine Beach, in September—Hamilton. Ocean Beach—Paulmier.

**S. fuliginosus, Dej.**

Generally distributed, common—Wenzel. Rare—Liebeck.

**S. plebeius, Dej.**

Brigantine Beach, in September—Hamilton. Ocean Beach—Paulmier.

**S. conjunctus, Say.**

Generally distributed, common—Wenzel, Liebeck. Brigantine Beach, in September—Hamilton. Newark. Cranberry bogs, Ocean county, common—Smith.

**S. nova species, Horn dixit.**

Madison. Several specimens were taken by Mr. Paulmier. It is in Dr. Horn's collection from Allegheny, Pa.

**S. ochropezzus, Say.**

Generally distributed, common—Wenzel, Liebeck. Brigantine Beach, in September—Hamilton. Newark. Ocean county, on cranberry bogs, common—Smith.

**S. dissimilis, Dej.**

Sea-shore, rare—Liebeck.

**ACUPALPUS, Latr.****A. hydropicus, Lec.**

Ocean county, common on cranberry bogs, in May—Smith.

**A. carus, Lec.**

Generally distributed, common—Wenzel, Liebeck.

**BRADYCHELLUS, Br.****B. rupestris, Say.**

Generally distributed, moderately abundant—Wenzel, Liebeck. Brigantine Beach, in September—Hamilton. Newark. Ocean county, cranberry bogs, not common—Smith.

## 98 GEOLOGICAL SURVEY OF NEW JERSEY.

**ANISODACTYLUS, Dej.****A. dulcicollis, Laf.**

Brigantine Beach, in September—Hamilton.

**A. rusticus, Dej.**

Generally distributed, common—Wenzel, Liebeck. Brigantine Beach, in September—Hamilton. Newark.

**A. carbonarius, Say.**

Generally distributed, not rare—Wenzel. Atlantic City, moderately abundant—Liebeck.

**A. interpunctatus, Kirby.**

Generally distributed, not common—Wenzel.

**A. harrisii, Lec.**

Sea-shore, rare—Liebeck.

**A. agricola, Say.**

Generally distributed, not common—Wenzel. New Brunswick, rare—Smith.

**A. melanopus, Hald.**

Generally distributed, moderately abundant—Liebeck.

**A. nigerrimus, Dej.**

Brigantine Beach, in September—Hamilton.

**A. discoideus, Dej.**

Sea-shore, rare—Liebeck, Wenzel. Gloucester, rare—Wenzel.

**A. baltimorensis, Say.**

Generally distributed, common—Wenzel, Liebeck. Newark. Caldwell, common—Crane. Occurs everywhere in the State—Smith.

**A. verticalis, Lec.**

Anglesea, in August—Smith.

**A. piceus, Men.**

Brigantine Beach, in September—Hamilton.

**A. terminatus, Say.**

Generally distributed, rather common—Wenzel. Sea shore, moderately abundant—Liebeck. Brigantine Beach, in September—Hamilton.

**A. nitidipennis, Lec.**

Newark—Bischoff.

## CATALOGUE OF INSECTS.

99

**A. lœtus, Dej.**

Brigantine Beach, in September, very rare—Hamilton. Atlantic county, rare—Wenzel.

**A. coenus, Say.**

Atlantic City, rare—Liebeck. Newark—rare.

**A. lugubris, Dej.**

Generally distributed, common—Wenzel. Gloucester, rare—Liebeck.

**A. sericeus, Harris.**

Gloucester, rare—Liebeck. Newark, rare—Smith.

**A. interstitialis, Say.**

Generally distributed, moderately common—Wenzel, Liebeck. Newark. Madison.

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**Family HALIPLIDÆ.****HALIPLUS, Latr.****H. fasciatus, Aubé.**

Gamden and Gloucester counties—Wenzel. Camden, rare—Liebeck. New Jersey—Collection Roberts and United States National Museum.

**H. punctatus, Aubé.**

New Jersey—Collection United States National Museum.

**H. triopsis, Say.**

New Jersey—Collection Roberts.

**H. ruficollis, De G.**

Generally distributed, common—Liebeck, Wenzel. New Jersey—Collection United States National Museum and Roberts.

**ONEMIDOTUS, Er.****C. 12-punctatus, Say.**

Generally distributed, common—Wenzel. Camden, moderately abundant—Liebeck. New Jersey—Collection Roberts and United States National Museum. Madison.

**C. edentulus, Lec.**

New Jersey—Collection Roberts.

## 100 GEOLOGICAL SURVEY OF NEW JERSEY.

**Family DYTISCIDÆ.****CANTHYDRUS, Sharp.***C. bicolor*, Say.

Anglesea—Wenzel.

**HYDROCANTHUS, Say.***H. iricolor*, Say.Generally distributed, rather common—Liebeck. Newark.  
New Jersey—Collection United States National Museum.**LACCOPHILUS, Leach.***L. maculosus*, Germ.

Generally distributed, moderately abundant—Liebeck. Caldwell, common—Crane. Newark. Madison. New Jersey—Collection Roberts and United States National Museum.

*L. proximus*, Say.

New Jersey—Collection United States National Museum.

*L. fasciatus*, Aubé.

Generally distributed, moderately abundant—Liebeck. New Jersey—Collection Roberts and United States National Museum.

*L. undatus*, Aubé.

New Jersey—Collection Roberts and United States National Museum.

**HYDROVATUS, Mots.***H. cuspidatus*, Germ.

Camden, rare—Liebeck.

*H. pustulatus*, Melsh.

New Jersey—Collection Roberts and United States National Museum.

**DESMOPACHRIA, Bab.***D. convexa*, Aubé.

Camden, rare—Liebeck. New Jersey—Collection Roberts.

## CATALOGUE OF INSECTS.

101

**BIDESSUS, Sharp.****B. affinis, Say.**

Generally distributed, moderately abundant—Liebeck. New Jersey—Collection Roberts and United States National Museum.

**B. granarius, Aubé.**

New Jersey—Collection United States National Museum.

**OELAMBUS, Thom.****C. inaequalis, Fabr.**

New Jersey—Collection United States National Museum.

**C. punctatus, Say.**

Generally distributed, common—Liebeck. New Jersey—Collection Roberts.

**C. nubilus, Lec.**

Generally distributed, moderately abundant—Liebeck. New Jersey—Collection Roberts.

**C. impressopunctatus, Sch.**

Sea-shore, rare—Liebeck. New Jersey—Collection Roberts.

Generally distributed, not uncommon—Wenzel.

**DERONECTES, Sharp.****D. griseostriatus, De G.**

New Jersey—Collection United States National Museum.

**HYDROPORUS, Clairv.****H. concinnus, Lec.**

New Jersey—Roberts.

**H. pulcher, Lec.**

New Jersey—Collection United States National Museum.

**H. integer, Sharp.**

New Jersey—Roberts.

**H. undulatus, Say.**

Newark. New Jersey—Collection Roberts and United States National Museum. Madison.

## 102 GEOLOGICAL SURVEY OF NEW JERSEY.

*H. consimilis*, Lec.

New Jersey—Collection United States National Museum.

*H. obscurus*, Sturm.

Generally distributed, moderately abundant—Liebeck.

*H. tenebrosus*, Lec.

New Jersey—Collection United States National Museum.

*H. americanus*, Aubé.

New Jersey—Collection United States National Museum.

*H. dichrous*, Melsh.

New Jersey—Collection United States National Museum.

*H. modestus*, Aubé.

New Jersey—Collection Roberts and United States National Museum.

*H. stagnalis*, G. & H.

New Jersey—Collection United States National Museum.

**ILYBIUS, Br.***I. biguttulus*, Gem.

Generally distributed, moderately abundant—Liebeck. New Jersey—Collection Roberts and United States National Museum. Madison.

**COPTOTOMUS, Say.***C. interrogatus*, Fabr.

Caldwell, common—Crane. Sea-shore, moderately abundant—Liebeck. Madison. New Jersey—Collection Roberts and United States National Museum.

**COPELATUS, Br.***C. glyphicus*, Say.

Generally distributed, moderately abundant—Liebeck. Brigantine Beach, in September—Hamilton. New Jersey—Collection Roberts and United States National Museum.

**MATUS, Aubé.***M. bicarinatus*, Say.

New Jersey—Collection Roberts and United States National Museum.

## CATALOGUE OF INSECTS.

103

**AGABUS, Leach.****A. seriatus, Say.**

New Jersey—Collection Roberts and United States National Museum.

**A. obtusatus, Say.**

New Jersey—Collection Roberts.

**A. punctatus, Melsh.**

New Jersey—Collection United States National Museum.

**A. teeniolatus, Harr.**

New Jersey, exact locality unknown, rare—Liebeck.

**A. disintegratus, Cr.**

Generally distributed, moderately abundant—Liebeck. Newark. New Jersey—Collection Roberts and United States National Museum.

**A. erythropterus, Say.**

New Jersey—Collection Roberts and United States National Museum.

**A. gagates, Aubé.**

Fort Lee, common—Linell. New Jersey—Collection Roberts.

**A. clavatus, Lec.**

Camden and Gloucester counties—Wenzel.

**RHANTUS, Esch.****R. binotatus, Harr.**

Newark.

**R. calidus, Fabr.**

Camden and Gloucester counties, not common—Wenzel.

**R. bistrigatus, Bergst.**

Camden, Gloucester and Atlantic counties, not common—Wenzel.

**COLYMBETES, Clairv.****C. sculptilis, Harr.**

Caldwell, rare—Crane. Newark. New Jersey—Collection Roberts and United States National Museum.

## 104 GEOLOGICAL SURVEY OF NEW JERSEY.

**HYDATICUS, Leach.*****H. piceus*, Lec.**

Very rare, one specimen only; Caldwell—Crane.

***H. bimarginatus*, Say.**

Anglesea, rare—Liebeck.

**DYTISOUS, Linn.*****D. harriasi*, Kirby.**

Caldwell, common—Crane.

***D. fasciventris*, Say.**

Camden, Gloucester and Atlantic counties—Wenzel. Caldwell, rare—Crane. New Jersey—Collection Roberts and United States National Museum. Madison.

***D. hybridus*, Aubé.**

New Jersey—Collection Roberts and United States National Museum.

***D. verticalis*, Say.**

New Jersey—Collection United States National Museum. Madison.

**ACILIUS, Leach.*****A. semisulcatus*, Aubé.**

Caldwell, common—Crane. Newark. New Jersey—Collection United States National Museum.

***A. fraternus*, Harr.**

Anglesea, rare—Liebeck. New Jersey—Collection Roberts and United States National Museum. Madison.

***A. mediatus*, Say.**

Sea-shore, rare—Liebeck. Camden, Gloucester and Atlantic counties—Wenzel. New Jersey—Collection Roberts and United States National Museum. Fort Lee, abundant—Linell.

**THERMONECTES, Esch.*****T. basilaris*, Harr.**

Generally distributed, moderately abundant—Liebeck. New Jersey—Collection Roberts and United States National Museum.

## CATALOGUE OF INSECTS.

105

**GRAPHODERUS, Esch.****G. liberus, Say.**

Madison. New Jersey—Collection Roberts and United States National Museum.

**G. fasciaticollis, Harr.**

New Jersey—Collection United States National Museum.

**OYBISTER, Curt.****O. fimbriolatus, Say.**

Caldwell, rare—Crane. New Jersey—Collection Roberts and United States National Museum.

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**Family GYRINIDÆ.****GYRINUS, Linn.****G. rockinghamensis, Lec.**

Atlantic county, common—Wenzel. Atco, common—Liebeck.

**G. limbatus, Say.**

Atco, Egg Harbor, moderately abundant—Liebeck.

**G. dichrous, Lec.**

New Jersey—Collection Roberts and United States National Museum.

**G. ventralis, Kirby.**

Generally distributed, moderately abundant—Liebeck. New Jersey—Collection United States National Museum.

**G. affinis, Aubé.**

New Jersey—Collection United States National Museum.

**G. analis, Say.**

Atlantic county, common—Wenzel.

**G. borealis, Aubé.**

Atlantic county, common—Wenzel. New Jersey—Collection Roberts and United States National Museum. Madison.

**G. lugens, Lec.**

Atco, rare—Liebeck.

## 106 GEOLOGICAL SURVEY OF NEW JERSEY.

**DINEUTES, MacL.*****D. vittatus*, Germ.**

Generally distributed, moderately abundant—Liebeck. Atlantic county, common—Wenzel. Newark. Clifton, Ocean county, in ditches and small streams, never in ponds—Smith.

***D. discolor*, Aubé.**

Ocean county, common—Smith. New Jersey—Collection Roberts and United States National Museum.

***D. assimilis*, Aubé.**

Generally distributed, moderately abundant—Liebeck. Atlantic county, common—Wenzel. Clifton, Ocean county, common—Smith. New Jersey—Collection Roberts and United States National Museum.

***D. emarginatus*, Say.**

Generally distributed, moderately abundant—Liebeck.

**Family HYDROPHILIDÆ.****HELOPHORUS, Fabr.*****H. lacustris*, Lec.**

Hoboken, common—Linell. Palisades, common—Smith.

***H. lineatus*, Say.**

Generally distributed, common—Liebeck. Newark. New Jersey—Collection United States National Museum.

***H. tuberculatus*, Gyll.**

Westville, rare—Liebeck.

**HYDROCHUS, Leach.*****H. scabrinus*, Muls.**

Generally distributed, common—Liebeck. Newark. New Jersey—Collection United States National Museum.

***H. inaequalis*, Lec.**

New Jersey—Collection United States National Museum.

## CATALOGUE OF INSECTS.

107

**H. subcupreus**, Rand.

New Jersey—Collection Roberts and United States National Museum.

**H. variolatus**, Lec.

Camden, moderately abundant—Liebeck.

**OCHTHEBIUS**, Leach,**O. beneficinus**, Lec.

New Jersey—Collection Horn.

**HYDRÆNA**, Kug.**H. pennsylvanica**, Kies.

New Jersey—Collection Roberts and United States National Museum.

**HYDROPHILUS**, Geoffr.**H. ovatus**, G. & H.

Newark; rare.

**H. triangularis**, Say.

Generally distributed, common—Liebeck. Camden and Gloucester counties, common—Wenzel. Newark; common. Caldwell, common—Crane.

**H. nimbatus**, Say.

Generally distributed, common—Liebeck. Newark. New Jersey—Collection Roberts and United States National Museum.

**H. mixtus**, Lec.

Generally distributed, moderately abundant—Liebeck. Madison.

**H. glaber**, Hbst.

Brigantine Beach, in September—Hamilton. Along Palisades, common—Smith. Caldwell, rare—Crane. New Jersey—Collection Roberts and United States National Museum.

**HYDROCHARIS**, Latr.**H. obtusatus**, Say.

Generally distributed, rare—Liebeck. Camden and Gloucester counties, common—Wenzel. Newark. Madison. New Jersey—Collection Roberts and United States National Museum.

## 108 GEOLOGICAL SURVEY OF NEW JERSEY.

**BEROSUS, Leach.****B. pantherinus, Lec.**

New Jersey—Collection Roberts.

**B. peregrinus, Hbst.**

Generally distributed, moderately abundant—Liebeck. New Jersey—Collection Horn and United States National Museum.

**B. striatus, Say.**

Generally distributed, moderately abundant—Liebeck. Camden and Gloucester counties, common—Wenzel. Caldwell, common—Crane. New Jersey—Collection Roberts and United States National Museum. Madison.

**LACCOBIUS, Br.****L. agilis, Rand.**

Westville, rare—Liebeck. New Jersey—Collection Roberts and United States National Museum.

**PHILHYDRUS, Sol.****P. nebulosus, Say.**

New Jersey—Collection United States National Museum.

**P. bifidus, Lec.**

New Jersey—Collection Horn and United States National Museum.

**P. ochraceus, Mels.**

Camden and Gloucester counties, common—Wenzel. Brigantine Beach, in September, common in fresh-water pools—Hamilton. New Jersey—Collection United States National Museum.

**P. reflexipennis, Zimm.**

Brigantine Beach, in September, common in fresh-water pools—Hamilton. New Jersey—Collection Roberts.

**P. cinctus, Say.**

Generally distributed, moderately abundant—Liebeck. Newark. New Jersey—Collection Roberts and United States National Museum.

## CATALOGUE OF INSECTS.

109

**P. diffusus**, Say.

New Jersey—Collection United States National Museum.

**P. perplexus**, Lec.

Brigantine Beach, in September, in fresh-water pools—Hamilton. New Jersey—Collection Roberts and United States National Museum.

**P. hamiltoni**, Horn.

Brigantine Beach, in September—Hamilton.

**HYDROCOMBUS**, Sharp.**H. fimbriatus**, Melsh.

Camden and Gloucester counties, common—Wenzel. New Jersey—Collection Roberts and United States National Museum.

**H. lacustris**, Lec.

Sea-shore, common—Liebeck. Hoboken, common—Linell.

**H. rotundatus**, Say.

Caldwell, rare—Crane.

**HYDROBIUS**, Leach.**H. globosus**, Say.

Westville, rare—Liebeck. Caldwell, rare—Crane. Newark. New Jersey—Collection Roberts and United States National Museum.

**H. fuscipes**, Linn.

Camden and Gloucester counties—Wenzel. New Jersey—Collection Roberts and United States National Museum.

**H. subcupreus**, Say.

Generally distributed, common—Liebeck. Brigantine Beach, in September—Hamilton. New Jersey—Collection Roberts and United States National Museum.

**H. suturalis**, Lec.

Brigantine Beach, in September—Hamilton.

**CERCYON**, Leach.**C. centromaculatum**, Sturm.

Orange Mountains, rare—Smith.

## 110 GEOLOGICAL SURVEY OF NEW JERSEY.

*C. prætextatum*, Say.

Generally distributed, moderately abundant—Liebeck. Brigantine Beach, in September—Hamilton. New Jersey—Collection Roberts and United States National Museum.

*C. ocellatum*, Say.

Generally distributed, moderately abundant—Liebeck. New Jersey—Collection United States National Museum.

*C. pygmæum*, Ill.

New Jersey—Collection United States National Museum.

*C. unipunctatum*, Linn.

Generally distributed, moderately common—Liebeck.

*C. anale*, Payk.

Camden, rare—Liebeck. New Jersey—Collection United States National Museum. Ocean county, cranberry bogs, common—Smith.

There are a number of unnamed species in collections, which will probably add a few to the above list.

**PHENONOTUM, Sharp.***P. extriatum*, Say.

Brigantine Beach, in September—Hamilton.

**Family SILPHIDÆ.****NECROPHORUS, Fabr.***N. americana*, Oliv.

Generally distributed, not rare—Wenzel. Westville, rare—Liebeck. Caldwell, common—Crane. Newark. Hudson county—Linell.\* Madison.

*N. sayi*, Lap.

Hudson county—Linell.

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\* Mr. Linell's collecting was done very largely along the Palisades to Fort Lee, in the marshes back of Hoboken, and at Snake Hill and its immediate vicinity. This is particularly so in the Staphylinide families.

## CATALOGUE OF INSECTS.

111

**N. orbicollis, Say.**

Generally distributed, not rare—Wenzel. Westville, rare—Liebeck. Caldwell, common—Crane. Newark. Hudson county—Linell. Madison.

**N. marginatus, Fabr.**

Generally distributed, common—Wenzel, Liebeck. Hudson county—Linell. Caldwell, common—Crane. Madison.

**N. guttula, Mots.**

Hudson county—Linell.

**N. tomentosus, Weber.**

Generally distributed, common—Wenzel, Liebeck. Hudson county—Linell. Caldwell, common—Crane. Newark.

**N. vespilloides, Hbst.**

Caldwell, common—Crane.

**SILPHIA, Linn.****S. surinamensis, Fabr.**

Generally distributed, common—Wenzel, Liebeck. Caldwell, common—Crane. Hudson county—Linell. Newark.

**S. lapponica, Hbst.**

Newark; not common.

**S. inaequalis, Fabr.**

Generally distributed, not rare—Wenzel. Westville, rare—Liebeck. Caldwell, common—Crane. Hudson county—Linell. Newark. Madison.

**S. noveboracensis, Först.**

Generally distributed, common—Wenzel. Westville, rare—Liebeck. Caldwell, common—Crane. Hudson county—Linell. Newark. Madison.

**S. americana, Linn.**

Generally distributed, not rare—Wenzel. Camden, rare—Liebeck. Caldwell, common—Crane. Hudson county—Linell. Newark. Madison.

**CHOLEVA, Latr.****C. simplex, Say.**

In ants' nests, near Newark, rare—Bischoff.

## 112 GEOLOGICAL SURVEY OF NEW JERSEY.

*C. basillaris*, Say.

Hudson county—Linell.

*C. clavicornis*, Lec.

In ants' nests, near Newark—Bischoff.

*C. terminans*, Lec.

Anglesea, in July—Schwarz.

**PRIONOCHÆTA, Horn.**

*P. opaca*, Say.

Anglesea, in July—Schwarz. Hudson county—Linell.

**PTOMOPHAGUS, Ill.**

*P. parasitus*, Lec.

Hudson county—Linell.

**LIODES, Latr.**

*L. discolor*, Melsh.

Hudson county—Linell.

**AGATHIDIUM, Ill.**

*A. oniscoides*, Beauv.

Snake Hill, abundant on fallen trees—Linell.

*A. exiguum*, Melsh.

Hudson county—Linell. Generally distributed, rare—Liebeck.

**Family SCYDΜΑΝΙΔÆ.****SCYDΜΑΝΟΣ, Latr.**

*S. perforatus*, Schaum.

Camden county, not common—Wenzel.

*S. fossiger*, Lec.

Camden, moderately abundant—Liebeck. Hudson county—Linell.

## CATALOGUE OF INSECTS.

113

**S. capillosulus**, Lec.

Ocean county, cranberry bogs, rare—Smith.

**S. brevicornis**, Say.

Ocean county, cranberry bogs, in May, rare—Smith.

**S. obscurellus**, Lec.

Ocean county, cranberry bogs, in May, rare—Smith.

**S. clavipes**, Say.

Camden, rare—Liebeck. Hudson county—Linell. Newark.

**S. salinator**, Lec.

Hudson county—Linell. Under stones and sticks in salt marshes, not rare—Smith.

**S. bicolor**, Lec.

Camden county, not common—Wenzel.

**BRAATHINUS**, Lec.**B. nitidus**, Lec.

Fort Lee, near running brooks, rare—Linell.

**Family PSELAPHIDÆ.****OEDIUS**, Lec.**C. ziegleri**, Lec.

Hudson county—Linell. Newark; rare.

**CTENISTES**, Reichenb.**C. piceus**, Lec.

Camden, not rare—Liebeck. Hudson county—Linell.

**TYRUS**, Aubé.**T. humeralis**, Aubé.

Westville, rare—Liebeck.

**PSELAPHUS**, Hbst.**P. erichsonii**, Lec.

Recorded on the Newark list.

H

## 114 GEOLOGICAL SURVEY OF NEW JERSEY.

**DECARTHON, Brend.****D. abnorme, Lec.**

Camden, not rare—Liebeck.

**BATRISUS, Aubé.****B. monstrosus, Lec.**Hudson county—Linell. Ocean county, on cranberry bogs,  
in May—Smith.**B. ferox, Lec.**

Camden, not rare—Liebeck.

**B. riparius, Say.**

Anglesea, in July, not common—Schwarz.

**B. globosus, Lec.**

Westville, rare—Liebeck.

**BRYAXIS, Leach.****B. brendelii, Horn.**

Ocean county, common on cranberry bogs, in May—Smith.

**B. rubicunda, Aubé.**

Camden, not rare—Liebeck. Hudson county—Linell.

**B. puncticollis, Lec.**

Ocean county, common on cranberry bogs, in May—Smith.

**TRIMIUM, Aubé****T. dubium, Lec.**Ocean county, not uncommon on cranberry bogs, in May—  
Smith.**Family STAPHYLINIDÆ.****FALAGRIA, Mann.****F. cingulata, Lec.**

New Jersey—Collection United States National Museum.

**F. dissecta, Er.**

New Jersey—Collection United States National Museum.

## CATALOGUE OF INSECTS.

115

**F. venustula, Er.**

New Jersey—Collection United States National Museum.

**HOMALOTA, Mann.****H. plana, Gyll.**

New Jersey—Collection United States National Museum.

**H. trimaculata, Er.**

New Jersey—Collection United States National Museum.

**H. lividipennis, Mann.**

New Jersey—Collection United States National Museum.

Three species at Anglesea, in July—Schwarz; and there are many unnamed and unnamable species in collections generally.

**LOMECHUSA, Grav.****L. cava, Lec.**

Snake Hill, occurs in the nest of a large red ant—Linell.

**TACHYUSA, Er.****T. cavicollis, Lec.**

New Jersey—Collection United States National Museum.

**T. nigrella, Lec.**

New Jersey—Collection United States National Museum.

**POLYSTOMA, Steph.****P. maritima, Casey.**

Brigantine Beach, in September—Hamilton. Cape May, in July—Schwarz.

**ALEOCHARA, Grav.****A. lata, Grav.**

Generally distributed, common—Wenzel. New Jersey—Collection United States National Museum.

**A. brachypterus, Fourc.**

New Jersey—Collection United States National Museum.

**A. bimaculata, Grav.**

Brigantine Beach, in September—Hamilton. New Jersey—Collection United States National Museum.

## 116 GEOLOGICAL SURVEY OF NEW JERSEY.

*A. nitida*, Grav.

New Jersey—Collection United States National Museum.

*OXYPODA*, Mann.*O. sagulata*, Er.

New Jersey—Collection United States National Museum.

*GYROPHENA*, Mann.*G. vinula*, Er.

New Jersey—Collection United States National Museum.

*MYLLENA*, Er.*M. rufipennis*.

Anglesea, in July—Schwarz.

*ACYLOPHORUS*, Nordm.*A. pronus*, Er.

Snake Hill, Palisades, excessively common—Linell. Madison.

*HETEROTHOPS*, Steph.*H. fumigatus*, Lec.

New Jersey—Collection United States National Museum.

*QUEDIUS*, Steph.*Q. fulgidus*, Fabr.

Hudson county—Linell. Caldwell, common—Crane. New Jersey—Collection United States National Museum.

*Q. peregrinus*, Grav.

New Jersey—Collection Horn and United States National Museum. Newark.

*Q. capucinus*, Grav.

Hudson county—Linell. New Jersey—Collection Horn and United States National Museum.

*Q. levigatus*, Gyll.

Brigantine Beach, mainland, in September—Hamilton. Hudson county, rare—Linell.

## CATALOGUE OF INSECTS.

117

***Q. molochinus*, Grav.**

Hudson county—Linell. New Jersey—Collection United States National Museum.

***Q. brunneipennis*, Mann.**

Brigantine Beach, in September, not uncommon—Hamilton.

***Q. ferox*, Lec.**

Hudson county, rare—Linell.

***Q. vernix*, Lec.**

Hudson county, rare—Linell. New Jersey—Collection United States National Museum. Newark.

***LISTOTROPHUS*, Perty.*****L. cingulatus*, Grav.**

Generally distributed, common—Wenzel. Hudson county—Linell. Caldwell, common—Crane. Newark. Madison.

***L. capitatus*, Bland.**

New Jersey—Collection United States National Museum.

***OREOPHILUS*, Kirby.*****O. villosus*, Grav.**

Generally distributed, common—Wenzel. Brigantine Beach, in September—Hamilton. Caldwell, common—Crane. Hudson county—Linell. Newark. Madison.

***STAPHYLINUS*, Linn.*****S. vulpinus*, Nordm.**

Brigantine Beach, in September, not common—Hamilton. Caldwell, rare—Crane. Hudson county—Linell. New Jersey—Collection United States National Museum.

***S. maculosus*, Grav.**

Generally distributed, common—Wenzel. Caldwell, common—Crane. Hudson county—Linell. Newark. Madison. I have taken it throughout the State, quite commonly.

***S. mysticus*, Er.**

Generally distributed, not rare—Wenzel. Hudson county—Linell. Madison. New Jersey—Collection United States National Museum.

## 118 GEOLOGICAL SURVEY OF NEW JERSEY.

**S. tomentosus**, Grav.

Brigantine Beach, in September, rare—Hamilton. Hudson county—Linell. Newark. New Jersey—Collection United States National Museum.

**S. fossator**, Grav.

Generally distributed, not rare—Wenzel. Brigantine Beach, mainland, in September—Hamilton. New Jersey—Collection United States National Museum.

**S. cinnamopterus**, Grav.

Generally distributed, common—Wenzel. Hudson county, abundant—Linell. Caldwell, common—Crane. Newark. Madison.

**S. violaceus**, Grav.

Generally distributed, not common—Wenzel. Madison. New Jersey—Collection United States National Museum.

**S. prælongus**, Mann.

Brigantine Beach, in September, common—Hamilton. Anglesea, in July—Schwarz. Hudson county—Linell.

**OOPUS**, Kirby.**O. ater**, Grav.

Generally distributed, common—Wenzel. Brigantine Beach, in September, occasional—Hamilton. Caldwell, common—Crane. Hudson county—Linell.

**BELONUCHUS**, Nordm.**B. formosus**, Grav.

Generally distributed, not common—Wenzel. Hudson county—Linell. Newark. New Jersey—Collection United States National Museum.

**PHILONTHUS**, Curt.**P. seneus**, Rossi.

Brigantine Beach, in September, frequent—Hamilton. Hudson county—Linell. Caldwell, common—Crane. Newark. New Jersey—Collection United States National Museum.

## CATALOGUE OF INSECTS.

119

**P. sericinus**, Horn.

Hudson county, rare—Linell. New Jersey—Collection United States National Museum. Newark.

**P. umbratilis**, Grav.

New Jersey—Collection Horn, one specimen.

**P. lestulus**, Say.

New Jersey—Collection United States National Museum.

**P. hepaticus**, Er.

Brigantine Beach, in September, frequent—Hamilton. Hudson county—Linell. New Jersey—Collection United States National Museum.

**P. umbrinus**, Grav.

Brigantine Beach, in September, very rare—Hamilton. Hudson county, rare—Linell. New Jersey—Collection Horn.

**P. quadricollis**, Horn.

Newark.

**P. debilis**, Grav.

New Jersey—Collection United States National Museum.

**P. varians**, Payk.

New Jersey—Collection United States National Museum.

**P. longicornis**, Steph.

Hudson county—Linell. New Jersey—Collection United States National Museum.

**P. discoideus**, Grav.

Hudson county—Linell. New Jersey—Collection United States National Museum.

**P. alumnus**, Er.

Palisades and Snake Hill, very common, in spring—Linell. Brigantine Beach, in September, rare—Hamilton. Anglesea, in July—Schwarz. New Jersey—Collection United States National Museum.

**P. fuaiformis**, Melsh.

Brigantine Beach, in September, common—Hamilton.

**P. schwarzi**, Horn.

Snake Hill, one specimen—Linell. Newark.

## 120 GEOLOGICAL SURVEY OF NEW JERSEY.

**P. micans**, Grav.

Brigantine Beach, in September, frequent—Hamilton.

**P. lomatus**, Er.

Generally distributed, common—Wenzel. Brigantine Beach, in September, common—Hamilton. Palisades and Snake Hill, early in spring, common—Linell.

**P. brunneus**, Grav.

Hudson county—Linell. Anglesea, in July—Schwarz. New Jersey—Collection United States National Museum.

**P. cyanipennis**, Fabr.

Generally distributed, common—Wenzel. Brigantine Beach, mainland, in September—Hamilton. Hudson county—Linell. Newark.

**P. blandus**, Grav.

Brigantine Beach, mainland, in September—Hamilton. Hudson county—Linell. New Jersey—Collection United States National Museum. Newark.

**P. sordidus**, Grav.

Hudson county—Linell.

**P. cephalotes**, Grav.

Hudson county—Linell.

**P. nigritulus**, Grav.

Hudson county—Linell. New Jersey—Collection United States National Museum.

**P. microphthalmus**, Horn.

Brigantine Beach, in September—Hamilton. Anglesea, in July—Schwarz.

**P. baltimoreensis**, Grav.

Generally distributed, not rare—Wenzel. Hudson county, in rotten wood—Linell. Madison. New Jersey—Collection United States National Museum.

**P. apicalis**, Say.

Camden and Gloucester counties, not common—Wenzel. Caldwell, rare—Crane.

## CATALOGUE OF INSECTS.

121

**AOTOBIAUS, Steph.****A. cinerascens, Grav.**

Hudson county—Linell. New Jersey—Collection United States National Museum.

**A. nanus, Horn.**

Hudson county—Linell. New Jersey—Collection Horn.

**A. sobrinus, Er.**

Generally distributed, not rare—Wenzel. Hudson county—Linell. New Jersey—Collection United States National Museum.

**A. parcus, Horn.**

Hudson county—Linell.

**A. paederooides, Lec.**

Brigantine Beach, in September, frequent—Hamilton. Hudson county—Linell. New Jersey—Collection United States National Museum.

**CAFIUS, Steph.****C. bistriatus, Er.**

Brigantine Beach, in September, abundant—Hamilton. Anglesea, Cape May, in July—Schwarz.

**XANTHOLINUS, Serv.****X. cephalus, Say.**

Generally distributed, common—Wenzel. Fort Lee, abundant under leaves in the woods—Linell. Brigantine Beach, in September, frequent—Hamilton.

**X. obsidianus, Melsh.**

Generally distributed—Wenzel. New Jersey—Collection United States National Museum.

**X. emmesus, Grav.**

Hudson county—Linell. New Jersey—Collection United States National Museum.

**X. obscurus, Er.**

Brigantine Beach, in September, frequent—Hamilton. Anglesea, in July—Schwarz. Hudson county—Linell.

## 122 GEOLOGICAL SURVEY OF NEW JERSEY.

**X. sanguinipennis**, Lec.

Anglesea and Cape May, in July—Schwarz. Hudson county,  
rare—Linell.

**X. pusillus**, Sachse.

Hudson county—Linell.

**X. hamatus**, Say.

Hudson county—Linell.

**LEPTACINUS, Er.****L. batychrus**, Gyll.

New Jersey—Collection United States National Museum.

**DIOCHUS, Er.****D. schaumii**, Kraatz.

Camden and Gloucester counties, not rare—Wenzel. Hudson  
county—Linell. New Jersey—Collection United States Na-  
tional Museum.

**STENUS, Latr.****S. bipunctatus**, Er.

New Jersey—Collection United States National Museum.

**S. juno**, Fabr.

Palisades, Snake Hill, common in spring—Linell. New Jer-  
sey—Collection United States National Museum.

**S. femoratus**, Say.

Hudson county—Linell. New Jersey—Collection United  
States National Museum.

**S. colonus**, Er.

New Jersey—Collection United States National Museum.

**S. stygicus**, Say.

New Jersey—Collection United States National Museum.

**S. sectilifer**, Casey.

Anglesea, in July—Schwarz.

**S. flavigornis**, Er.

Palisades and Snake Hill, in spring, abundant—Linell. New  
Jersey—Collection United States National Museum.

## CATALOGUE OF INSECTS.

123

**S. annularis, Er.**

With the preceding and equally abundant; same authorities.

**S. reconditus, Casey.**

New Jersey—Collection United States National Museum.

**S. arculus, Er.**

Anglesea, in July—Schwarz.

**S. punctatus, Er.**

Hudson county—Linell. New Jersey—Collection United States National Museum.

There will undoubtedly be many additions to this list, when the species now in collections are properly identified.

**EUMESTHETUS, Grav.****E. americanus, Er.**

Generally distributed, common—Wenzel. New Jersey—Collection United States National Museum.

**CRYPTOBIUM, Mann.****C. badium, Grav.**

Snake Hill, abundant—Linell. New Jersey—Collection United States National Museum.

**C. lugubre, Lec.**

Brigantine Beach, in September, occasional—Hamilton.

**C. bicolor, Grav.**

Hudson county—Linell. Madison. Ocean county, on cranberry bogs, in May, not common—Smith.

**C. pallipes, Grav.**

Generally distributed, common—Wenzel. Hudson county—Linell. New Jersey—Collection United States National Museum. Ocean county, common on cranberry bogs, in May—Smith.

**C. latebricola, Nordm.**

Brigantine Beach, in September, occasional—Hamilton. Ocean county, common on cranberry bogs, in May—Smith.

**C. cribratum, Lec.**

Hudson county, rare—Linell. Madison.

## 124 GEOLOGICAL SURVEY OF NEW JERSEY.

**LATHROBIUM, Grav.****L. grande, Lec.**

New Jersey—Collection United States National Museum.

**L. punctulatum, Lec.**

Anglesea, in July—Schwarz. Hudson county—Linell. New Jersey—Collection United States National Museum.

**L. armatum, Say.**

Recorded on the Newark list.

**L. simile, Lec.**

Hudson county—Linell.

**L. seriatum, Lec.**

Brigantine Beach, in September, rare—Hamilton.

**L. longiusculum, Grav.**

Brigantine Beach, in September, common—Hamilton. Hudson county—Linell. Newark.

**L. collare, Er.**

New Jersey—Collection United States National Museum.

**L. dimidiatum, Say.**

Brigantine Beach, in September, rare—Hamilton.

**STILICUS, Latr.****S. opaculus, Lec.**

New Jersey—Collection United States National Museum.

**S. angularis, Lec.**

Anglesea, in July—Schwarz. Generally distributed—Wenzel. Hudson county—Linell.

**S. biarmatus, Lec.**

Newark.

**MEGASTILICUS, Casey.****M. formicarius, Casey.**

Near Newark, in ant hills; not rare.

**LITHOCHARIS, Er.****L. corticina, Grav.**

Generally distributed, not rare—Wenzel. New Jersey—Collection United States National Museum.

## CATALOGUE OF INSECTS.

125

*L. confuens*, Say.

Camden and Gloucester counties—Wenzel. Hudson county  
—Linell. New Jersey—Collection United States National  
Museum. Madison.

*P. EDERUS*, Grav.*P. littorarius*, Grav.

Brigantine Beach, in September, abundant—Hamilton. Hud-  
son county—Linell. Newark. Camden and Gloucester counties  
—Wenzel. Madison.

*P. obliterateus*, Lec.

Brigantine Beach, in September, less common—Hamilton.

*SUNIUS*, Steph.*S. prolixus*, Er.

Brigantine Beach, in September, common—Hamilton.  
Newark.

*S. longiusculus*, Mann.

Gloucester and Camden counties, common—Wenzel. Hudson  
county—Linell. New Jersey—Collection United States Nat-  
ional Museum.

*PALAMINUS*, Br.*P. normalis*, Lec.

Anglesea, in July—Schwarz.

*TACHINUS*, Grav.*T. memnonius*, Grav.

New Jersey—Collection United States National Museum.

*T. repandus*, Horn.

New Jersey—Collection United States National Museum.

*T. flavipennis*, Dej.

New Jersey—Collection United States National Museum.

*T. fimbriatus*, Grav.

Brigantine Beach, mainland, in September—Hamilton. Cam-  
den and Gloucester counties, rather common—Wenzel. New  
Jersey—Collection United States National Museum.

## 126 GEOLOGICAL SURVEY OF NEW JERSEY.

*T. limbatus*, Melsh.

New Jersey—Collection United States National Museum.

*T. pallipes*, Grav.

Camden and Gloucester counties, common—Wenzel. New Jersey—Collection United States National Museum.

**TACHYPORUS, Grav.***T. jocosus*, Say.

Camden and Gloucester counties, common—Wenzel. New Jersey—Collection United States National Museum.

*T. chrysomelinus*, Linn.

Brigantine Beach, in September—Hamilton. New Jersey—Collection United States National Museum.

*T. brunneus*, Er.

Camden and Gloucester counties, common—Wenzel. New Jersey—Collection United States National Museum.

**ERCHOMUS, Mots.***E. ventriculus*, Say.

Brigantine Beach, mainland, in September—Hamilton. Camden and Gloucester counties, common—Wenzel. Newark. New Jersey—Collection United States National Museum.

**CONOSOMA, Kraatz.***C. crassum*, Grav.

Generally distributed, common—Wenzel. New Jersey—Collection United States National Museum.

*C. pubescens*, Payk.

Camden and Gloucester counties, common—Wenzel. New Jersey—Collection United States National Museum. Madison.

*C. basale*, Er.

New Jersey—Collection United States National Museum.

*C. opicum*, Say.

Ocean county, under bark—Smith.

## CATALOGUE OF INSECTS.

127

## BOLETOBIUS, Leach.

- B. cingulatus**, Mann.  
Newark.
- B. intrusus**, Horn.  
Brigantine Beach, mainland, in September—Hamilton. New Jersey—Collection United States National Museum.
- B. cincticollis**, Say.  
New Jersey—Collection United States National Museum.
- B. anticus**, Horn.  
New Jersey—Collection United States National Museum.
- B. pygmaeus**, Fabr.  
Brigantine Beach, mainland, in September—Hamilton.
- B. trinotatus**, Er.  
Anglesea, in July—Schwarz. Brigantine Beach, mainland, in September—Hamilton. New Jersey—Collection United States National Museum.
- B. cinctus**, Grav.  
Generally distributed, common—Wenzel. New Jersey—Collection United States National Museum.
- Var. gentilis*, Lec.  
Brigantine Beach, mainland, in September—Hamilton.

## BRYOPORUS, Kraatz.

- B. rufescens**, Lec.  
New Jersey—Collection United States National Museum.

## MYCETOPORUS, Mann.

- M. americanus**, Er.  
Anglesea, in July—Schwarz. New Jersey—Collection United States National Museum.

## OXYPORUS, Fabr.

- O. femoralis**, Grav.  
Camden and Gloucester counties, common—Wenzel. New Jersey—Collection United States National Museum.

## 128 GEOLOGICAL SURVEY OF NEW JERSEY.

*O. major*, Grav.

Camden and Gloucester counties, not rare—Wenzel. New Jersey—Collection United States National Museum.

*O. vittatus*, Grav.

New Jersey—Collection United States National Museum.

*O. lateralis*, Grav.

Camden and Gloucester counties, not rare—Wenzel. New Jersey—Collection United States National Museum.

**BLEDIUS, Leach.***B. pallipennis*, Er.

Recorded on the Newark list.

*B. mandibularis*, Er.

Brigantine Beach, salt marshes, September, common—Hamilton.

*B. brevidens*, Lec.

Atlantic county—Wenzel.

*B. politus*, Er.

Brigantine Beach, salt marshes, September, frequent—Hamilton.

*B. basalis*, Lec.

Brigantine Beach, in September, salt marshes, common—Hamilton. Anglesea, in July—Schwarz. New Jersey—Collection United States National Museum.

*B. cordatus*, Say.

Brigantine Beach, common in salt marshes, September—Hamilton.

**PLATYSTETHUS, Mann.***P. americanus*, Er.

Brigantine Beach, common, September—Hamilton. New Jersey—Collection United States National Museum.

**OXYTELUS, Grav.***O. rugosus*, Grav.

New Jersey—Collection United States National Museum.

## CATALOGUE OF INSECTS.

129

**O. pennsylvanicus, Er.**

New Jersey—Collection United States National Museum.

**O. insignitus, Grav.**

Brigantine Beach, September—Hamilton. New Jersey—Collection United States National Museum.

**O. nitidulus, Grav.**

New Jersey—Collection United States National Museum.

**O. exiguis, Er.**

Anglesea, in July—Schwarz.

**TROGOPHLCHUS, Mann.****T. simplarius, Lec.**

Anglesea, in July—Schwarz.

**T. arcifer, Lec.**

New Jersey—Collection United States National Museum.

**T. 4-punctatus, Say.**

Camden and Gloucester counties—Wenzel. New Jersey—Collection United States National Museum.

**APOCELLUS, Er.****A. sphaericollis, Say.**

Brigantine Beach, in September—Hamilton. New Jersey—Collection United States National Museum.

**GEODROMICUS, Redt.****G. caesus, Er.**

Gloucester and Camden counties—Wenzel.

**OLOPHRUM, Er.****O. obtectum, Er.**New Jersey—Collection United States National Museum.  
Madison. Newark.**HOMALIUM, Grav.****H. rufipes, Grav.**

New Jersey—Collection United States National Museum.

## 130 GEOLOGICAL SURVEY OF NEW JERSEY.

**GLYPTOMA, Er.****G. costale,** Er.

New Jersey—Collection United States National Museum.

**Family TRICHOPTERYGIDÆ.****PTILIUM, Er.****P. hornianum,** Math.

Anglesea, in July—Schwarz.

**PTENIDIUM, Er.****P. ulkei,** Math.

Cape May, in July—Schwarz.

**P. atomaroides,** Mots.

Cape May, in July—Schwarz.

**TRICHOPTERYX, Kirby.****T. haldemanni,** Lec.

Anglesea, in July—Schwarz.

**Family SCAPHIDIIDÆ.****SCAPHIDIUM, Oliv.****S. quadriguttatum,** Say.

Generally distributed, moderately abundant—Liebeck.

**S. piceum,** Mots.

Generally distributed, moderately abundant—Wenzel, Liebeck.

**SCAPHISOMA, Leach.****S. convexum,** Say.

Generally distributed, not rare—Liebeck, Wenzel. Newark.

## CATALOGUE OF INSECTS.

131

## Family PHALACRIDÆ.

## PHALACRUS, Payk.

*P. politus*, Melsh.

Taken in Ocean county—Smith.

## OLIBRUS, Br.

*O. lecontei*, Casey.

“Atlantic States; not rare.”

*O. consimilis*, Marsh.

Newark. Generally distributed, not rare—Wenzel.

*O. nitidus*, Melsh.

Generally distributed, common—Wenzel, Liebeck. Hudson county—Linell.

## STILBUS, Seidl.

*S. subalutaceus*, Casey.

Cape May; only recorded locality.

## LITOCHRUS, Br.

*L. immaculatus*, Casey.

“New Jersey”—Casey.

## Family CORYLOPHIDÆ.

## SACIUM, Lec.

*S. amabile*, Lec.

Anglesea, in July—Schwarz.

*S. fasciatum*, Say.

Anglesea, in July—Schwarz. Newark.

*S. lunatum*, Lec.

Anglesea, in July—Schwarz.

*S. nova species*, Schwarz dixit.

Anglesea, in July—Schwarz.

## 132 GEOLOGICAL SURVEY OF NEW JERSEY.

**ARTHROLIPS, Woll.****A. marginicollis, Lec.**

I have taken this in the State, exact locality unknown—Smith.

**CORYLOPHUS, Steph.****C. truncatus, Lec.**

Camden and Gloucester counties, not rare—Wenzel.

**RHYPOBIUS, Lec.****R. marinus, Lec.**

Brigantine Beach, in September, common—Hamilton. Anglesea, in July, common—Schwarz.

**ORTHOPERUS, Steph.****O. glaber, Lec.**

Camden and Gloucester counties, not common—Wenzel. Anglesea, in July—Schwarz.

**O. scutellaris, Lec.**

Anglesea, in July—Schwarz.

**Family COCCINELLIDÆ.****ANISOSTICTA, Dup.****A. seriata, Melsh.**

Sea-shore, not rare—Wenzel. Atlantic City, moderately abundant—Liebeck. Brigantine Beach, in September, frequent—Hamilton. Cape May, in July—Schwarz. New Jersey—Linell.

**A. strigata, Thunb.**

Hudson county—Linell.

**MEGILLA, Muls.****M. maculata, De G.**

Generally distributed, common—Wenzel, Liebeck. Brigantine Beach, in September, common—Hamilton. Hudson county,

## CATALOGUE OF INSECTS.

133

common—Linell. Caldwell, common—Crane. Newark. Madison. New Brunswick.

## HIPPODAMIA, Muls.

*H. glacialis*, Fabr.

Generally distributed, common—Wenzel, Liebeck. Hudson county, abundant—Linell. New Brunswick. Ocean county, common—Smith. Caldwell, common—Crane. Newark. Madison.

*H. convergens*, Guer.

Common throughout the State. Reported as abundant by all observers.

*H. 13-punctata*, Linn.

Hudson county, not common—Linell. Caldwell, common—Crane.

*H. parenthesis*, Say.

Occurs throughout the State; moderately abundant. Reported by all collectors.

## COCCINELLA, Linn.

*C. affinis*, Rand.

Atlantic county, rare—Wenzel.

*C. trifasciata*, Linn.

Newark, Madison; not common.

*C. novemnotata*, Hbst.

Common throughout the State.

*C. sanguinea*, Linn.

Common throughout the State.

## ADALIA, Muls.

*A. bipuncta*, Linn.

Common throughout the State.

## HARMONIA, Muls.

*H. picta*, Rand.

Gloucester, Dacosta, common—Liebeck. Camden, Gloucester and Atlantic counties, common—Wenzel. Hudson county—Linell. New Brunswick, not common—Smith.

## 134 GEOLOGICAL SURVEY OF NEW JERSEY.

**MYSIA, Muls.****M. pullata, Say.**

Westville, moderately abundant—Liebeck. Common in spring—Wenzel.

**ANATIS, Muls.****A. 15-punctata, Oliv.**

Reported from all parts of the State; not rare.

**PSYLLOBORA, Muls.****P. 20-maculata, Say.**

Common throughout the State.

**CHILOCORUS, Leach.****C. bivulnerus, Melis.**

Moderately common throughout the State.

**EXOCHOMUS, Redt.****E. marginipennis, Lec.**

Generally distributed, rare—Wenzel. Dacosta, rare—Liebeck.

**E. tripustulata, De G.**

Generally distributed, more common on the shore—Wenzel. Atlantic City, rare—Liebeck.

**PENTILIA, Muls.****P. misella, Lec.**

Anglesea—Wenzel.

**BRACHYACANTHA, Chevr.****B. dentipes, Fabr.**

Anglesea, rare—Wenzel. Woodbury, rare—Liebeck.

**B. ursina, Fabr.**

Common throughout the State.

**Var. 10-pustulata, Melsh.**

With the type; generally less common.

## CATALOGUE OF INSECTS.

135

## HYPERASPIS, Chevr.

- H. fimbriolata**, Melsh.  
Hudson county—Linell.
- H. undulata**, Say.  
Generally distributed, not rare—Wenzel. Hudson county—  
Linell.
- H. lewisi**, Cr.  
Generally distributed, rare—Wenzel.
- H. signata**, Oliv.  
Generally distributed, not rare—Wenzel, Liebeck. Hudson  
county—Linell.
- H. proba**, Say.  
Generally distributed, not rare—Wenzel. Hudson county—  
Linell.
- H. bigeminata**, Rand.  
Atco, rare—Liebeck.

## SCYMNUS, Kug.

- S. bioculatus**, Muls.  
Atco, rare—Liebeck.
- S. terminatus**, Say.  
Generally distributed, not rare—Wenzel.
- S. americanus**, Muls.  
Atco, rare—Liebeck.
- S. fraternus**, Lec.  
Generally distributed, rare—Liebeck.
- S. haemorrhous**, Lec.  
Generally distributed, not rare—Wenzel.
- S. punctatus**, Melsh.  
Anglesea, in July—Schwarz.

## COCCIDULA, Kug.

- C. lepida**, Lec.  
Gloucester; rare.

## 136 GEOLOGICAL SURVEY OF NEW JERSEY.

**EPILACHNA, Chevr.****E. borealis, Fabr.**

Generally distributed, moderately abundant—Wenzel, Liebeck. New Brunswick. Newark. Caldwell, common—Crane.

Unlike all others of this family, this species is a leaf-feeder and injurious; all the others are highly beneficial. When more careful collections are made, the number of our species in some genera will be largely increased.

**Family ENDOMYCHIDÆ.****RHANIS, Lec.****R. unicolor, Zieg.**

Generally distributed, rare—Liebeck. Camden and Gloucester counties, not common—Wenzel.

**LYOOPERDINA, Latr.****L. ferruginea, Lec.**

Camden and Gloucester counties, not common—Wenzel. Gloucester, rare—Liebeck. Hudson county—Linell. Newark.

**APHORISTA, Gorh.****A. vittata, Fabr.**

Generally distributed, not rare—Wenzel. Gloucester, rare—Liebeck. Caldwell, common—Crane.

**MYCETINA, Muls.****M. perpulchra, Newn.**

Newark—Bischoff.

**M. testacea, Zieg.**

Generally distributed, not common—Wenzel. Sea-shore, rare—Liebeck.

**PHYMAPHORA, Newn.****P. pulchella, Newn.**

Caldwell, common—Crane. Madison. Newark.

## CATALOGUE OF INSECTS.

137

## STENOTARSUS, Perty.

*S. hispidus*, Hbst.

Atlantic and Cape May counties, not common—Wenzel.  
 Atlantic City, Landisville, rare—Liebeck. Newark.

## EPIPOCUS, Germ.

*E. cinctus*, Lec.

Generally distributed, rare—Wenzel.

## ENDOMYCHUS, Panz.

*E. biguttatus*, Say.

Generally distributed, not common—Wenzel, Liebeck. Hudson county—Linell.

## Family EROTYLIDÆ.

## LANGURIA, Latr.

*L. bicolor*, Fabr.

Camden, rare—Wenzel. Westville, sea-shore, rare—Liebeck.  
 Brigantine Beach, in September, two specimens—Hamilton.  
 Newark.

*L. mozardi*, Lec.

Generally distributed, rather common—Wenzel, Liebeck.  
 Caldwell, common—Crane. Hudson county—Linell. Newark.

*L. taedata*, Lec.

Sea-shore, not common—Wenzel, Liebeck. Hudson county—  
 Linell.

*L. angustata*, Beauv.

Generally distributed, not rare—Wenzel. Hudson county—  
 Linell. Newark.

*Var. trifasciata*, Say.

Generally distributed, rare—Liebeck. Newark.

*L. gracilis*, Newn.

Generally distributed, not common—Wenzel. Gloucester,  
 rare—Liebeck. Hudson county—Linell.

## 138 GEOLOGICAL SURVEY OF NEW JERSEY.

**DACNE, Latr.****D. 4-maculata, Say.**

New Jersey, exact locality unknown, rare—Liebeck.

**MEGALODACNE, Cr.****M. fasciata, Fabr.**

Generally distributed, rather common—Liebeck. Same, except sea-shore—Wenzel. Caldwell, common—Crane. Newark.

**ISCHYRUS, Lac.****I. 4-punctatus, Oliv.**

Caldwell, common—Crane.

**MYCOTRETUS, Lac.****M. pulchra, Say.**

Hudson county—Linell.

**TRITOMA, Fabr.****T. humeralis, Fabr.**

Generally distributed, not common—Liebeck, Wenzel. Brigantine Beach, mainland, in September—Hamilton. Hudson county—Linell.

**T. biguttata, Say.**

Anglesea, in July—Schwarz. Brigantine Beach, mainland, in September—Hamilton. Hudson county—Linell. Newark.

**T. angulata, Say.**

Hudson county—Linell. New Jersey—Collection Horn.

**T. unicolor, Say.**

Generally distributed, not common—Wenzel, Liebeck.

**T. thoracica, Say.**

Generally distributed, not rare—Wenzel. Sea-shore, rare—Liebeck. Hudson county—Linell.

**T. flavigollis, Lec.**

Generally distributed, moderately abundant—Liebeck, Wenzel. Brigantine Beach, mainland, in September—Hamilton. Hudson county—Linell.

## CATALOGUE OF INSECTS.

139

## Family COLYDIIDÆ.

## SYNCHITA, Hellw.

*S. obscura*, Horn.

Anglesea, in July—Schwarz.

*S. fuliginosa*, Melsh.

Hudson county—Linell.

## DITOMA, Illig.

*D. quadriguttata*, Say.

Dacosta, rare—Liebeck. Hudson county—Linell.

## COXELUS, Latr.

*C. guttulatus*, Lec.

Westville, rare—Liebeck.

## PENTHELISPA, Pasc.

*P. haematoches*, Fabr.

Anglesea—Wenzel.

## AULONIUM, Br.

*A. parallelipedum*, Say.

Hudson county, not common—Linell.

## COLYDIUM, Fabr.

*C. lineola*, Say.

Camden and Gloucester counties, rare—Wenzel. Hudson county—Linell.

## BOTHRIDERES, Br.

*B. geminatus*, Say.

Generally distributed, rare—Liebeck.

## CHRYLON, Latr.

*C. castaneum*, Say.

Generally distributed, rare—Wenzel. Hudson county—Linell.

## 140 GEOLOGICAL SURVEY OF NEW JERSEY.

**PHILOTHERMUS, Aube.****P. glabericulus, Lec.**

Generally distributed, moderately abundant—Liebeck. Rare—Wenzel. Hudson county—Linell.

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**Family RHYSSODIDÆ.****CLINIDIUM, Kirby.****C. sculptile, Newn.**

Generally distributed, rare—Liebeck. Camden and Gloucester counties, rare—Wenzel.

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**Family CUCUJIDÆ.****SILVANUS, Latr.****S. surinamensis, Linn.**

Generally distributed; often injurious to stored grain. Common in the mangers, in stables.

**S. bidentatus, Fabr.**

Generally distributed, not rare—Wenzel. Hudson county—Linell.

**S. planatus, Germ.**

Brigantine Beach, mainland, in September—Hamilton. Hudson county—Linell. Newark.

**S. imbellis, Lec.**

Generally distributed, not uncommon—Liebeck.

**S. advena, Waltl.**

I have taken this rarely, under bark.

**NAUSIBIUS, Redt.****N. dentatus, Marsh.**

Generally distributed, not uncommon—Liebeck.

## CATALOGUE OF INSECTS.

141

## CATOGENUS, Westw.

*C. rufus*, Fabr.

Generally distributed, rare—Liebeck. Locally common—Wenzel. Caldwell, rare—Crane. Hudson county—Linell. Newark.

## OUOUJUS, Fabr.

*O. clavipes*, Fabr.

Generally distributed, not uncommon—Wenzel, Liebeck. Fort Lee, abundant in fall—Linell. Caldwell, common—Crane. Newark.

## LÆMOPHLEBUS, Lap.

*L. biguttatus*, Say.

Westville, not uncommon—Liebeck. Anglesea, in July—Schwarz. Hudson county—Linell.

*L. fasciatus*, Melsh.

Anglesea, in July—Schwarz. Newark.

*L. convexulus*, Lec.

Hudson county—Linell.

*L. adustus*, Lec.

Hudson county—Linell.

*L. testaceus*, Lec.

Hudson county—Linell.

## LATHROPUS, Br.

*L. vernalis*, Lec.

Anglesea, in July—Schwarz. Hudson county—Linell.

## BRONTES, Fabr.

*B. dubius*, Fabr.

Generally distributed, rare—Wenzel. Camden, not uncommon—Liebeck. Caldwell, common—Crane. Newark.

*B. debilis*, Lec.

Hudson county—Linell. Mr. Linell adds, "according to Captain Casey, the northern form is not *dubius*."

## 142 GEOLOGICAL SURVEY OF NEW JERSEY.

**TELEPHANUS, Br.****T. velox, Hald.**

Generally distributed, not uncommon—Liebeck. Brigantine Beach, in September—Hamilton. Hudson county—Linell. Newark.

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**Family CRYPTOPHAGIDÆ.\*****TELMATOPHILUS, Heer.****T. americanus, Lec.**

Hudson county—Linell.

**LOBERUS, Lec.****L. impressus, Lec.**

I have taken this either in Hudson or Essex county, rarely.  
Hudson county—Linell.

**TOMARUS, Lec.****T. pulchellus, Lec.**

Anglesea, in July—Schwarz. Hudson county—Linell.

**ANTHEROPHAGUS, Latr.****A. ochraceus, Melsh.**

Westville, rare—Liebeck. Hudson county—Linell.

**ATOMARIA, Steph.****A. ephippiata, Zimm.**

Camden, moderately common—Liebeck. Hudson county—Linell. Newark—Loeffler.

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**Family MYCETOPHAGIDÆ.****MYCETOPHAGUS, Hellw.****M. punctatus, Say.**

Generally distributed, rather common—Liebeck. Hudson county—Linell.

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\*A number of species in this family are in collections, awaiting identification.

## CATALOGUE OF INSECTS.

143

**M. flexuosus, Say.**

Generally distributed, rather common—Liebeck. Hudson county—Linell.

**M. melaheimeri, Lec.**

Camden, rare—Liebeck.

**M. pluripunctatus, Lec.**

Westville, rare—Liebeck.

**M. pini, Zieg.**

Westville, rare—Liebeck.

**LITARGUS, Er.****L. sex-punctatus, Say.**

Anglesea, in July—Schwarz. Hudson county—Linell.

**L. dideimus, Say.**

Anglesea, in July—Schwarz. Hudson county—Linell.

**TYPHAEA, Steph.****T. fumata, Linn.**

- Westville, rare—Liebeck. Newark—Loeffler.

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**Family DERESTIDÆ.****BYTURUS, Latr.****B. unicolor, Say.**

Generally distributed, not rare—Liebeck. Hudson county—Linell.

**DERMESTES, Linn.****D. caninus, Germ.**

Generally distributed, not uncommon—Liebeck, Wenzel. Brigantine Beach, in September—Hamilton. Newark.

**D. lardarius, Linn.**

Generally distributed, common—Wenzel, Liebeck. Brigantine Beach, in September—Hamilton. Caldwell, common—Crane. Newark. Madison.

## 144 GEOLOGICAL SURVEY OF NEW JERSEY.

**D. vulpinus, Fabr.**

Westville, rare—Liebeck. Generally distributed—Wenzel.  
Caldwell, common—Crane.

**D. frischii, Kug.**

Sea-shore, moderately abundant—Liebeck. Brigantine Beach,  
in September, abundant—Hamilton.

**ATTAGENUS, Latr.****A. piceus, Oliv.**

Common throughout the State.

**TROGODERMA, Latr.****T. ornatum, Say.**

I have taken specimens on flowers. Caldwell, rare—Crane.

**T. tarsale, Melsh.**

Generally distributed, rather common—Liebeck. Sometimes  
quite annoying as a museum pest.

**ANTHRENUS, Geoffr.****A. scrophulariae, Linn.**

New Brunswick; excessively abundant in April. This is the  
carpet beetle, the parent of the so-called "Buffalo Moth."  
Caldwell, common—Crane. Newark.

**A. varius, Fabr.**

Generally distributed; common. This is the ordinary museum  
pest, so often injurious to all dried specimens of animals or  
plants.

**A. museorum, Linn.**

Also a museum pest, but more rare than the preceding.

**CRYPTORHOPALUM, Guer.****C. ruficorne, Lec.**

Not uncommon on flowers in Ocean county.

**C. triste, Lec.**

Brigantine Beach, mainland, in September, on Solidago—  
Hamilton.

## CATALOGUE OF INSECTS.

145

## ORPHILUS, Br.

*O. glabratus*, Fabr.

Not uncommon on flowers.

## Family HISTERIDÆ.

## HOLOLEPTA, Payk.

*H. quadridentata*, Fabr.

Hudson county—Linell.

*H. lucida*, Lec.

Hudson county—Linell.

*H. fossularis*, Say.

Camden and Gloucester counties, not common—Wenzel.  
 Gloucester, Dacosta, rare—Liebeck. Caldwell, rare—Crane.  
 Hudson county—Linell. Newark.

## HISTER, Linn.

*H. arcuatus*, Say.

Sea-shore, not rare—Wenzel. Brigantine Beach, in September, frequent—Hamilton. Newark. Madison.

*H. biplagiatus*, Lec.

Generally distributed, not common—Wenzel. Westville, not uncommon—Liebeck. Brigantine Beach, in September, rare—Hamilton.

*H. interruptus*, Beauv.

Generally distributed, common—Wenzel, Liebeck. Hudson county, common—Linell. Newark.

*H. marginicollis*, Lec.

Madison—Paulmier.

*H. abbreviatus*, Fabr.

Generally distributed, common—Wenzel. Brigantine Beach, in September, frequent—Hamilton. Newark. Hudson county—Linell.

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## 146 GEOLOGICAL SURVEY OF NEW JERSEY.

**H. civilis**, Lec.

Sea-shore, rare—Liebeck. Camden and Gloucester counties, not common—Wenzel. Brigantine Beach, in September, less frequent—Hamilton.

**H. furtivus**, Lec.

Madison—Paulmier.

**H. depurator**, Say.

Hudson county—Linell. A common species near Jersey City.

**H. bimaculatus**, Linn.

Sea-shore, rare—Liebeck. Atlantic county, rare—Wenzel. Caldwell, common—Crane. Madison.

**H. sedecimstriatus**, Say.

Hudson county—Linell. Caldwell, common—Crane.

**H. americanus**, Payk.

Generally distributed, common—Wenzel, Liebeck. Hudson county—Linell.

**H. perplexus**, Lec.

I have found this not uncommon in the State.

**H. exaratus**, Lec.

Brigantine Beach, in September, rare—Hamilton.

**H. subrotundatus**, Say.

Generally distributed, common—Liebeck, Wenzel. Hudson county—Linell. Newark.

**H. vernus**, Say.

Generally distributed, not common—Wenzel.

**H. carolinus**, Payk.

Generally distributed, common—Liebeck. Under bark—Wenzel. Hudson county—Linell.

**H. lecontei**, Mars.

Generally distributed, under bark—Wenzel. Westville, not uncommon—Liebeck. Caldwell, rare—Crane. Newark. Hudson county—Linell.

**H. parallelus**, Say.

Not uncommon under bark—Wenzel. Madison.

## CATALOGUE OF INSECTS.

147

**H. attenuatus**, Lec.

Under bark, rather rare—Wenzel.

**EPIHRUS**, Er.**E. pulicarius**, Er.Camden and Gloucester counties, under bark, not common—  
Wenzel.**HETÆRIUS**, Er.**H. brunnipennis**, Rand.Orange Mountains, in ants' nests, not rare—Linell and New-  
ark list.**PAROMALUS**, Er.**P. aequalis**, Say.Snake Hill, under bark—Linell. Generally distributed, under  
bark—Wenzel.**P. estriatus**, Lec.

Snake Hill, under bark—Linell.

**P. geminatus**, Lec.

Brigantine Beach, in September, rare—Hamilton.

**P. 14-striatus**, Steph.Brigantine Beach, in September—Hamilton. Snake Hill,  
under bark—Linell.**P. bistriatus**, Er.

Snake Hill, under bark—Linell.

**P. seminulum**, Er.

Snake Hill, under bark—Linell.

Mr. Linell adds that these species are found under bark of  
freshly-cut, not decayed stumps, but where the sap is still flowing.**SAPRINUS**, Er.**S. pennsylvanicus**, Payk.Generally distributed, common—Wenzel, Liebeck. Brigant-  
ine Beach, in September, common—Hamilton. Sandy Hook,  
common—Smith. This species is abundant all along the sea-  
shore, under carrion.

## 148 GEOLOGICAL SURVEY OF NEW JERSEY.

**S. assimilis**, Payk.

Sea-shore, not uncommon—Wenzel. Brigantine Beach, in September—Hamilton. Atlantic City—Castle.

**S. sphaeroides**, Lec.

Brigantine Beach, in September, rare—Hamilton.

**S. fraternus**, Say.

Generally distributed, not rare—Wenzel. Anglesea, in July—Schwarz. Brigantine Beach, in September, common—Hamilton. Sandy Hook, common—Smith. Caldwell, common—Crane.

**S. patruelis**, Lec.

Brigantine Beach, in September, frequent—Hamilton. Cape May, in July—Schwarz.

**S. dimidiatipennis**, Lec.

Sea-shore, rare—Wenzel, Liebeck.

**PLEGADERUS**, Er.**P. transversus**, Say.

Generally distributed, not common—Wenzel. Atlantic City—Castle.

**ALETES**, Horn.**A. politus**, Lec.

Ocean county, common on cranberry bogs, in May—Smith.

**Family NITIDULIDÆ.**

Under this family Mr. Linell remarks: "Sap beetles are, in my experience, most abundant in September and October, on tree stumps cut in the spring of the same year." Mr. Wenzel also says that decaying fruit in the fall is prolific in species of this family.

**BRACHYPTERUS**, Er.**B. urticæ**, Fabr.

Generally distributed, not rare—Wenzel. I have taken it near Hoboken.

## CATALOGUE OF INSECTS.

149

**CERCUS, Latr.****C. abdominalis, Er.**

Westville; not uncommon—Liebeck. Hudson county—Linell.  
Newark.

**CARPOPHILUS, Steph.****C. hemipterus, Linn.**

Hudson county, not rare locally—Linell.

**C. niger, Say.**

Generally distributed, common—Wenzel. Hudson county—  
Linell.

**C. corticinus, Er.**

Camden, rare—Liebeck.

**C. brachypterus, Say.**

Hudson county—Linell.

**C. antiquus, Melsh.**

Hudson county—Linell.

I have taken all these myself on the wooded slopes of the  
Palisades.

**COLASTUS, Er.****C. maculatus, Er.**

Hudson county—Linell.

**C. semitectus, Say.**

Generally distributed, common—Wenzel. Hudson county—  
Linell.

**C. unicolor, Say.**

Same as before.

**C. truncatus, Rand.**

Same as before.

All these are about equally common.

**CONOTELUS, Er.****C. obscurus, Er.**

Generally distributed, rare—Liebeck. Brigantine Beach, in  
September—Hamilton. Hudson county—Linell.

## 150 GEOLOGICAL SURVEY OF NEW JERSEY.

**EPURÆA, Br.****E. helvola, Er.**

Generally distributed, not rare—Wenzel. Anglesea, in July—Schwarz. Brigantine Beach, mainland, in September—Hamilton. Hudson county—Linell.

**E. rufa, Say.**

Hudson county—Linell. Madison.

**E. avara, Rand.**

Hudson county—Linell.

**E. peltoides, Horn.**

Hudson county—Linell.

**E. labilis, Er.**

Generally distributed, common—Wenzel. Hudson county—Linell.

**NITIDULA, Fabr.****N. rufipes, Linn.**

Camden, rare—Liebeck. Brigantine Beach, in September—Hamilton. Hudson county—Linell. Madison.

**N. ziczac, Say.**

Common all over the State.

**STELIDOTA, Br.****S. geminata, Say.**

Generally distributed—Wenzel. Westville, rare—Liebeck. Hudson county—Linell.

**S. 8-maculata, Say.**

Anglesea, in July—Schwarz. Hudson county—Linell.

**S. strigosa, Gyll.**

Brigantine Beach, mainland, in September—Hamilton.

**PROMETOPIA, Br.****P. 6-maculata, Say.**

Generally distributed, common—Wenzel, Liebeck. Hudson county—Linell. Caldwell, common—Crane. Newark.

## CATALOGUE OF INSECTS.

151

**PHENOLIA, Br.***P. grossa*, Fabr.

Generally distributed, not uncommon—Wenzel, Liebeck.  
Hudson county—Linell. Newark.

**OMOSITA, Br.***O. colon*, Linn.

Generally distributed, common—Wenzel, Liebeck. Brigantine Beach, in September—Hamilton. Hudson county—  
Linell. Newark.

**SORRONIA, Br.***S. guttulata*, Lec.

Hudson county, rare—Linell.

*S. undulata*, Say.

Generally distributed, moderately abundant—Liebeck, Wenzel.  
Hudson county—Linell.

*S. ulkei*, Lec.

Sea-shore, rare—Liebeck.

**POCADIUS, Br.***P. helvolus*, Er.

Fort Lee, abundant—Linell. Generally distributed, not common—Wenzel.

*P. infuscatus*, Reitter.

New Jersey—One specimen in Dr. Horn's collection.

**OXYONEMUS, Br.***O. histrina*, Lec.

Generally distributed, not common—Wenzel. Sea-shore, rare  
—Liebeck. Hudson county—Linell.

**AMPHICROSSUS, Br.***A. ciliatus*, Oliv.

Generally distributed, not rare—Wenzel. Hudson county—  
Linell.

## 152 GEOLOGICAL SURVEY OF NEW JERSEY.

**PALLODES, Br.***P. silaceus*, Er.

Generally distributed, not rare—Wenzel. Anglesea, in July—Schwarz. Hudson county—Linell. Newark. Madison.

**CYCHRAMUS, Kug.***C. adustus*, Er.

Near Hoboken, rare—Smith.

**CRYPTAROMA, Shuck.***C. ampla*, Er.

Generally distributed, rather common—Wenzel, Liebeck. Hudson county—Linell.

*C. strigata*, Fabr.

Hudson county—Linell. Newark—Loeffler.

*C. concinna*, Melsh.

Hudson county—Linell.

**IPS, Fabr.***I. obtusus*, Say.

Westville, rare—Liebeck. Snake Hill, rare—Linell. Newark.

*I. fasciatus*, Oliv.

Generally distributed, common—Wenzel, Liebeck. Brigantine Beach, in September—Hamilton. Hudson county—Linell. Caldwell, common—Crane. Newark.

*I. sanguinolentus*, Oliv.

Camden. Gloucester county, not uncommon—Wenzel. Westville, not uncommon—Liebeck. Hudson county—Linell. Newark.

*I. cylindricus*, Lec.

Caldwell, rare—Crane.

**RHIZOPHAGUS, Hbst.***R. cylindricus*, Lec.

Generally distributed, not uncommon—Liebeck.

*R. bipunctatus*, Say.

Hudson county—Linell.

## CATALOGUE OF INSECTS.

153

## Family LATRIDIIDÆ.

## STEPHOSTETHUS, Lec.

*S. liratus*, Lec.

Generally distributed and locally not rare—Smith.

## CORTICARIA, Marsh.

*C. deleta*, Mann.

Generally distributed, not common—Smith. Newark—Loeffler.

*C. americana*, Mann.

Hudson county—Linell.

*C. longipennis*, Lec.

Newark—Loeffler.

*C. cavicollis*, Mann.

Hudson county—Linell.

*C. simplex*, Lec.

Anglesea, in July—Schwarz.

## Family TROGOSITIDÆ.

## NEMOSOMA, Latr.

*N. parallelum*, Melsh.

Hudson county—Linell. Newark; rare.

## TROGOSITA, Oliv.

*T. virescens*, Fabr.

Generally distributed, rather common—Wenzel, Liebeck. Newark.

## TENEBRIOIDES, Pall.

*T. corticalis*, Melsh.

Generally distributed, rather common—Wenzel, Liebeck. Hudson county—Linell. Caldwell, rare—Crane.

## 154 GEOLOGICAL SURVEY OF NEW JERSEY.

*T. castanea*, Melsh.

Generally distributed—Wenzel. Camden, rare—Liebeck.  
Hudson county—Linell.

*T. bimaculata*, Melsh.

Hudson county—Linell.

**THYMALUS, Duft.***T. fulgidus*, Er.

Hudson county—Linell. Newark.

**MONOTOMA, Hbst.***M. producta*, Lec.

Brigantine Beach, in September, abundant—Hamilton.  
Anglesea, in July, common—Schwarz.

*M. picipes*, Hbst.

Hudson county—Linell.

**BACTRIDIUM, Lec.***B. ephippigerum*, Guer.

Hudson county—Linell.

*B. striolatum*, Reit.

Hudson county—Linell.

*B. cavicolle*, Horn.

Hudson county—Linell.

**Family BYRRHIDÆ.****NOSODENDRON, Latr.***N. unicolor*, Say.

Camden and Gloucester counties, rare—Wenzel.

**OYTILUS, Br.***C. sericeus*, Först.

Hudson county—Linell. Newark.

## CATALOGUE OF INSECTS.

155

**BYRRHUS**, Linn.**B. americanus**, Lec.

Sea-shore, not common—Wenzel, Liebeck.

**Family PARNIDÆ.****PSEPHENUS**, Hald.**P. lecontei**, Lec.

Newark; not common.

**DRYOPS**, Oliv.**D. lithophilus**, Germ.

Clifton, abundant—Linell. Newark.

**D. fastigiatus**, Say.Clifton, abundant—Linell. New Jersey—Collection Roberts.  
Newark—Bischoff.**D. striatus**, Lec.

New Jersey—Collection Roberts.

**ELMIS**, Latr.**E. 4-notatus**, Say.

Clifton—Linell. New Jersey—Collection Roberts.

**E. pusillus**, Lec.

Clifton, not rare—Linell.

**STENELMIS**, Dup.**S. crenatus**, Say.

Clifton, abundant—Linell. New Jersey—Collection Roberts.

**S. vittipennis**, Zimm.

Clifton, not common—Linell.

**S. quadrimaculatus**, Horn.

Newark—Bischoff.

**MACRONYCHUS**, Müll.**M. glabratus**, Say.

Clifton, common—Linell. New Jersey—Collection Roberts.

## 156 GEOLOGICAL SURVEY OF NEW JERSEY.

**ANCYRONYX, Br.****A. variegatus, Germ.**Clifton, not common—Linell. New Jersey—Collection  
Roberts.**Family HETEROCERIDÆ.****HETEROCHERUS, Fabr.****H. tristis, Mann.**

Sea-shore, rare—Liebeck.

**H. fatuus, Kies.**

Brigantine Beach, in September—Hamilton. Newark.

**H. substriatus, Kies.**

Sea-shore, not rare—Wenzel.

**H. mollinus, Kies.**

Sea-shore, not rare—Wenzel.

**H. collaris, Kies.**

Sea-shore, not rare—Wenzel.

**H. brunneus, Melsh.**

Newark; a single specimen.

**Family DASCYLLIDÆ.****EURYPOGON, Mots.****E. niger, Melsh.**

Hudson county—Linell. Newark—Bischoff.

**ODONTONYX, Guer.****O. trivittis, Germ.**

Newark—Bischoff.

**PTILODACTYLA, Lat.****P. serricollis, Say.**

Hudson county—Linell.

## CATALOGUE OF INSECTS.

157

**EUCINETUS, Germ.*****H. terminalis*, Lec.**

Hudson county—Linell.

**EOTOPRIA, Lec.*****H. nervosa*, Melsh.**

Hudson county—Linell.

**HELODES, Latr.*****H. thoracica*, Guer.**

Newark. Not uncommon in Ocean and Monmouth counties.

**SCIRTES, Ill.*****S. orbiculatus*, Fabr.**

Hudson county—Linell.

***S. tibialis*, Guer.**

I have several times taken this in the State.

**CYPHON, Payk.*****C. collaris*, Guer.**

Hudson county—Linell.

***C. variabilis*, Thunb.**

Common on flowers, Ocean and Monmouth counties. Anglesea, in July—Schwarz.

**Family RHIPICERIDÆ.****SANDALUS, Knoch.*****S. petrophya*, Knoch.**

Northern Jersey, rare—Liebeck. Newark.

**Family ELATERIDÆ.****MELASIS, Oliv.*****M. pectinicornis*, Melsh.**

Newark. Atlantic City—Castle.

## 158 GEOLOGICAL SURVEY OF NEW JERSEY.

**THAROPS, Lap.****T. ruficornis, Say.**

Sea-shore, rare—Liebeck. Hudson county—Linell.

**DELTOMETOPUS, Bonv.****D. amoenicornis, Say.**Generally distributed, rare—Liebeck. Hudson county—  
Linell.**MICORRHAGUS, Esch.****M. triangularis, Say.**

Newark, compared with Dr. Horn's specimens. Madison.

**ADELOCERA, Latr.****A. marmorata, Fabr.**Gloucester and Camden counties, not common—Wenzel.  
Westville, rare—Liebeck.**A. discoidea, Web.**

Generally distributed, not rare—Wenzel, Liebeck.

**A. maculata, Lec.**

Exact locality unknown; rare; not taken recently—Liebeck.

**CHALCOLEPIDIUS, Esch.****C. viridipilis, Say.**Gloucester and Camden counties, not rare—Wenzel. West-  
ville, rare—Liebeck.**ALAUS, Esch.****A. oculatus, Linn.**

Occurs everywhere in the State, not uncommonly.

**A. myops, Fabr.**Generally distributed, moderately abundant—Wenzel, Liebeck.  
Occurs throughout the pine districts; more common southward.**CARDIOPHORUS, Esch.****C. cardisce, Say.**

Generally distributed, not uncommon—Wenzel.

## CATALOGUE OF INSECTS.

159

**C. gagates**, Er.  
Madison—Paulmier.

**C. robustus**, Lec.  
New Jersey—Collection Dr. Horn.

**HORISTONOTUS**, Cand.  
**H. curiatus**, Say.  
Gloucester and Camden counties, not common—Wenzel.  
Westville, rare—Liebeck. Hudson county—Linell.

**CRYPTOHYPNUS**, Esch.  
**C. guttulatus**, Melsh.  
Camden, rare—Liebeck.  
**C. pulchellus**, Linn.  
Westville, rare—Liebeck. New Jersey—Collection Dr. Horn.  
**C. obliquatulus**, Melsh.  
Camden, rare—Liebeck. Ocean county, not rare—Smith.

**MONOCREPIDIUS**, Esch.  
**M. lividus**, De G.  
Generally distributed, common—Liebeck, Wenzel. Hudson county—Linell.  
**M. vespertinus**, Fabr.  
Generally distributed, common—Liebeck, Wenzel. Hudson county—Linell. Caldwell, common—Crane.  
**M. auritus**, Hbst.  
Camden and Gloucester counties, not uncommon—Wenzel.  
Westville, rather common—Liebeck. Brigantine Beach, mainland, in September, common—Hamilton. Hudson county—Linell. Madison. Ocean county—Smith.  
**M. bellus**, Say.  
Camden and Gloucester counties, not uncommon—Wenzel.  
Westville, Gloucester, not uncommon—Liebeck. Hudson county—Linell.

**BLATER**, Linn.  
**B. hepaticus**, Melsh.  
Camden and Gloucester counties, not rare—Wenzel.

## 160 GEOLOGICAL SURVEY OF NEW JERSEY.

*E. pedalis*, Germ.

Generally distributed, not rare—Wenzel. Atco, rare—Liebeck.

*E. mixtus*, Hbst.

New Jersey—Collection Dr. Horn.

*E. nigricollis*, Hbst.

Generally distributed, not rare—Wenzel. Rare—Liebeck. Hudson county—Linell. Newark.

*E. linteus*, Say.

Generally distributed, not rare—Wenzel. Rare—Liebeck. Hudson county—Linell.

*E. sayi*, Lec.

Gloucester and Camden counties, very rare—Wenzel. New Jersey—Collection Dr. Horn.

*E. rubricollis*, Hbst.

Gloucester and Camden counties, rare—Wenzel. Westville, rare—Liebeck. Newark.

*E. nigricans*, Germ.

Hudson county—Linell.

*E. rubricus*, Say.

Hudson county—Linell. New Jersey—Collection Dr. Horn. Ocean county, rare—Smith.

*E. collaris*, Say.

Camden, rare—Liebeck.

*E. sanguinipennis*, Say.

Brigantine Beach, mainland, in September, very rare—Hamilton.

*E. xanthomus*, Germ.

Camden and Gloucester counties, rare—Wenzel. Dacosta, rare—Liebeck.

*E. obliquus*, Say.

Generally distributed, not rare—Wenzel, Liebeck. Hudson county—Linell. Newark. Ocean county, rare—Smith.

*E. pusio*, Germ.

Hudson county—Linell.

## CATALOGUE OF INSECTS.

161

## DRASTERIUS, Esch.

*D. elegans*, Fabr.

Generally distributed, common—Wenzel, Liebeck. Hudson county—Linell. Newark.

*D. amabilis*, Lec.

Camden and Gloucester counties, rare—Wenzel. Camden, rare—Liebeck. Hudson county—Linell.

## MEGAPHENTHES, Kies.

*M. limbalis*, Hbst.

Generally distributed, rare—Liebeck. Hudson county—Linell. Newark.

*M. rufilabris*, Germ.

Atco, rare—Liebeck. Hudson county—Linell.

## LUDIUS, Latr.

*L. attenuatus*, Say.

Camden, rare—Liebeck. Hudson county—Linell. Caldwell, rare—Crane.

*L. abruptus*, Say.

Westville, rare—Liebeck. Hudson county—Linell. Caldwell, rare—Crane.

## AGRIOTUS, Esch.

*A. mancus*, Say.

Hudson county—Linell. Newark. Caldwell, rare—Crane.

*A. insanus*, Cand.

Hudson county—Linell.

*A. pubescens*, Melsh.

Generally distributed, rare—Liebeck. Camden and Gloucester counties, not common—Wenzel.

*A. oblongicollis*, Melsh.

As before: also Hudson county—Linell.

## DOLOPIUS, Esch.

*D. lateralis*, Esch.

Landisville, Atco, rare—Liebeck. Hudson county—Linell. Caldwell, rare—Crane.

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## 162 GEOLOGICAL SURVEY OF NEW JERSEY.

**BHTARMON**, Kies.**B. bigeminatus**, Rand.

Hudson county—Linell.

**GLYPHONYX**, Cand.**G. recticollis**, Say.Generally distributed, not rare—Liebeck. Hudson county—  
Linell. Ocean county, in May, common—Smith.**G. testaceus**, Melsh.Camden and Gloucester counties, not rare—Wenzel. Angle-  
sea, in July—Schwarz. Hudson county—Linell. Ocean  
county, in May, common—Smith.**MELANOTUS**, Esch.**M. decumanus**, Er.Generally distributed, not rare—Wenzel. Hudson county—  
Linell.**M. secretus**, Lec.

Atoo, rare—Liebeck.

**M. ignobilis**, Melsh.

New Jersey—Collection Dr. Horn.

**M. depresso**, Melsh.

Generally distributed, not rare—Wenzel.

**M. tenuicollis**, Lec.

New Jersey. All of Dr. Horn's specimens are so marked.

**M. glandicolor**, Melsh.

Hudson county—Linell.

**M. fissilis**, Say.

Occurs commonly throughout the State.

**M. communis**, Gyll.

Occurs commonly throughout the State.

**M. exuberans**, Lec.

New Jersey—Collection Dr. Horn.

**M. parumpunctatus**, Melsh.

Hudson county—Linell.

## CATALOGUE OF INSECTS.

163

**M. cribulosus**, Lec.

Generally distributed, not common—Wenzel.

**M. tenax**, Say.

New Jersey—Collection Dr. Horn.

**M. americanus**, Hbst.

Generally distributed, not common—Wenzel, Liebeck. Hudson county—Linell.

**M. insipiens**, Say.

Generally distributed, rare—Liebeck.

**M. variolatus**, Lec.

Recorded on the Newark list.

**LIMONIUS**, Esch.**L. auripilis**, Say.

Camden and Gloucester counties, rare—Wenzel. Atco, rare—Liebeck.

**L. stigma**, Hbst.

New Jersey—Collection Dr. Horn.

**L. griseus**, Beauv.

Generally distributed, common—Wenzel, Liebeck. Hudson county—Linell.

**L. confusus**, Lec.

Generally distributed, not uncommon—Liebeck.

**L. plebeius**, Say.

Hudson county—Linell.

**L. æger**, Lec.

Not rare in Ocean county.

**L. quercinus**, Say.

Generally distributed, common—Liebeck. Hudson county—Linell. Madison. I have taken this abundantly in Ocean county.

**L. basillaris**, Say.

Generally distributed, common—Liebeck, Wenzel.

**L. agonus**, Say.

Atlantic City—Castle.

## 164 GEOLOGICAL SURVEY OF NEW JERSEY.

**L. nimbatus**, Say.

Generally distributed, not rare—Wenzel. Westville, rare—Liebeck. Hudson county—Linell.

**PITYOBIUS**, Lec.**P. anguinus**, Lec.

Atlantic City, rare, not taken recently—Liebeck. Atlantic City, Dacosta—Castle.

**ATHOUS**, Esch.**A. brightwelli**, Kirby.

Hudson county—Linell.

**A. acanthus**, Say.

Hudson county—Linell.

**A. cucullatus**, Say.

Generally distributed, not rare—Liebeck. Anglesea, in July—Schwarz. Hudson county—Linell.

**A. equestris**, Lec.

New Jersey—Collection Dr. Horn.

**A. limbatus**, Lec.

Atlantic City—Castle.

**GISTODES**, Lec.**O. tenuicollis**, Rand.

Ocean county; not common.

**SERICOSOMUS**, Steph.**S. viridanus**, Say.

Sea-shore, rare—Liebeck.

**S. debilis**, Say.

Landisville, rare—Liebeck.

**CORYMBITES**, Latr.**C. tesselatus**, Linn.

Camden and Gloucester counties, rare—Wenzel.

**C. cylindriformis**, Hbst.

Generally distributed, common—Wenzel, Liebeck. Caldwell, common—Crane. Hudson county—Linell. Newark.

## CATALOGUE OF INSECTS.

165

*C. pyrrhos*, Hbst.

Generally distributed, rather common—Wenzel, Liebeck. Hudson county—Linell. Newark. Caldwell, common—Crane.

*C. bivittatus*, Melsh.

Sea-shore, rare—Liebeck.

*C. tarsalis*, Melsh.

Generally distributed, not uncommon—Liebeck, Wenzel.

*C. sulcicollis*, Say.

Generally distributed, rare—Wenzel.

*C. aethiops*, Hbst.

Generally distributed, rare—Wenzel. Hudson county—Linell. Newark.

*C. hieroglyphicus*, Say.

Generally distributed, not uncommon—Liebeck. Hudson county—Linell. Newark. Caldwell, rare—Crane.

*C. metallicus*, Payk.

Camden and Gloucester counties, rare—Wenzel.

*C. inflatus*, Lec.

Gloucester, rare—Liebeck. Hudson county—Linell.

## ASAPHES, Kirby.

*A. decoloratus*, Say.

Hudson county—Linell. Not an uncommon species in the Orange Mountains. Madison.

*A. memnonius*, Hbst.

Generally distributed, not uncommon—Liebeck. Hudson county—Linell. Newark. Caldwell, common—Crane. Madison.

*A. bilobatus*, Say.

Hudson county—Linell. Caldwell, common—Crane.

## MELANACTES, Lec.

*M. piceus*, Deg.

Generally distributed, rare—Liebeck. Camden and Gloucester counties, not rare—Wenzel. Hudson county—Linell. Newark.

## 166 GEOLOGICAL SURVEY OF NEW JERSEY.

**M. morio**, Fabr.

Camden and Gloucester counties, not rare—Wenzel. Hudson county—Linell. Newark. Caldwell, rare—Crane.

¶ **OEBRIO**, Oliv.**O. bicolor**, Fabr.

Camden and Gloucester counties, rare—Wenzel.

¶ **PEROTHOPS**, Br.**P. mucida**, Gyll.

Camden, rare—Liebeck.

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**Family THROSCIDÆ.****DRAPETES**, Redt.**D. geminatus**, Say.

Westville, rare—Liebeck. Hudson county—Linell.

**THROSCOUS**, Latr.**T. constrictor**, Say.

Ocean county, rare—Smith. Newark—Loeffler.

**T. chevrolati**, Bonv.

Hudson county, not common—Linell. Newark—Loeffler.

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**Family BUPRESTIDÆ.****CHALCOPHORA**, Sol.**C. virginiensis**, Dru.

Generally distributed, common—Wenzel. Westville, rather common—Liebeck. Newark.

**C. liberta**, Germ.

Atlantic county, not common—Wenzel. Westville, Egg Harbor, rare—Liebeck.

## CATALOGUE OF INSECTS.

167

## DICERCA, Esch.

*D. prolongata*, Lec.

Recorded on the Newark list.

*D. divaricata*, Say.

Generally distributed, common—Wenzel. Camden, rare—Liebeck. Hudson county—Linell. Madison. Caldwell, common—Crane.

*D. pugionata*, Germ.

Gloucester county, on Black Alder, rare—Wenzel. Westville, rare—Liebeck. Hudson county—Linell. Newark.

*D. obscura*, Fabr.

Generally distributed, common—Wenzel, Liebeck. Hudson county—Linell. Newark. Caldwell, rare—Crane.

*Var. lurida*, Fabr.

Same distribution as type, and equally common.

*D. spreta*, Gory.

Camden and Gloucester counties, rare—Wenzel. Newark.

*D. asperata*, Lap. & Gory.

Exact locality unknown, rare—Liebeck.

*D. punctulata*, Sch.

Camden and Gloucester counties, rare—Wenzel. Sea-shore, rare—Liebeck.

## PSEUDONOTA, Esch.

*P. cyanipes*, Say.

Sea-shore, rare—Liebeck. Newark.

*P. thureura*, Say.

Atlantic county, rare—Wenzel. Gloucester, rare—Liebeck.

## BUPRESTIS, Linn.

*B. rufipes*, Oliv.

Sea-shore, rare—Liebeck.

*B. lineata*, Say.

Generally distributed, common—Wenzel, Liebeck. Brigantine Beach, in September, in drifted wood—Hamilton. Newark.

## 168 GEOLOGICAL SURVEY OF NEW JERSEY.

**B. consularis**, Gory.

Sea-shore, rare—Liebeck.

**B. nuttalli**, Kirby.

Generally distributed, not rare—Wenzel.

**B. fasciata**, Fabr.

Gloucester county, rare—Wenzel.

**B. striata**, Fabr.

Atlantic county, rare—Wenzel. Dacosta, Westville, rare—Liebeck. Newark.

**B. decora**, Fabr.

Gloucester county, very rare—Wenzel.

**B. ultramarina**, Say.

Generally distributed, rare—Liebeck. Gloucester and Atlantic counties, rare—Wenzel.

**CINYRA**, Lap. & Gory.

**C. gracilipes**, Melsh.

Gloucester county, rare—Wenzel. Westville, rare—Liebeck. Hudson county—Linell.

**MELANOPHILA**, Esch.

**M. notata**, Lap. & Gory.

Sea-shore, rare—Liebeck.

**M. longipes**, Say.

Generally distributed, rather common—Wenzel, Liebeck. Newark.

**M. fulvoguttata**, Harr.

Recorded on the Newark list.

**M. æneola**, Melsh.

Landisville, rare—Liebeck. New Jersey—Collection Dr. Horn. Atlantic City—Castle.

**ANTHAXIA**, Esch.

**A. æneogaster**, Lap.

Recorded on the Newark list.

**A. viridifrons**, Lap.

Generally distributed, not common—Wenzel.

## CATALOGUE OF INSECTS.

169

*A. cyanella*, Gory.

Generally distributed, not common—Wenzel.

*A. quercata*, Fabr.

Generally distributed, not common—Wenzel. Dacosta, not rare—Liebeck.

*A. flavimana*, Gory.

Generally distributed, not uncommon—Wenzel, Liebeck.

**CHRYSOBOTHRIS, Esch.***C. femorata*, Fabr.

Common all over the State.

*Var. 4-impressa*, Lap. & Gory.

New Jersey—Collection Dr. Horn.

*C. floricola*, Gory.

Generally distributed, rare—Wenzel. Landisville, Dacosta, rare—Liebeck. Hudson county—Linell.

*C. dentipes*, Germ.

Generally distributed, rare—Wenzel. Gloucester, Dacosta, rare—Liebeck. Hudson county—Linell.

*C. pusilla*, Lap. & Gory.

Atlantic county, rare—Wenzel. Landisville, Dacosta, rare—Liebeck.

*C. sexsignata*, Say.

Generally distributed, rare—Liebeck. Camden and Gloucester counties, rare—Wenzel. Hudson county—Linell. Newark.

*C. chrysoela*, Ill.

Orange Mountains, rare—Smith.

*C. chlorocephala*, Gory.

Landisville, Dacosta, rare—Liebeck. New Jersey—Collection Dr. Horn.

**ACTENODES, Lac.***A. acornis*, Say.

Atlantic county, rare—Wenzel. Sea-shore, not rare—Liebeck. Brigantine Beach, in September, washed up by tide, rare—Hamilton. Newark.

## 170 GEOLOGICAL SURVEY OF NEW JERSEY.

**AOMÆODERA, Esch.****A. ornata, Fabr.**

Generally distributed, not common—Wenzel.

**A. pulchella, Hbst.**

Atco, not common—Liebeck. Atlantic county, rare—Wenzel.

**A. culta, Web.**

Quite generally distributed throughout the State; not rare.

**PTOSIMA, Sol.****P. gibbicollis, Say.**

Sea-shore, rare—Liebeck.

**MASTOGHENIUS, Sol.****M. subcyaneus, Lec.**

Camden and Gloucester counties, rare—Wenzel. Landisville, rare—Liebeck. Hudson county—Linell. Newark.

**EUPRISTOCERUS, Deyr.****E. cogitans, Web.**

Camden and Gloucester counties, not common—Wenzel. Westville, rare—Liebeck. Hudson county—Linell. Newark.

**AGRILUS, Steph.****A. ruficollis, Fabr.**

Common throughout the State.

**A. fulgens, Lec.**

Westville, rare—Liebeck.

**A. otiosus, Say.**

Generally distributed, not rare—Liebeck. Newark. Hudson county—Linell.

**Var. pusillus, Say.**

With the type, and equally common—Liebeck.

**Var. defectus, Lec.**

Newark, according to list.

## CATALOGUE OF INSECTS.

171

**A. bilineatus**, Web.

Not rare throughout the State—Wenzel, Liebeck, Linell,  
Smith. Newark.

**A. lecontei**, Saund.

Hudson county—Linell.

**A. fallax**, Say.

Camden and Gloucester counties, rare—Wenzel.

**A. interruptus**, Lec.

Hudson county—Linell. Newark.

**A. subcinctus**, Gory.

Westville, rare—Liebeck.

**A. plumbeus**, Lec.

Hudson county—Linell.

**A. politus**, Say.

Recorded on the Newark list. Taken by myself near Jersey  
City.

**A. egenus**, Gory.

Generally distributed, common—Wenzel, Liebeck. Hudson  
county—Linell. Newark. Madison. Ocean county.

**A. lacustris**, Lec.

Generally distributed, not rare—Liebeck.

**TAPHROCERUS**, Sol.**T. gracilis**, Say.

Generally distributed, not uncommon—Liebeck. Gloucester  
county, locally not uncommon—Wenzel. Hudson county—  
Linell. Newark.

**BRACHYS**, Sol.**B. ovata**, Web.

Common throughout the State—Wenzel, Liebeck, Linell,  
Smith. Anglesea, in July—Schwarz.

**Var. tessellata**, Fabr.

I have seen specimens from Newark.

**B. aërosoa**, Melsh.

Not rare throughout the State—Liebeck, Wenzel, Linell,  
Smith.

## 172 GEOLOGICAL SURVEY OF NEW JERSEY.

**PACHYSCHELUS, Sol.****P. purpureus, Say.**

Recorded on the Newark list.

**P. laevigatus, Say.**

Generally distributed, not rare—Liebeck, Wenzel. Hudson county—Linell. Newark.

**Family LAMPYRIDÆ.****CALOPTERON, Guer.****C. terminale, Say.**

Hudson county—Linell.

**C. reticulatum, Fabr.**

Found not uncommonly throughout the State.

**CELESTES, Newn.****C. basalis, Lec.**

Sea-shore, not common—Liebeck. Hudson county—Linell.

**CŒNIA, Newn.****C. dimidiata, Fabr.**

Sea-shore, rare—Liebeck. Caldwell, common—Crane.

**LOPHEROS, Lec.****L. fraternus, Rand.**

Rare, near Paterson—Smith.

**EROS, Newn.****E. thoracicus, Rand.**

Westville, rare—Liebeck.

**E. aurora, Hbst.**

Generally distributed, not uncommon—Liebeck. Gloucester county, rare—Wenzel.

**E. trilineatus, Melsh.**

Westville, rare—Liebeck. Hudson county—Linell.

## CATALOGUE OF INSECTS.

173

## PLATHEROS, Bourg.

*P. timidus*, Lec.

Hudson county—Linell.

*P. modestus*, Say.

Generally distributed, not rare—Wenzel. Atco, rare—Liebeck. Hudson county—Linell.

*P. canaliculatus*, Say.

Generally distributed, not rare—Liebeck. Hudson county—Linell.

*P. sollicitus*, Lec.

Generally distributed, not rare—Wenzel.

*P. floralis*, Melsh.

Atco, rare—Liebeck.

## CALOCHROMUS, Guer.

*C. perfaceta*, Say.

Generally distributed, rare—Liebeck. Orange Mountains, rare—Smith.

## LUCIDOTA, Lap.

*L. atra*, Say.

Gloucester, rare—Liebeck. Hudson county—Linell. Newark.

*L. punctata*, Lec.

Dacosta, rare—Liebeck.

## ELLYOHNIA, Lec.

*E. corrusca*, Linn.

Generally distributed, common—Wenzel, Liebeck. Newark.

## PYROPYGA, Mots.

*P. nigricans*, Say.

Hudson county—Linell.

*P. decipiens*, Harr.

Generally distributed, common—Liebeck, Wenzel.

## 174 GEOLOGICAL SURVEY OF NEW JERSEY.

**PYRACTOMENA, Lec.****P. angulata, Say.**

Generally distributed, not common—Wenzel. Newark. Caldwell, rare—Crane.

**P. lucifera, Melsh.**

Generally distributed, common—Wenzel. Rare—Liebeck.

**PHOTINUS, Lap.****P. consanguineus, Lec.**

Generally distributed, not rare—Liebeck. Hudson county—Linell.

**P. lineellus, Lec.**

Atco, rare—Liebeck.

**P. pyralis, Linn.**

Hudson county, common—Linell, Smith. Newark.

**P. marginellus, Lec.**

Generally distributed, common—Wenzel, Liebeck. Caldwell, common—Crane.

**P. scintillans, Say.**

Generally distributed, common—Liebeck. Caldwell, common—Crane.

This genus contains the common "fire-flies," which form so attractive a feature of the early summer evenings. The species are somewhat local, and the common "fire-fly" in different parts of the State is apt to belong to different species.

**PHOTURIS, Lec.****P. pennsylvanica, De G.**

Generally distributed throughout the State, and the largest and most brilliant of our "fire-flies."

**TYTTHONYX, Lec.****T. erythrocephalus, Fabr.**

Atco, rare—Liebeck.

## CATALOGUE OF INSECTS.

175

**OMETHUS, Lec.***O. marginatus*, Lec.

Atco, rare—Liebeck.

**CHAULIOGNATHUS, Hents.***C. scutellaris*, Lec.

Pine districts, common in spring—Wenzel.

*C. pennsylvanicus*, De G.

Generally distributed, common—Wenzel. Hudson county—Linell. Newark. Madison. I have taken this abundantly, in fall, on Solidago. Caldwell, common—Crane.

*C. marginatus*, Fabr.

Generally distributed, rather common—Liebeck. Brigantine Beach, mainland, in September—Hamilton. I have taken this commonly enough, in spring, in Ocean county. Caldwell, common—Crane.

**PODABRUS, Westw.***P. tricostatus*, Say.

Hudson county—Linell. Orange Mountains, rare—Smith.

*P. rugulosus*, Lec.

Generally distributed, common—Wenzel, Liebeck. Hudson county—Linell.

*P. frater*, Lec.

Generally distributed, rather common—Wenzel. Westville, rare—Liebeck.

*P. basilaris*, Say.

Generally distributed, rare—Liebeck. Hudson county—Linell. Caldwell, common—Crane. Madison.

*P. diadema*, Fabr.

Gloucester, rare—Liebeck.

*P. modestus*, Say.

Atco, rare—Liebeck. Caldwell, common—Crane.

*P. comes*, Lec.

Orange Mountains, rare—Smith.

## 176 GEOLOGICAL SURVEY OF NEW JERSEY.

*P. tomentosus*, Say.

Generally distributed, not rare—Linell.

*P. protensus*, Lec.

Hudson county—Linell.

*P. brunnicollis*, Lec.

Atco, rare—Liebeck.

## TELEPHORUS, Schaff.

*T. dentiger*, Lec.

Hudson county—Linell.

*T. excavatus*, Lec.

Generally distributed, common—Wenzel. Dacosta, rare—Liebeck. Hudson county—Linell.

*T. fraxini*, Say.

Generally distributed, not rare—Wenzel. Atco, rare—Liebeck.

*T. carolinus*, Fabr.

Common throughout the State.

*T. lineola*, Fabr.

Less common, but as generally distributed.

*T. rectus*, Melsh.

Generally distributed, not common—Wenzel.

*T. flavipes*, Lec.

Recorded on the Newark list.

*T. scitulus*, Say.

Common throughout the State; often excessively abundant on flowers.

*T. pusillus*, Lec.

Atco, rare—Liebeck.

*T. rotundicollis*, Say.

Westville, rare—Liebeck. Hudson county—Linell. Newark.

*T. tuberculatus*, Lec.

Generally distributed, not rare—Wenzel. Ocean county, common—Smith.

*T. bilineatus*, Say.

Found throughout the State, though scarcely common.

## CATALOGUE OF INSECTS.

177

**DITHEMNUS, Lec.****D. bidentatus, Say.**

Generally distributed, not rare—Liebeck. Hudson county—Linell.

**TRYPHERUS, Lec.****T. latipennis, Germ.**

Atco, rare—Liebeck. Hudson county—Linell.

**MALTHINUS, Latr.****M. occipitalis, Lec.**

Atco, rare—Liebeck.

**MALTHODES, Kies.****M. concavus, Lec.**

Hudson county—Linell.

**Family MALACHIDÆ.****COLLOPS, Br.****C. eximius, Er.**Generally distributed, not uncommon—Wenzel, Liebeck.  
Hudson county—Linell. Newark.**C. nigriceps, Say.**Generally distributed, not rare—Wenzel. Hudson county—  
Linell.**C. 4-maculatus, Fabr.**

Common throughout the State. Caldwell, rare—Crane.

**ANTHOCOMUS, Br.****A. flavilabris, Say.**

Hudson county—Linell.

**PSEUDOBÆUS, Horn.****P. oblitus, Lec.**

Hudson county—Linell. Orange Mountains—Smith.

M

## 178 GEOLOGICAL SURVEY OF NEW JERSEY.

**ATTALUS, Er.****A. terminalis, Er.**

Hudson county—Linell. Ocean county—Smith.

**A. morulus, Lec.**

Hudson county—Linell. Orange Mountains—Smith.

**A. granularis, Er.**

Anglesea, in July—Schwarz.

**A. circumscriptus, Say.**

Atco, rare—Liebeck.

**A. scincetus, Say.**

Generally distributed, not uncommon—Liebeck. Hudson county—Linell. Orange Mountains, not rare—Smith.

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**Family CLERIDÆ.****CYMATODERA, Gray.****C. brunnea, Melsh.**

Generally distributed, rare—Wenzel.

**C. bicolor, Say.**

Westville, rare—Liebeck.

**C. inornata, Say.**

Hudson county—Linell.

**C. undulata, Say.**

Generally distributed, rare—Wenzel. Camden, rare—Liebeck.

**TRICHOIDES, Hbst.****T. apivorus, Germ.**

Atlantic county, rare—Wenzel.

**CLERUS, Geoff.****C. quadrisignatus, Say.**

Generally distributed, not rare—Wenzel.

## CATALOGUE OF INSECTS.

179

**C. quadriguttatus, Oliv.**

Generally distributed, not uncommon—Wenzel, Liebeck.  
Hudson county—Linell.

**C. rosmarus, Say.**

Generally distributed, not rare—Wenzel. Rare—Liebeck.  
Hudson county—Linell. Newark.

**C. lunatus, Spin.**

Generally distributed, not rare—Wenzel. Daoesta, rare—  
Liebeck.

**C. thoracicus, Oliv.**

Generally distributed, not common—Wenzel, Liebeck. Hud-  
son county—Linell. Newark.

## THANASIMUS, Latr.

**T. dubius, Fabr.**

Generally distributed, but local—Wenzel. Hudson county—  
Linell.

## THANEROCLERUS, Spin.

**T. sanguineus, Say.**

Sea-shore, rare—Liebeck. Madison.

## HYDNOCERA, Newn.

**H. unifasciata, Say.**

Generally distributed, rare—Wenzel. Atco, rare—Liebeck.  
Hudson county—Linell.

**H. humeralis, Say.**

Common throughout the State.

**Var. cyanescens, Lec.****Var. difficilis, Lec.**

With the type and hardly less common.

**H. pallipennis, Say.**

Generally distributed, not uncommon—Wenzel, Liebeck.  
Hudson county—Linell. Newark.

**H. verticalis, Say.**

Same as with *pallipennis*.

## 180 GEOLOGICAL SURVEY OF NEW JERSEY.

*H. tabida*, Lec.

Dacosta, rare—Liebeck.

*H. longicollis*, Say.

Atco, rare—Liebeck.

**PHYLLOBAENUS**, Spin.*P. dislocatus*, Say.

Camden, rare—Liebeck. Hudson county—Linell.

**CHARIESSA**, Perty.*C. vestita*, Spin.

Hudson county—Linell.

*C. dichroa*; Lec.

Generally distributed, rare—Wenzel.

*C. pilosa*, Först.

Generally distributed, not uncommon—Wenzel, Liebeck.

Hudson county—Linell. Caldwell, one specimen—Crane.

*Var. onusta*, Say.

Same as type form—Liebeck.

**CREGYA**, Lec.*C. vetustula*, Spin.

Generally distributed, rare—Wenzel. Westville, rare—Liebeck.

*C. oculata*, Say.

Generally distributed, not rare—Wenzel, Liebeck. Hudson county—Linell.

**ORTHOPLLEURA**, Spin.*O. damicornis*, Fabr.

Generally distributed, rare—Liebeck.

**NECROBIA**, Latr.*N. rufipes*, Fabr.

Generally distributed, not uncommon—Wenzel, Liebeck. Newark.

## CATALOGUE OF INSECTS.

181

**N. ruficollis**, Fabr.

Same distribution as before.

**N. violaceus**, Linn.

Generally distributed, not rare—Wenzel.

**Family PTINIDÆ.****PTINUS**, Linn.**P. fur**, Linn.

Generally distributed, not rare—Wenzel. Camden, rare—Liebeck. Caldwell, rare—Crane.

**P. brunneus**, Duft.

Camden, rare—Liebeck.

**EUCRADA**, Lec.**E. humeralis**, Melsh.

New Brunswick, rare—Smith.

**ERNOBIUS**, Thom.**E. mollis**, Linn.

Generally distributed, not common—Wenzel, Liebeck.

**E. granulatus**, Lec.

Brigantine Beach, in September, once only, six specimens—Hamilton.

**E. luteipennis**, Lec.

Westville, rare—Liebeck.

**OZOGNATHUS**, Lec.**O. floridanus**, Lec.

Anglesea—Wenzel. Heretofore not found north of Florida.

**OLIGOMERUS**, Redt.**O. sericans**, Melsh.

Anglesea, in July—Schwarz.

## 182 GEOLOGICAL SURVEY OF NEW JERSEY.

**SITODREPA**, Thom.**S. panicea**, Linn.

Newark; not uncommon.

**HADROBREGMUS**, Thom.**H. errans**, Melsh.

Westville, rare—Liebeck. Anglesea, in July—Schwarz.

**H. carinatus**, Say.

Westville, not uncommon—Liebeck.

**TRICHODESMA**, Lec.**T. gibbosa**, Say.

Gloucester, rare—Wenzel. Westville, rare—Liebeck. Newark.

**TRYPOPITYS**, Redt.**T. sericeus**, Say.

I have taken this along the Palisades, rarely.

**PETALIUM**, Lec.**P. bistriatum**, Say.

Anglesea, in July—Schwarz.

**EUPACTUS**, Lec.**E. nitidus**, Lec.

Hudson county—Linell. Anglesea—Wenzel.

**XYLETINUS**, Latr.**X. peltatus**, Harr.

Generally distributed, rare—Liebeck.

**X. fucatus**, Lec.

Caldwell, common—Crane.

**LASIODERMA**, Steph.**P. serricorne**, Fabr.

The so-called "tobacco beetle;" not uncommon in old cigar-ettes. Anglesea—Wenzel. Ocean county—Smith.

## CATALOGUE OF INSECTS.

183

*L. nova* species, Horn dixit.  
Anglesea, in July—Schwarz.

**HEMIPTYCHUS**, Lec.  
*H. gravis*, Lec.  
Anglesea—Wenzel.

**DORCATOMA**, Hbst.  
*D. setulosum*, Lec.  
Anglesea—Wenzel.

**PROTHECA**, Lec.  
*P. puberula*, Lec.  
Generally distributed, not common—Wenzel.

**CÆNOCARA**, Thom.  
*C. oculata*, Say.  
Generally distributed, not rare—Liebeck. Newark—Loeffler.

**PTILINUS**, Geoff.  
*P. ruficornis*, Say.  
Landisville, rare—Liebeck.

**ENDECATOMUS**, Mell.  
*E. reticulatus*, Hbst.  
Generally distributed, not rare—Liebeck.

**SINOXYLON**, Duft.  
*S. basilare*, Say.  
Generally distributed, not common—Wenzel, Liebeck.

**BOSTRICHUS**, Geoff.  
*B. bicornis*, Web.  
Generally distributed, not common—Wenzel, Liebeck.

**AMPHICERUS**, Lec.  
*A. bicaudatus*, Say.  
Atlantic county, rare—Wenzel.

## 184 GEOLOGICAL SURVEY OF NEW JERSEY.

**DINODERUS, Steph.****D. porcatus, Lec.**

Sea-shore, rare—Liebeck.

**D. cibratus, Lec.**

Generally distributed, not rare—Liebeck.

**D. pusillus, Fabr.**

Atlantic county, common—Wenzel.

**LYCTUS, Fabr.****L. striatus, Melsh.**

Hudson county—Linell. Specimens are in Newark collections.

**L. opaculus, Lec.**

Hudson county—Linell.

**Family CUPESIDÆ.****CUPES, Fabr.****C. concolor, Westw.**

New Jersey—Linell. Gloucester, rare—Wenzel.

**C. capitata, Fabr.**

New Jersey—Linell. Caldwell, one specimen—Crane.

**Family LYMEXYLIDÆ.****LYMEXYLON, Fabr.****L. sericeum, Harr.**

Gloucester, rare—Wenzel. Newark; one specimen in Mr. Bischoff's collection.

**Family CIOIDÆ.****CIS, Lat.****C. fuscipes, Mell.**

Hudson county—Linell.

## CATALOGUE OF INSECTS.

185

**C. punctatus, Mell.**

Generally distributed, common—Wenzel. Anglesea, in July  
—Schwarz.

**C. sp. sp.**

Anglesea, in July, two undetermined species—Schwarz.

## ENNEARTHRON, Mell.

**E. thoracicornis, Zieg.**

Anglesea, in July—Schwarz. Generally distributed, not rare  
—Wenzel.

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## Family SPHINDIDÆ.

## SPHINDUS, Chev.

**S. americanus, Lec.**

I have taken this not infrequently in New Jersey.

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## Family LUCANIDÆ.

## LUCANUS, Linn.

**L. dama, Thunb.**

Generally distributed, not rare—Liebeck, Wenzel. Newark.  
Decidedly more rare on and north of the red sandstone region.  
Caldwell—Crane.

## DORCUS, MacL.

**D. parallelus, Say.**

Generally distributed, not uncommon—Liebeck, Wenzel.  
Newark. Madison. Caldwell, rare—Crane.

**D. brevis, Say.**

Dacosta; rare. The only known specimens were taken here  
by Mr. Bland.

## PLATYOERUS, Geoff.

**P. querous, Web.**

Generally distributed, not rare—Wenzel, Liebeck. Caldwell,  
rare—Crane. Newark.

## 186 GEOLOGICAL SURVEY OF NEW JERSEY.

**CHERUCHUS, MacL.***C. piceus*, Web.

Generally distributed, rare—Liebeck. Gloucester and Camden counties, rare—Wenzel. Newark.

**NICAGUS, Lec.***N. obscurus*, Lec.

Gloucester, not uncommon—Wenzel, Liebeck.

**PASSALUS, Fabr.***P. cornutus*, Fabr.

Common everywhere throughout the State.

**Family SCARABÆIDÆ.****CANTHON, Hoffm.***C. ebenus*, Say.

Sea-shore, rare—Liebeck.

*C. lecontei*, Harold.

Sea-shore, rare—Liebeck, Wenzel. Gloucester, rare—Wenzel.

*C. vigilans*, Lec.

Atlantic county, rare—Wenzel. Sea-shore, rare—Liebeck.

*C. lœvis*, Dru.

Common all over the State.

*C. viridis*, Beauv.

Atlantic City, rare, not taken recently—Liebeck.

**CHŒRIDIUM, Lap.***C. histeroides*, Web.

Generally distributed, not rare—Wenzel. Atco, rare—Liebeck.

**COPRIS, Geoffr.***C. minutus*, Dru.

Generally distributed, not uncommon—Wenzel. Sea-shore, not rare—Liebeck. Newark, Caldwell, rare—Crane.

## CATALOGUE OF INSECTS.

187

*C. anaglypticus*, Say.

Common all over the State.

*C. carolina*, Linn.

Common all over the State.

*PHANÆUS*, MacL.*P. carnifex*, Linn.

More or less common throughout the State.

*ONTHOPHAGUS*, Latr.*O. nuchicornis*, Linn.

Camden, rare—Wenzel, Liebeck.

*O. hecate*, Panz.

Generally distributed, common—Wenzel, Liebeck. Brigantine Beach, in September—Hamilton. Newark. Madison. Caldwell, common—Crane.

*O. janus*, Panz.

Generally distributed throughout the State; common.

*Var. striatulus*, Beauv.

Brigantine Beach, in September—Hamilton.

*O. tuberculifrons*, Harold.

Brigantine Beach, in September—Hamilton.

*O. pennsylvanicus*, Harold.

Common throughout the State.

*RHYSSHEMUS*, Muls.*R. scaber*, Hald.

Atlantic and Cape May counties, common—Wenzel. Atlantic City, not uncommon—Liebeck. Brigantine Beach, salt marshes, in September—Hamilton.

*ATÆNIUS*, Harold.*A. cognatus*, Lec.

Brigantine Beach, in September, common—Hamilton.

*A. wenzeli*, Horn.

Atlantic county, rare—Wenzel. Brigantine Beach, in September, not rare—Hamilton.

## 188 GEOLOGICAL SURVEY OF NEW JERSEY.

**A. strigatus**, Horn.

Brigantine Beach, in September—Hamilton.

**A. gracilis**, Melsh.

Brigantine Beach, in September—Hamilton.

**A. imbricatus**, Melsh.

New Jersey—Collection Dr. Horn.

**A. stercoator**, Fabr.

Newark. New Brunswick.

**A. socialis**, Horn.

Atlantic county, rare—Wenzel.

**APHODIUS**, Ill.**A. fossor**, Linn.

Hudson county—Linell.

**A. fimetarius**, Linn.

Common all over the State.

**A. ruricola**, Melsh.

Generally distributed, rare—Liebeck.

**A. granarius**, Linn.

Common all over the State.

**A. vittatus**, Say.Generally distributed, common—Liebeck. Atlantic county,  
rare—Wenzel. Newark.**A. inquinatus**, Hbst.

Common all over the State.

**A. rubeolus**, Beauv.

Landisville, Camden, common—Liebeck.

**A. stercorosus**, Melsh.Generally distributed, common—Liebeck. Not common—  
Wenzel.**A. bicolor**, Say.

Westville, not uncommon—Liebeck.

## CATALOGUE OF INSECTS.

189

**A. phaleroides**, Horn.

Atlantic and Cape May counties, not common—Wenzel. Atlantic City, not rare—Liebeck. Brigantine Beach, in September, not frequent—Hamilton. Anglesea, in July—Schwarz.

**A. femoralis**, Say.

Generally distributed, not uncommon—Wenzel, Liebeck.

**A. parcus**, Horn.

Anglesea—Wenzel.

**BOLBOCHRAS**, Kirby.**B. faretus**, Fabr.

Generally distributed, rare—Wenzel. Atlantic City, rare—Liebeck. Newark. Caldwell, rare—Crane. Madison.

**B. lazarus**, Fabr.

Generally distributed, rare—Wenzel. Sea-shore, not uncommon—Liebeck.

**ODONTÆUS**, Kl.**O. filicornis**, Say.

Atlantic City, rare—Liebeck. Ocean Beach—Paulmier.

**O. cornigerus**, Melsh.

New Jersey—Linell.

**GEOTRUPES**, Latr.**G. splendidus**, Fabr.

Generally distributed, rather common—Wenzel, Liebeck. Madison. Caldwell, rare since 1887—Crane.

**G. semiopacus**, Jek.

Atlantic City, rare—Liebeck. Newark. Madison.

**G. egeriei**, Germ.

Generally distributed, not uncommon—Wenzel. Camden, rare—Liebeck.

**G. blackburnii**, Fabr.

Rather common throughout the State.

**G. balyi**, Jek.

Gloucester county, rare—Wenzel. Westville, rare—Liebeck.

## 190 GEOLOGICAL SURVEY OF NEW JERSEY.

**TROX, Fabr.****T. scabrosus, Beauv.**

Generally distributed, not common—Wenzel. Atlantic City, not rare—Liebeck. Brigantine Beach, in September, frequent—Hamilton.

**T. asper, Lec.**

Brigantine Beach, in September, in carcasses—Hamilton.

**T. suberosus, Fabr.**

Generally distributed, not uncommon—Wenzel, Liebeck.

**T. tuberculatus, De G.**

Recorded on the Newark list. Caldwell, rare—Crane.

**T. erinaceus, Lec.**

Generally distributed, not rare—Wenzel, Liebeck. Hudson county—Linell.

**T. unistriatus, Beauv.**

Generally distributed, not uncommon—Liebeck.

**T. sordidus, Lec.**

Westville, rare—Liebeck. Madison—Paulmier.

**T. foveicollis, Harr.**

Generally distributed, rare—Liebeck.

**T. terrestris, Say.**

Hudson county—Linell.

**T. scaber, Linn.**

Generally distributed, not uncommon—Wenzel.

**T. atrox, Lec.**

New Jersey—Henshaw.

**AMPHICOMA, Latr.****A. lupina, Lec.**

Sea-shore, rare—Liebeck.

**A. vulpina, Hentz.**

Recorded on the Newark list.

## CATALOGUE OF INSECTS.

191

## HOPLIA, Ill.

*H. trifasciata*, Say.

Sea-shore, rare—Liebeck. In my experience, occurs very early in spring.

*H. trivialis*, Harold.

Sea-shore, rare—Liebeck.

*H. modesta*, Hald.

Generally distributed, common—Wenzel. Sea-shore, not uncommon—Liebeck. Newark.

## DICHELONYCHA, Kirby.

*D. elongata*, Fabr.

Generally distributed, rare—Wenzel. Westville, not uncommon—Liebeck. Newark.

*D. fuscula*, Lec.

Gloucester, rare—Liebeck.

*D. albicollis*, Burm.

Generally distributed, common—Wenzel. Westville, not rare—Liebeck.

## SERICA, MacL.

*S. vespertina*, Gyll.

Common throughout the State.

*S. iricolor*, Say.

Dacosta, rare—Liebeck. Atlantic county, common—Wenzel. Ocean county, on Scrub Oak, not rare—Smith.

*S. sericea*, Illiger.

Common throughout the State.

*S. trociformis*, Burm.

Atlantic county, common—Wenzel. Landisville, not uncommon—Liebeck. Ocean county, not rare on Scrub Oak, in May.

## MACRODACTYLUS, Latr.

*M. subspinosa*, Fabr.

The well-known "rose bug;" common all over the State.

## 192 GEOLOGICAL SURVEY OF NEW JERSEY.

## DIPLOTAXIS, Kirby.

*D. sordida*, Say.

Generally distributed, not common—Wenzel. Sea-shore, not uncommon—Liebeck.

*D. liberta*, Germ.

Sea-shore, common—Wenzel, Liebeck. Newark. Madison.

*D. frondicola*.

New Jersey—Linell.

## LACHNOSTERNA, Hope.

*L. glaberrima*, Blanch.

Brigantine Beach, September 10th—Hamilton. Anglesea, in July—Schwarz. New Jersey specimens are in the Collection United States National Museum, without exact locality.

*L. ephilida*, Say.

I have taken it during the present season (1889) in small numbers. Generally distributed—Liebeck, Wenzel.

*L. clemens*, Horn.

There is a single specimen marked "New Jersey" in the Collection United States National Museum, but the locality may be erroneous.

*L. dispar*, Burm.

Camden and Gloucester counties, not common—Wenzel.

*L. gracilis*, Burm.

Rather uncommon near New Brunswick. Sea-shore, rare—Liebeck. Camden and Gloucester counties, not rare—Wenzel.

*L. gibbosa*, Burm.

Common at New Brunswick, in June. Camden and Gloucester counties, not rare—Wenzel.

*L. subpruinosa*, Casey.

Not actually recorded from New Jersey, but it has been taken near Philadelphia and on Long Island.

*L. inversa*, Horn.

I took one specimen in Ocean county. It does not occur near Newark, apparently, and it is not in the Philadelphia collections from New Jersey. It is probably confined to the southern counties.

## CATALOGUE OF INSECTS.

193

**L. micans**, Knoch.

Common locally, and generally distributed. Newark. Westville—Liebeck. Camden and Gloucester counties, common—Wenzel.

**L. arcuata**, Smith.

I have taken two specimens in Ocean county. It appears to belong to the southern counties.

**L. insperata**, Smith.

Snake Hill, New Jersey; apparently rare.

**L. dubia**, Smith.

The common form in Ocean county. The only *fusca* form taken at New Brunswick, and I have seen it from the vicinity of Jersey City.

**L. fusca**, Frehl.

The common form near Jersey City and Newark, and probably throughout the northern part of the State. Camden and Gloucester counties—Wenzel.

**L. grandis**, Smith.

Rare near Jersey City, and probably found in small numbers throughout the State. Camden and Gloucester counties—Wenzel.

**L. fraterna**, Harris.**Var. cognata**, Burm.**Var. forsteri**, Burm.

I have taken all forms of this species in the State, probably all near Jersey City. Camden and Gloucester counties—Wenzel.

**L. nova**, Smith.

I have not seen it from the State, but have taken it on Long Island, and have no doubt it occurs with us.

**L. knochii**, Gyll.

Camden and Gloucester counties, very rare—Wenzel. River-ton—Castle.

**L. rugosa**, Mels.

Sea-shore, rare—Liebeck. Camden and Gloucester counties—Wenzel.

N

## 194 GEOLOGICAL SURVEY OF NEW JERSEY.

**L. hirsuta**, Knoch.

Not common; generally distributed. Rare, Westville—Liebeck. Camden and Gloucester counties—Wenzel.

**L. balia**, Say.

I have taken this in the State. Exact locality unknown.

**L. hirticula**, Knoch.

Common everywhere. I took it at New Brunswick this season.

**L. crenulata**, Fröhl.

Not common. I have taken it near Jersey City. Camden and Gloucester counties—Wenzel.

**L. ilicis**, Knoch.

Not rare. A few specimens near Jersey City. Newark. Generally distributed, moderately abundant—Liebeck, Wenzel.

**L. quercus**, Knoch.

Rare. Isolated specimens from different localities seen.

**L. tristis**, Fabr.

Common everywhere in the State.

In this list I have added two species not actually taken in the State, but which are so distributed faunally that their occurrence is almost a certainty. Two other species—

**L. marginalis**, Lec.**L. villifrons**, Lec.—

Are also almost certain to occur. My collection, now in the United States National Museum, contained many specimens collected by me in this State, and from my paper in the Proceedings United States National Museum for 1888, these localities are taken.

**PHYTALUS**, Er.**P. georgianus**, Horn.

Hammonton, a single specimen only—Schwarz.

**POLYPHYLLA**, Harr.**P. variolosa**, Hentz.

Atlantic county, rare—Wenzel. Atlantic City, rare—Liebeck. Sandy Hook, rather commonly washed up on the shore—Smith.

## CATALOGUE OF INSECTS.

195

**ANOMALA, Kœppe.****A. binotata, Gyll.**

Generally distributed, common—Wenzel, Liebeck.

**A. minuta, Burm.**

Anglesea, not uncommon—Liebeck.

**A. undulata, Melsh.**

New Jersey—Linell. Rare near Fort Lee—Smith.

A very distinctly varietal form occurs at Anglesea; taken by Mr. Wenzel.

**A. lurida, Fabr.**

Atlantic City—Castle.

**A. lucicola, Fabr.**

More or less common all over the State.

**A. obliqua, Horn.**

Generally distributed; common. Dacosta, Landisville, common—Liebeck.

**A. marginata, Fabr.**

Generally distributed, rare—Wenzel. Sea-shore, rare—Liebeck.

**STRIGODERMA, Burm.****S. pygmaea, Fabr.**

Generally distributed, not uncommon—Liebeck. Common in May and June—Wenzel. Madison.

**S. arboricola, Fabr.**

Generally distributed, common—Wenzel, Liebeck. Newark. Monmouth county, in July, not common—Smith. Caldwell, common—Crane.

**PELIDNOTA, MacL.****P. punctata, Linn.**

Common on grape vines all over the State.

**COTALPA, Burm.****C. lanigera, Linn.**

Occurs throughout the State; usually not common. Feeds on a Swamp Willow.

## 196 GEOLOGICAL SURVEY OF NEW JERSEY.

**CYCLOCHEPHALA, Latr.****C. immaculata, Oliv.**

Generally distributed, common—Wenzel. Sea-shore, not rare  
—Liebeck

**C. villosa, Burm.**

A specimen in a Newark collection is referable here.

**C. puberula, Lec.**

Atlantic City—Castle.

**CHALEPUS, MacL.****C. trachypygus, Burm.**

Generally distributed, common—Liebeck, Wenzel. Brigantine Beach, in September, come to light abundantly—Hamilton. Newark. Madison.

**LIGYRUS, Burm.****L. gibbosus, De G.**

Sea-shore, common—Wenzel, Liebeck. Brigantine Beach, in September, come to light abundantly—Hamilton. Newark. Caldwell, common—Crane.

**L. relictus, Say.**

Atlantic City, rare—Liebeck. Sea-shore, not rare—Wenzel. Newark. Caldwell, common—Crane. Madison.

**L. rugiceps, Lec.**

Caldwell, common—Crane.

**APHONUS, Lec.****A. castaneus, Melsh.**

Atlantic City, rare—Liebeck. Sea-shore, not rare—Wenzel. Anglesea, in July—Smith. Newark. Madison.

**XYLORYCTES, Hope.****X. satyrus, Fabr.**

Generally distributed, locally common—Liebeck, Wenzel. Newark. Feeds in roots of Ash.

## CATALOGUE OF INSECTS.

197

**STRATEGUS, Hope.****S. antaeus, Fabr.**

Atlantic and Cape May counties, not rare—Wenzel. Westville, not rare—Liebeck. On the Newark list.

**PHILEURUS, Latr.****P. truncatus, Beauv.**

On the Newark list.

**ALLORHINA, Burm.****A. nitida, Linn.**

Generally distributed, common—Wenzel, Liebeck. Newark. Cape May, in July—Schwarz. Long Branch, rare—Crane.

**EUPHORIA, Burm.****E. areata, Fabr.**

Westville, not uncommon—Liebeck. Gloucester, Atlantic and Cape May counties, very local—Wenzel. Brigantine Beach, in September, abundant once, but none have occurred the past five years—Hamilton.

**E. sepulchralis, Fabr.**

Generally distributed, not common—Wenzel.

**E. fulgida, Fabr.**

Generally distributed—Liebeck. Locally common—Wenzel. Newark. Caldwell, rare until three years ago—Crane.

**E. herbacea, Oliv.**

Generally distributed, not common—Wenzel. Westville, rare—Liebeck.

**E. inda, Linn.**

Occurs throughout the State, in fall and early in spring.

**CREMASTOCHILUS, Knoch.****C. pilosicollis, Horn.**

On the Newark list.

**C. variolosus, Kirby.**

Westville, rare—Liebeck. Gloucester county, rare—Wenzel. Madison—Paulmier.

## 198 GEOLOGICAL SURVEY OF NEW JERSEY.

*O. harrisii*, Kirby.

Woodbury, rare—Liebeck. Gloucester county, rare—Wenzel.

**OSMODERMA, Knoch.***O. eremicola*, Knoch.

Generally distributed, not rare—Wenzel. Westville, not uncommon—Liebeck. Newark. Madison. Caldwell, common—Crane.

*O. scabra*, Beauv.

Generally distributed, not rare—Wenzel. Sea-shore, rare—Liebeck. Newark. Madison. Caldwell, rare—Crane.

**GNORIMUS, Lap.***G. maculosus*, Knoch.

Generally distributed, rare—Wenzel. Sea-shore, rare—Liebeck.

**TRICHIUS, Fabr.***T. piger*, Fabr.

Occurs rather commonly all over the State.

*T. affinis*, Gory.

Occurs with the preceding.

*T. delta*, Först.

Williamstown, Dacosta, rare—Wenzel.

**VALGUS, Scroba.***V. squamiger*, Beauv.

Occurs rather commonly throughout the State.

**Family SONDYLIDÆ.****PARANDRA, Latr.***P. brunnea*, Fabr.

Occurs rather commonly throughout the State.

## CATALOGUE OF INSECTS.

199

## Family CERAMBYCIDÆ.

## ORTHOSOMA, Serv.

*O. brunneum*, Först.

Not uncommon throughout the State.

## PRIONUS, Geoff

*P. laticollis*, Dru.

Not uncommon throughout the State. Rare at Caldwell—Crane.

*P. pocularis*, Dalm.

Landisville, not uncommon—Liebeck. Atlantic and Cape May counties, not rare—Wenzel. Cape May, in July—Schwarz.

## TRAGOSOMA, Serv.

*T. harrisii*, Lec.

On the Newark list. I have found it along shore, cast up by the tide.

## SPHENOSTETHUS, Hald.

*S. taalei*, Buq.

New Jersey, rare, not taken recently—Liebeck. One specimen in Collection Dr. Horn, marked "New Jersey."

## ASEMUM, Esch.

*A. moestum*, Hald.

Not rare throughout the State. Rare at Caldwell—Crane.

## CRIOCEPHALUS, Muls.

*C. agrestis*, Kirby.

Brigantine Beach, in September, rare—Hamilton.

*C. obsoletus*, Rand.

Generally distributed, rather common—Wenzel, Liebeck. Brigantine Beach, in September, not common—Hamilton. Newark.

## SMODICUM, Hald.

*S. cucujiforme*, Say.

Generally distributed, not rare—Liebeck. Camden and Gloucester counties, rare—Wenzel. Newark.

## 200 GEOLOGICAL SURVEY OF NEW JERSEY.

**PHYSOCHEMUM, Hald.**

*P. brevilineum*, Say.

Atlantic and Cape May counties, common—Wenzel. Sea-shore, moderately abundant—Liebeck. Newark.

**HYLOTRUPES, Serv.**

*H. bajulus*, Linn.

Quite generally distributed throughout the State; not uncommon.

*H. ligneus*, Fabr.

Generally distributed, common, feeds on Cedar—Wenzel. Dacosta, not uncommon—Liebeck. Newark.

**PHYMATODES, Muls.**

*P. variabilis*, Fabr.

Common throughout the State.

*P. amoenus*, Say.

Westville, rare—Liebeck. In Grape, not common—Wenzel. I bred quite a number from grape stems this spring. Caldwell, common—Crane. Madison.

*P. varius*, Fabr.

Not uncommon throughout the State.

**CALLIDIUM, Fabr.**

*C. antennatum*, Newn.

Common throughout the State.

**CEME, Newn.**

*O. rigida*, Say.

Generally distributed, rare—Wenzel. Sea-shore, rare—Liebeck, Anglesea, in July—Schwarz. Newark.

**CHION, Newn.**

*C. cinctus*, Dru.

Not rare, generally distributed—Wenzel.

## CATALOGUE OF INSECTS.

201

**EBURIA, Serv.****E. 4-geminata, Say.**

Generally distributed, rare—Liebeck.

**ROMALEUM, White.****R. simplicicolle, Hald.**

Atlantic county, common—Wenzel. Sea-shore, rather common—Liebeck. Newark.

**R. atomarium, Dru.**

Generally distributed, not common—Wenzel. Dacosta, not uncommon—Liebeck.

**R. rufulum, Hald.**

Westville, rare—Liebeck. Camden and Gloucester counties, rare—Wenzel. Hudson county—Linell. Newark.

**ELAPHIDION, Serv.****E. mucronatum, Fabr.**

Common throughout the State. Rare at Caldwell—Crane.

**E. incertum, Newn.**

On the Newark list.

**E. villosum, Fabr.**

Not uncommon throughout the State. Larvæ in Oak.

**E. parallelum, Newn.**

Same as the preceding and equally common.

**E. aculeatum, Lec.**

Generally distributed, rare—Liebeck.

**E. unicolor, Rand.**

Camden and Gloucester counties, rare—Wenzel. Westville, common—Liebeck.

**TYLONOTUS, Hald.****T. bimaculatus, Hald.**

Camden and Gloucester counties, rare—Wenzel. Westville, rare—Liebeck.

## 202 GEOLOGICAL SURVEY OF NEW JERSEY.

**HETERACHTHES, Newn.*****H. quadrimaculatus, Newn.***

Generally distributed, rare—Liebeck. Gloucester and Camden counties, rare, in Hickory—Wenzel. Hudson county—Linell. Newark.

***H. ebenus, Newn.***

Atlantic county, rare—Wenzel. Westville, rare—Liebeck. Newark.

**PHYTON, Newn.*****P. pallidum, Say.***

On the Newark list.

**OBRIUM, Serv.*****O. rubrum, Newn.***

New Jersey, rare, not taken recently—Liebeck.

***O. rubidum, Lec.***

New Jersey, rare, not taken recently—Liebeck.

**MOLORCHUS, Fabr.*****M. bimaculatus, Say.***

Not rare throughout the State.

**RHOPALOPHORA, Serv.*****R. longipes, Say.***

Sea-shore, not uncommon—Liebeck.

**TRAGIDION, Serv.*****T. coquus, Lec.***

Generally distributed, more common in Atlantic and Cape May counties—Wenzel. Sea-shore, not uncommon—Liebeck. Brigantine Beach, in September, a few specimens washed up—Hamilton. Caldwell, rare—Crane.

**PURPURICENUS, Serv.*****P. humeralis, Say.***

Generally distributed, common—Wenzel. Sea-shore, common—Liebeck. Newark. New Jersey—Linell.

## CATALOGUE OF INSECTS.

203

**BATYLE, Thom.***B. suturalis*, Say.

Generally distributed and not uncommon throughout the State.

**STENOSPHenus, Hald.***S. notatus*, Oliv.

Generally distributed, common—Wenzel. Westville, rare—Liebeck.

**CYLLENE, Newn.***C. pictus*, Dru.

Generally distributed, rare—Wenzel, Liebeck. Caldwell, rare—Crane. Bores in Hickory, and emerges in spring.

*C. robiniae*, Först.

Found throughout the State commonly. Lives in Locust, and emerges in fall.

**PLAGIONOTUS, Muls.***P. speciosus*, Say.

“Snake Hill, on Oak trees in every instance. There are very few Maples left there, so it possibly really lives in Oak too”—Linell. Newark. Madison.

**CALLOIDES, Lec.***C. nobilis*, Say.

Generally distributed, locally common, abundant on the shore—Wenzel. Sea-shore, rather common—Liebeck. Newark.

**ARHOPALUS, Serv.***A. fulminans*, Fabr.

Found throughout the State, but rarely common.

**XYLOTRECHUS, Chevr.***X. colonus*, Fabr.

Common throughout the State.

*X. sagittatus*, Germ.

Generally distributed, rare—Wenzel.

*X. quadrimaculatus*, Hald.

Brigantine Beach, in September, one specimen—Hamilton.

## 204 GEOLOGICAL SURVEY OF NEW JERSEY.

**X. undulatus**, Say.

Newark. Not rare in the Orange Mountains.

**Var. lunulatus**, Kirby.

On the Newark list.

**NEOOLYTUS**, Thom.**N. scutellaris**, Oliv.

Generally distributed, rare—Wenzel.

**N. luscus**, Fabr.

Generally distributed, rare—Wenzel.

**N. caprea**, Say.

Generally distributed, rare—Wenzel. Newark.

**N. erythrocephalus**, Fabr.

Rather common throughout the State.

**CLYTANTHUS**, Thom.**C. ruricola**, Oliv.

New Jersey, not taken recently—Liebeck.

**CYRTOPHORUS**, Lec.**C. verrucosus**, Oliv.

Camden and Gloucester counties, rare—Wenzel. Caldwell,  
rare—Crane.

**EUDERCES**, Lec.**E. picipes**, Fabr.

Generally distributed, common—Wenzel, Liebeck. Newark.  
Orange Mountains, not rare—Smith.

**E. pini**, Oliv.

Landisville, not uncommon—Liebeck. Newark. Caldwell,  
rare—Crane.

**ATIMIA**, Hald.**A. confusa**, Say.

Gloucester and Camden counties, rare, in Cedar—Wenzel.  
Atco, rare—Liebeck.

**DISTENIA**, Serv.**D. undata**, Oliv.

Westville, rare—Liebeck. Hudson county—Linell. Newark.

## CATALOGUE OF INSECTS.

205

**DESMOCHRUS, Serv.***D. palliatus*, Först.

Found throughout the State, on Elder; not rare.

**ENCYCLOPS, Newn.***E. coeruleus*, Say.

Gloucester, not uncommon—Liebeck.

**RHAGIUM, Fabr.***R. lineatum*, Oliv.

Generally distributed, common—Wenzel, Liebeck. Newark.

**CENTRODERA, Lec.***C. decolorata*, Harr.

I found one specimen in this State, years ago; exact locality I do not now remember.

*C. picta*, Hald.

Recorded on the Newark list.

**TOXOTUS, Serv.***T. cylindricollis*, Say.

New Jersey—Collection Dr. Horn.

**ACMÆOPS, Lec.***A. bivittata*, Say.

Generally distributed, not uncommon—Liebeck. Newark.

*A. directa*, Newn.

Westville, rare—Liebeck.

*A. discoidea*, Hald.

Sea-shore, rare—Liebeck. New Jersey—Collection Dr. Horn.

Atlantic City—Castle.

**GAUROTES, Lec.***G. cyanipennis*, Say.

Generally distributed, not common—Wenzel, Liebeck. Hudson county—Linell. Newark. Caldwell, rare—Crane.

## 206 GEOLOGICAL SURVEY OF NEW JERSEY.

**STRANGALIA, Serv.****S. famelica**, Newn.

Found throughout the State, not rarely.

**S. acuminata**, Oliv.

Westville, rare—Liebeck. New Jersey—Linell. Newark.

**S. luteicornis**, Fabr.

Found throughout the State, not rarely.

**S. bicolor**, Swed.

Generally distributed, rare—Wenzel. Anglesea, rare—Liebeck. Newark.

**TYPOCHRUS, Lec.****T. zebratus**, Fabr.

Landisville, rare—Liebeck.

**T. velutinus**, Oliv.

Common throughout the State.

**T. lugubris**, Say.

New Jersey—Henshaw.

**LEPTURA, Serv.****L. emarginata**, Fabr.

Newark. Trenton; one specimen some years ago. Fort Lee.

**L. deleta**, Lec.

New Jersey, rare, not taken recently—Liebeck.

**L. plebeja**, Rand.

New Jersey—Collection Dr. Horn. Caldwell, rare—Crane.

**L. abdominalis**, Hald.

Sea-shore, rare—Liebeck. Atlantic City—Castle.

**L. lineola**, Say.

Rather common throughout the State.

**L. haemmatites**, Newn.

Westville, not rare—Liebeck. Newark.

**L. zebra**, Oliv.

Not rare throughout the State.

**L. cordifera**, Oliv.

Newark. New Jersey—Collection Dr. Horn.

## CATALOGUE OF INSECTS.

207

*L. rubrica*, Say.

Rather common throughout the State.

*L. circumdata*, Oliv.

Atco, rare—Liebeck. Newark.

*L. vagans*, Oliv.

Specimens are in the Newark collections.

*L. proxima*, Say.

Westville, rare—Liebeck.

*L. octonotata*, Say.

On the Newark list.

*L. vittata*, Germ.

Generally distributed, not rare—Liebeck. Newark. Rather common near Montclair—Smith. Caldwell, very rare—Crane.

*L. pubera*, Say.

On the Newark list.

**CYRTINUS, Lec.***C. pygmæus*, Hald.

Camden and Gloucester counties, rare—Wenzel. Atco, rare—Liebeck. Hudson county—Linell. Newark.

**PSENOCORUS, Lec.***P. supernotatus*, Say.

Occurs throughout the State, though not common.

**MONOHAMMUS, Serv.***M. titillator*, Fabr.

Rather common throughout the State.

*M. confusa*, Kirby.

Atlantic and Cape May counties, rare—Wenzel. Camden, rare—Liebeck. Newark.

**DORCASCHEMA, Lec.***D. alternatum*, Say.

Generally distributed, not rare—Liebeck.

*D. nigrum*, Say.

Westville, rare—Liebeck. Caldwell, rare—Crane. Madison.

## 208 GEOLOGICAL SURVEY OF NEW JERSEY.

**HETCHMIS, Hald.***H. cinera*, Oliv.

Generally distributed, not uncommon—Liebeck. Newark.

**CACOPLIA, Lec.***C. pullata*, Hald.

Gloucester and Atlantic counties, rare—Wenzel.

**GOES, Lec.***G. tigrina*, De G.

Newark, rare. Caldwell, one specimen—Crane.

*G. pulchra*, Hald.

Gloucester and Camden counties, rare—Wenzel. Westville, rare—Liebeck. Hudson county—Linell. Newark.

*G. debilis*, Lec.

Camden and Gloucester, rare—Wenzel. Dacosta, not uncommon—Liebeck.

*G. tessellata*, Hald.

Gloucester, rare—Wenzel. Newark.

*G. pulverulentus*, Hald.

Gloucester and Atlantic counties, rare—Wenzel. Camden, rare—Liebeck. Newark.

**ACANTHODERES, Serv.***A. quadrigibbus*, Say.

Northern Jersey, rare—Liebeck. Newark. Caldwell, rare—Crane.

*A. decipiens*, Hald.

Gloucester and Camden counties, rare—Wenzel. Sea-shore, not rare—Liebeck. Newark. Hudson county.

**LEPTOSTYLUS, Lec.***L. aculiferus*, Say.

Generally distributed, not rare—Wenzel. Sea-shore, rare—Liebeck.

*L. commixtus*, Hald.

Generally distributed, not rare—Wenzel.

## CATALOGUE OF INSECTS.

209

*L. biustus*, Lec.

Anglesea, in July—Schwarz.

*L. collaris*, Hald.

Hudson county—Linell.

*L. macula*, Say.

Generally distributed, rather common—Wenzel, Liebeck.

Madison. Caldwell, rare—Crane.

## LIOPUS, Serv.

*L. crassulus*, Lec.

Madison—Paulmier.

*L. variegatus*, Hald.

Generally distributed, not rare—Wenzel. Atco, rare—Liebeck.

*L. fascicularis*, Harris.

On the Newark list.

*L. alpha*, Say.

Occurs quite commonly throughout the State.

*L. cinereus*, Lec.

Generally distributed, rather common—Liebeck. Hudson county—Linell.

*L. punctatus*, Lec.

A single specimen in Mr. Bischoff's collection, Newark.

## DEOTES, Lec.

*D. spinosus*, Say.

Atco, rare—Liebeck. Newark. Madison.

## LEPTURGES, Bates.

*L. symmetricus*, Hald.

Hudson county—Linell.

*Var. angulatus*, Lec.

Generally distributed, not common—Wenzel, Liebeck.

*L. signatus*, Lec.

Hudson county—Linell. Newark. Caldwell, rare—Crane.

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## 210 GEOLOGICAL SURVEY OF NEW JERSEY.

*L. querci*, Fitch.

Not rare throughout the State.

*L. facetus*, Say.

Hudson county—Linell. Orange Mountains—Smith. Caldwell, rare—Crane.

**HYPERPLATYS, Bates.**

*H. aspersus*, Say.

Not rare throughout the State.

*H. maculatus*, Hald.

Occurs, not rarely, throughout the State.

**UROGRAPHIS, Horn.**

*U. fasciatus*, De G.

Atlantic and Cape May counties, common—Wenzel. Hudson county—Linell. Caldwell, common—Crane.

**GRAPHISURUS, Kirby.**

*G. pusillus*, Kirby.

Atlantic and Cape May counties, common—Wenzel. Newark.

**ACANTHOCHINUS, Steph.**

*A. obsoletus*, Oliv.

Generally distributed, rare—Wenzel.

*A. nodosus*, Fabr.

Egg Harbor, September, rare—Wenzel. Atco, rare—Liebeck.

**DECTES, Lec.**

*D. spinosus*, Say.

Caldwell, common—Crane.

**POGONOCHEIRUS, Latr.**

*P. mixtus*, Hald.

Generally distributed, not rare—Wenzel. Sea-shore, not uncommon—Liebeck. Newark.

## CATALOGUE OF INSECTS.

211

**EUCYRUS, Lec.***E. dasycerus*, Lec.

Generally distributed, common—Liebeck. Anglesea, in July  
—Schwarz. Newark.

**EUPOGONIUS, Lec.***E. tomentosus*, Hald.

Generally distributed, common—Wenzel, Liebeck. Cape May  
Court House, in July—Schwarz. Newark.

*E. vestitus*, Say.

Generally distributed, not uncommon—Liebeck.

**ONCIDERES, Serv.***O. cingulata*, Say.

Camden, rare, not taken recently—Liebeck. New Jersey—  
Collection Dr. Horn.

**HIPPOPSIS, Serv.***H. lemniscata*, Fabr.

Westville, rare—Liebeck.

**SAPERDA, Fabr.***S. obliqua*, Say.

Gloucester and Camden counties, rare, on Black Alder—  
Wenzel. Westville, rare—Liebeck. Newark. Orange Mountains, rare—Linell.

*S. calcarata*, Say.

Newark. Not rare near the Hudson—Smith.

*S. mutica*, Say.

Gloucester, on Willow, rare—Wenzel. Caldwell, rare—Crane.

*S. candida*, Fabr.

Atco, rare—Liebeck. Hudson county—Linell. Newark.  
Madison, larvæ in Apple trees. I have taken it in Warren  
county, on Pear, have received it from Newark on Quince, and  
have taken the imago abundantly on Thorn, back of Jersey City  
Heights—Smith. Caldwell, common—Crane.

## 212 GEOLOGICAL SURVEY OF NEW JERSEY.

**S. fayi**, Bland.

New Jersey—Linell.

**S. vestita**, Say.

Rather common, bores in Linden—Wenzel. Camden, rare—Wenzel. Hudson county, rather common—Linell. Newark. Caldwell, common—Crane.

**S. discoidea**, Fabr.

Generally distributed, not rare, larvæ in Hickory—Wenzel. Camden, not uncommon—Liebeck. Newark.

**S. tridentata**, Oliv.

Hudson county—Linell. Newark, Caldwell, common—Crane.

**S. lateralis**, Fabr.

On Hickory, common—Wenzel. Westville, not uncommon—Liebeck. Hudson county—Linell. Newark. Madison.

**S. puncticollis**, Say.

Camden and Gloucester counties, rare, on *Rhus radicans*—Wenzel. Camden, rare—Liebeck. Hudson county—Linell. Newark.

**S. contolor**, Lec.

Hudson county—Linell. Newark.

## OBERA, Muls.

**O. bimaculata**, Oliv.

Hudson county—Linell.

*Var.* **tripunctata**, Fabr.

Atco, Dacosta, not uncommon—Liebeck. Newark. Greenwood Lake, rare—Crane. Madison.

**O. schaumii**, Lec.

On the Newark list.

**O. ocellata**, Hald.

Atlantic county, rare—Wenzel. Hudson county—Linell. Newark.

**O. tripunctata**, Swed.

Rather common throughout the State.

**O. gracilis**, Fabr.

Dacosta, rare—Liebeck.

## CATALOGUE OF INSECTS.

213

**O. ruficollis, Fabr.**

Atlantic and Gloucester counties, rare—Wenzel. Dacosta,  
Landisville, rare—Liebeck. Madison.

**TETROPS, Steph.****T. canescens, Lec.**

Gloucester county, on Black Alder, rare—Wenzel.

**TETRAOPES, Serv.****T. discoideus, Lec.**

Gloucester, common—Liebeck.

**T. canteriator, Drap.**

Common throughout the State, but rather local.

**T. tetraophthalmus, Först.**

Common throughout the State, on *Asclepias* (Milk Weed).

**DYSPHAGA, Lec.****D. tenuipes, Hald.**

Gloucester, very rare—Wenzel.

**Family CHRYSOMELIDÆ.****DONACIA, Fabr.****D. palmata, Oliv.**

Camden and Gloucester counties, not rare—Wenzel.

**D. proxima, Kirby.**

Hudson county—Linell. Madison.

**D. distincta, Lec.**

Hudson county—Linell.

**D. subtilis, Kunze.**

Hudson county—Linell.

**D. æqualis, Say.**

Camden and Gloucester counties—Wenzel.

## 214 GEOLOGICAL SURVEY OF NEW JERSEY.

**D. torosa**, Lec.

Camden and Gloucester counties, not rare—Wenzel.

**D. emarginata**, Kirby.

Camden and Gloucester counties, not rare—Wenzel.

**D. cuprea**, Kirby.

New Jersey—Collection Dr. Horn.

**D. kirbyi**, Lec.

Atlantic City—Castle.

**ORSODACHNA**, Latr.**O. atra**, Ahr.

Newark. I have found it quite commonly very early in spring, on blossoms.

**ZEUGOPHORA**, Kunze.**Z. consanguinea**, Cr.

Newark. A specimen named by myself.

**Z. varians**, Cr.

Newark—Bischoff.

**SYNETA**, Esch.**S. ferruginea**, Germ.

Hudson county—Linell. Newark.

**LHMA**, Fabr.**L. brunnicollis**, Lac.

Hudson county—Linell.

**L. collaris**, Say.

On the Newark list.

**L. trilineata**, Oliv.

Occurs throughout the State, but scarcely common.

**CRIOCERIS**, Geoff.**C. asparagi**, Linn.

Common wherever *Asparagus* is raised; often very injurious.

## CATALOGUE OF INSECTS.

215

**ANOMEA, Lac.****A. laticlavia, Först.**

Occurs throughout the State; usually not common.

**COSCINOPTERA, Lac.****C. dominicana, Fabr.**Dacosta, not common—Liebeck, Wenzel. Hudson county—  
Linell. Newark.**BABIA, Chevr.****B. quadriguttata, Oliv.**

Atco, not rare—Liebeck. Orange Mountains, rare—Smith.

**SAXINIS, Lac.****S. omogera, Lec.**

Newark. Determined by myself.

**CHLAMYS, Knoch.****C. polycocca, Lac.**

Generally distributed, rare—Wenzel.

**C. plicata, Fabr.**

Hudson county—Linell.

**C. foveolata, Knoch.**

On the Newark list.

**EXEMA, Lac.****E. gibber, Oliv.**

Generally distributed, not common—Liebeck, Wenzel. Newark.

**BASSAREUS, Hald.****B. formosus, Melsh.**Generally distributed, not rare—Wenzel. Hudson county—  
Linell. Newark. Ocean county—Smith.**B. mammifer, Newn.**

Generally distributed, not rare—Wenzel.

**Var. luteipennis, Melsh.**

Hudson county—Linell.

## 216 GEOLOGICAL SURVEY OF NEW JERSEY.

**B. lituratus**, Fabr.

Not rare throughout the State.

*Var. recurvus*, Say.

Generally distributed—Wenzel.

*Var. lativittis*, Germ.

Newark. Determined by myself.

**CRYPTOCEPHALUS**, Geoff.**C. mucoreus**, Lec.

Orange Mountains, taken rarely—Smith.

**C. 4-maculatus**, Say.

Hudson county—Linell. Newark. Ocean county—Smith.

*Var. notatus*, Fabr.

Generally distributed—Wenzel.

**C. quadruplex**, Newn.

Hudson county—Linell. Ocean county—Smith.

**C. guttulatus**, Oliv.

Generally distributed—Wenzel. Newark.

**C. leucomelas**, Suffr.

Camden county, rare, on Poplar—Wenzel.

**C. venustus**, Fabr.

Common throughout the State.

*Var. ornatus*, Fabr.

Anglesea, in July—Schwarz. Caldwell, rare—Crane.

**C. nsertus**, Hald.

Generally distributed, not rare—Wenzel. Newark.

**C. calidus**, Suffr.

Hudson county—Linell.

**C. gibbicollis**, Hald.

Generally distributed—Wenzel.

**C. incertus**, Oliv.

Generally distributed—Wenzel.

**C. mutabilis**, Melsh.

Newark. Determined by myself.

## CATALOGUE OF INSECTS.

217

*C. badius*, Suffr.

Caldwell, common—Crane.

*C. schreibersii*, Suffr.

Hudson county—Linell. Ocean county—Smith.

*C. striatus*, Lec.

Hudson county—Linell. Newark—Bischoff.

## PACHYBRACHYS, Chevr.

*P. morosus*, Hald.

Generally distributed, not rare—Wenzel.

*P. abdominalis*, Say.

Generally distributed, not rare—Wenzel.

*P. othonus*, Say.

Hudson county—Linell. Newark. Orange Mountains, quite common—Smith.

*P. trinotatus*, Melsh.

Generally distributed, not rare—Wenzel. Hudson county—Linell.

*P. intricatus*, Suffr.

Not rare throughout the State. I have seen it from all quarters.

*P. tridens*, Melsh.

Hudson county—Linell. On Poison Ivy when in bloom, not rare—Wenzel.

*P. luridus*, Fabr.

Hudson county—Linell.

*P. atomarius*, Melsh.

Generally distributed, not rare—Wenzel. Newark—Bischoff.

*P. femoratus*, Oliv.

Recorded on the Newark list.

*P. subfasciatus*, Hald.

New Jersey—Collection Dr. Horn.

*P. dilatatus*, Suffr.

New Jersey—Collection Dr. Horn.

## 218 GEOLOGICAL SURVEY OF NEW JERSEY.

**MONACHUS, Chevr.****M. ater**, Hald.

New Jersey—Henshaw.

**DIACHUS, Lec.****D. auratus**, Fabr.Anglesea, in July—Schwarz. Orange Mountains, common—  
Smith.**TRIACHUS, Lec.****T. atomus**, Suffr.

Anglesea, in July—Schwarz.

**XANTHONIA, Baly.****X. 10-notata**, Say.

Common throughout the State.

**X. villosula**, Melsh.

New Jersey—Collection Dr. Horn.

**X. stevensii**, Baly.

Swampy meadows, not rarely—Smith.

**FIDIA, Baly.****F. murina**, Cr.

Generally distributed, not common—Wenzel. Newark.

**F. longipes**, Mels.

Common at Caldwell—Crane.

**ADOXUS, Kirby.****A. vitis**, Linn.Madison—Paulmier. I have received this also from Southern  
Jersey.**GLYPTOSCHELIS, Lec.****G. hirtus**, Lec.Generally distributed, rare—Wenzel. New Jersey—Collec-  
tion Dr. Horn.**G. barbatus**, Say.

Generally distributed, common—Wenzel.

## CATALOGUE OF INSECTS.

219

**CHRYSOCHUS, Chevr.***C. auratus*, Fabr.

Locally common throughout the State.

**TYMNES, Chap.***T. tricolor*, Fabr.

Not rare throughout the State.

**PARIA, Lec.***P. 6-notata*, Say.

Common throughout the State; its varieties more rare. Brigantine Beach, in September, small variety—Hamilton.

*P. aterrima*, Oliv.

Also common throughout the State.

**METACHROMA, Lec.***M. quercata*, Fabr.

Camden and Atlantic counties, rare—Wenzel. Orange Mountains, rare—Smith.

*M. pallida*, Say.

Anglesea, in July—Schwarz. New Jersey—Collection Dr. Horn. Ocean county, rare—Smith.

**GRAPHOPS, Lec.***G. pubescens*, Mels.

Hudson county—Linell. Newark. Caldwell, common—Crane.

*G. curtipennis*, Mels.

Ocean county, on cranberry bogs, in May—Smith.

*G. nebulosus*, Lec.

Generally distributed, common—Wenzel. Ocean county, in May, on cranberry bogs—Smith.

**CHYSODINA, Baly.***O. globosa*, Say.

Hudson county—Linell. Newark. Orange Mountains, quite common—Smith.

## 220 GEOLOGICAL SURVEY OF NEW JERSEY.

**COLASPIS, Fabr.****C. brunnea**, Fabr.

Not rare in Ocean county.

**Var. *flavida***, Say.

Generally distributed, common—Wenzel. Newark.

**Var. *costipennis***, Dej.

Rare near Jamesburg.

**C. *prætexta***, Say.Atlantic and Cape May counties, not common—Wenzel.  
Newark—Bischoff.**C. *tristis***, Oliv.

On the Newark list.

**Var. *puncticollis***, Say.

Generally distributed, common—Wenzel.

**PRASOCURIS, Lat.****P. *varipes***, Lec.

Not uncommon throughout the State.

**DORYPHORA, Ill.****D. *clivicollis***, Kirby.More or less common throughout the State, on *Asclepias*.**D. *10-lineata***, Say.

The well-known potato beetle; common everywhere.

**CHRYSONELA, Linn.****C. *suturalis***, Fabr.

Quite common throughout the State.

**C. *similis***, Rog.

Generally distributed, common—Wenzel.

**C. *elegans***, Oliv.

Quite common throughout the State.

**C. *lunata***, Fabr.

Newark; rare. Caldwell, rare—Crane.

## CATALOGUE OF INSECTS.

221

*C. scalaris*, Lec.

I have taken this in New Jersey, but do not recollect where.  
Caldwell, rare—Crane.

*C. philadelphica*, Linn.

Generally distributed, common—Wenzel. Newark. Quite abundant in Ocean county. Caldwell, rare—Crane.

*C. multipunctata*, Say.

Newark. Orange Mountains, not rare—Smith. Caldwell, common—Crane.

**PLAGIODERA**, Redt.*P. viridis*, Melsh.

Orange Mountains, rare—Smith.

**GASTROIDEA**, Hope.*G. polygoni*, Linn.

Common throughout the State.

*G. cyanea*, Melsh.

Quite common throughout the State.

**LINA**, Megerle.*L. lapponica*, Linn.

Generally distributed, common—Wenzel. Newark.

*L. scripta*, Fabr.

Generally distributed, common—Wenzel. Newark. I have bred this on Willow—Smith. Caldwell, common—Crane.

**PHYLLODECTA**, Kirby.*P. vulgarissima*, Linn.

Orange Mountains, not common—Smith. Madison.

**CEROTOMA**, Chevr.*C. caminea*, Fabr.

Quite abundant throughout the State.

**LUPERUS**, Geoff.*L. meraca*, Say.

New Jersey—Henshaw.

## 222 GEOLOGICAL SURVEY OF NEW JERSEY.

**PHYLLOBROTICA, Redt.***P. discoidea*, Fabr.Gloucester, rare—Liebeck. Hudson county—Linell. Newark  
—Bischoff.**DIABROTICA, Chevr.***D. 12-punctata*, Oliv.*D. vittata*, Fabr.

Both species are extremely common throughout the State.

*D. atripennis*, Say.

Hudson county—Linell. Caldwell, rare—Crane.

**TRIRHABDA, Lec.***T. tomentosa*, Linn.

Newark. Orange Mountains, not rare—Smith. Madison.

*Var. virgata*, Lec.*Var. canadensis*, Kirby.

With the type form, and sometimes replacing it.

**ADIMONIA, Leach.***A. americana*, Fabr.

Atlantic and Cape May counties, rare—Wenzel.

*Var. cibrata*, Lec.

Newark. Quite generally distributed, not rare—Smith.

*A. rufosanguinea*, Say.

Generally distributed, common—Wenzel. Newark.

*A. conferta*, Lec.

New Jersey—Henshaw.

*A. cavicollis*, Lec.

New Jersey—Henshaw.

**GALERUCA, Geoff.***G. sagittariae*, Gyll.Generally distributed, common—Wenzel. Caldwell, common  
—Crane. Madison.*G. decora*, Say.

Anglesea, in July—Schwarz.

## CATALOGUE OF INSECTS.

223

*G. notata*, Fabr.

Generally distributed, common—Wenzel. Newark. Caldwell, common—Crane.

*G. xanthomelasena*, Schr.

The elm-leaf beetle; quite generally distributed throughout the State.

*G. integra*, Lec.

Caldwell, rare—Crane.

*G. maritima*, Lec.

Common everywhere along shore.

**BLEPHARIDA, Rog.***B. rhois*, Först.

Generally distributed throughout the State, on Sumac, but not common.

**HYPOLAMPSIS, Clark.***H. pilosa*, Ill.

Atlantic county, not rare—Wenzel. Sea-shore, not uncommon—Liebeck.

**PHÆDROMUS, Clark.***P. paradoxus*, Mels.

Atlantic City—Castle.

**CEDIONYCHIS, Latr.***CE. gibbitarsa*, Say.

Generally distributed, not rare—Wenzel, Liebeck. Newark. Brigantine Beach, in September, abundant—Hamilton. New Brunswick.

*CE. thoracica*, Fabr.

Generally distributed, not rare—Wenzel. Westville, rather common—Liebeck. Caldwell, rare—Crane. Newark.

*CE. vians*, Illig.

Generally distributed, not rare—Wenzel. Rare—Liebeck. Caldwell, rare—Crane. Madison.

*CE. petaurista*, Fabr.

Sea-shore, rare—Liebeck.

## 224 GEOLOGICAL SURVEY OF NEW JERSEY.

*CE. miniata*, Fabr.

Generally distributed—Wenzel. Anglesea, not uncommon—Liebeck.

*CE. sexmaculata*, Illig.

Generally distributed, not common—Wenzel, Liebeck. Newark. Orange Mountains, not rare—Smith.

*CE. limbalis*, Mels.

Ocean county, on cranberry bogs, in May, common—Smith.

*Var. subvittata*, Horn.

At same time and place, and equally common with the typical form—Smith.

*CE. suturalis*, Fabr.

Atlantic county, not common—Wenzel. Newark.

*CE. queradata*, Fabr.

Generally distributed, moderately abundant—Liebeck, Wenzel. Caldwell, rare—Crane.

*CE. scalaris*, Mels.

Egg Harbor, rare—Liebeck.

## DISONYCHA, Chevr.

*D. pennsylvanica*, Ill.

Generally distributed throughout the State; not rare.

*Var. pallipes*, Cr.

On the Newark list. New Jersey—Collection Dr. Horn.

*D. crenicollis*, Say.

Hudson county—Linell.

*D. caroliniana*, Fabr.

Hudson county—Linell. Newark. Westville, rare—Liebeck. Caldwell, rare—Crane.

*D. glabrata*, Fabr.

Hudson county—Linell. Newark.

*D. triangularis*, Say.

Generally distributed, rather common—Liebeck. Hudson county—Linell. Madison.

## CATALOGUE OF INSECTS.

225

*D. xanthomelæna*, Dalm.

Generally distributed, rather common—Wenzel, Liebeck.  
Hudson county—Linell. Newark.

*D. mellicollis*, Say.

Generally distributed, not rare—Wenzel. Hudson county—  
Linell.

*D. collata*, Fabr.

Generally distributed, not rare—Liebeck. Hudson county—  
Linell.

**HALTICA, Geoffr.***H. bimarginata*, Say.

Newark. Determined by myself. New Jersey—Collection  
Dr. Horn.

*H. chalybea*, Ill.

Common all over the State. The grape-vine flea beetle.

*H. carinata*, Germ.

Dacosta, rare—Liebeck.

*H. ignita*, Ill.

Not uncommon throughout the State.

*H. marevagans*, Horn.

Gloucester, Atlantic and Cape May counties, not uncommon—  
Wenzel. Sea-shore, not uncommon—Liebeck. Anglesea, in  
July—Smith. Newark. New Jersey—Linell.

*H. fuscoænea*, Melsh.

Anglesea, in July—Schwarz. Atco, rare—Liebeck.

*H. rufa*, Illig.

Newark; not rare. Determined by myself.

**ORTHALTICA, Cr.***O. copalina*, Fabr.

Rather common throughout the State.

**CREPIDODERA, Chevr.***C. rufipes*, Linn.

Generally distributed, rare—Liebeck. Hudson county—  
Linell.

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## 226 GEOLOGICAL SURVEY OF NEW JERSEY.

*C. helexinus*, Linn.

Common throughout the State.

*C. atriventris*, Mels.

Atco, rare—Liebeck. Hudson county—Linell. Newark—Loeffler. Ocean county, not rare, in May—Smith.

**EPITRIX**, Foudr.*E. fuscula*, Cr.

Generally distributed, rare—Liebeck.

*E. cucumeris*, Harr.

Common throughout the State. The cucumber flea beetle.

**MANTURA**, Steph.*M. floridana*, Cr.

Anglesea, in July—Schwarz.

**CHÄTOCNEMA**, Steph.*C. subcylindrica*, Lec.

Westville, rare—Liebeck.

*C. denticulata*, Illig.

Hudson county—Linell. Generally distributed, not uncommon—Liebeck. Ocean county, not rare—Smith.

*C. pulicaria*, Mels.

Hudson county—Linell. Anglesea—Wenzel.

*C. minuta*, Mels.

Newark—Bischoff.

*C. pinguis*, Lec.

Newark—Bischoff.

**SYSTENA**, Clark.*S. hudsonias*, Först.

Rather common throughout the State.

*S. rontalis*, Fabr.

Generally distributed, not rare—Wenzel. Westville, rare—Liebeck. Hudson county—Linell. Orange Mountains, in July, not rare—Smith.

## CATALOGUE OF INSECTS.

227

**S. tenuata**, Say.

Not uncommon throughout the State.

**S. marginalis**, Illiger.

Generally distributed throughout the State; not common.

## GLYPTINA, Lec.

**G. spuria**, Lec.

Generally distributed, rare—Liebeck. Hudson county—Linell.

## PHYLLOTRETA, Fouadr.

**P. sinuata**, Steph.

Generally distributed, common—Wenzel. Hudson county—Linell.

**P. vittata**, Fabr.

Quite common throughout the State.

**P. bipustulata**, Fabr.

Generally distributed, not common—Wenzel, Liebeck. Hudson county—Linell.

**P. chalybeipennis**, Cr.

Cape May, in July—Schwarz.

**P. picta**, Say.

Generally distributed throughout the State; not common.

## LONGITARSUS, Latr.

**L. insolens**, Horn.

New Jersey—Collection Dr. Horn.

**L. melanurus**, Mels.

Newark—Loeffler.

## DIBOLIA, Latr.

**D. borealis**, Chevr.

Atco, rare—Liebeck. Hudson county—Linell.

## PSYLLIODES, Latr.

**P. punctulata**, Mels.

Generally distributed, rare—Liebeck. Anglesea, in July—Schwarz. Hudson county—Linell.

## 228 GEOLOGICAL SURVEY OF NEW JERSEY.

**P. convexior**, Lec.

Generally distributed, rare—Liebeck. Hudson county—Linell.

**MICRORHOPALA**, Baly.**M. vittata**, Fabr.

Not rare along the coast—Wenzel. Anglesea, in July—Schwarz. Hudson county—Linell. Newark.

**M. xerene**, Newn.

Generally distributed, not common—Wenzel. Westville, rare—Liebeck.

**M. porcata**, Melsh.

Hudson county—Linell.

**ODONTOTA**, Chevr.**O. scapularis**, Oliv.

Generally distributed, common—Wenzel. Hudson county—Linell. Newark.

**O. bicolor**, Oliv.

Newark; apparently not rare. Determined by myself.

**O. dorsalis**, Thunb.

Generally distributed wherever the Locust (*Robinia pseudoacacia*) is found.

**O. rubra**, Web.

Quite common throughout the State. Ocean county, in May, common on Locust—Smith.

**O. nervosa**, Panz.

Common throughout the State. Found in Ocean county with the preceding.

**CHARISTENA**, Baly.**C. nigrita**, Oliv.

Newark; rare. Determined by myself.

**STENISPA**, Baly.**S. metallica**, Fabr.

New Jersey, rare—Liebeck. Collection Dr. Horn. Newark. Ocean county, rare—Smith.

## CATALOGUE OF INSECTS.

229

## CASSIDA, Linn.

**C. nigripes**, Oliv.

Generally distributed, common—Wenzel.

**C. bivittata**, Say.

Generally distributed, common—Wenzel.

## COPTOCYCOLA, Chevr.

**C. aurichalcea**, Fabr.

Generally distributed throughout the State; locally quite common.

**C. guttata**, Oliv.

Madison. Newark.

**C. clavata**, Fabr.More rare than *aurichalcea*, but as generally distributed and sometimes locally abundant. Caldwell, common—Crane.

## CHELYMORPHA, Chevr.

**C. argus**, Licht.

Common throughout the State.

**C. phytophagica**, Cr.

On the Newark list.

## Family BRUCHIDÆ.

## BRUCHUS, Linn.

**B. pisi**, Linn.

Common; generally distributed. The well-known "pea weevil."

**B. bivulneratus**, Horn.

Hudson county—Linell.

**B. nigrinus**, Horn.

New Jersey—Collection Dr. Horn.

**B. alboscutellatus**, Horn.

Hudson county—Linell.

## 230 GEOLOGICAL SURVEY OF NEW JERSEY.

**B. calvus**, Horn.

Anglesea, in July—Schwarz.

**B. obsoletus**, Say.

Common throughout the State; infesting beans.

**B. musculus**, Say.

Brigantine Beach, in September, mainland, on Solidago—Hamilton. Madison.

The list in this family is very incomplete. We have at least as many more specimens as are above recorded.

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**Family TENEBRIONIDÆ.****EPITRAGUS**, Lec.

**E. arundinis**, Lec.

Common along the coast, from Sandy Hook to Cape May. July (Sandy Hook) to September (Brigantine Beach)—Hamilton.

**PHELOPSIS**, Lec.

**P. obcordata**, Kirby.

On dry fungoid growths on trees. Hudson county—Linell. Fort Lee—Smith.

**NYCTOBATES**, Guér.

**N. pennsylvanica**, De G.

Common all over the State, under bark.

**Vari. barbata**, Knoch.

With the type—Wenzel.

**MERINUS**, Lec.

**M. laevis**, Oliv.

Generally distributed, rare—Wenzel. Hudson county—Linell.

**UPIS**, Fabr.

**U. ceramboides**, Linn.

On the Newark list.

## CATALOGUE OF INSECTS.

231

**HAPLANDRUS, Lec.****H. femoratus, Fabr.**

Generally distributed throughout the State; not uncommon.

**H. ater, Lec.**

Generally distributed, rare—Wenzel. I have taken it at New Brunswick.

**CENTRONOPUS, Sol.****C. parallelus, Lec.**

Generally distributed, common—Wenzel.

**SCOTOBATES, Horn.****S. calcaratus, Fabr.**

Generally distributed, common—Wenzel. Newark. Caldwell, very rare—Crane. Madison.

**XYLOPINUS, Lec.****X. saperdioides, Oliv.**

Generally distributed, not common—Wenzel, Liebeck. Newark. Caldwell, common—Crane.

**X. rufipes, Say.**

Generally distributed, not common—Wenzel, Liebeck. Caldwell, rare—Crane.

**X. ænescens, Lec.**

New Jersey—Collection Dr. Horn. Caldwell, common—Crane.

**TENEBRIO, Linn.****T. obscurus, Fabr.**

Common throughout the State.

**T. molitor, Linn.**

Equally common with the preceding.

**T. castaneus, Knoch.**

Dacosta, rare—Liebeck.

**T. tenebrioides, Beauv.**

Generally distributed, common—Wenzel, Liebeck. Caldwell, common—Crane.

## 232 GEOLOGICAL SURVEY OF NEW JERSEY.

**OPATRINUS, Latr.****O. notus, Say.**

Quite common throughout the State.

**O. aciculatus, Lec.**

Rare. I have taken a few specimens near Jersey City.

**BLAPSTINUS, Lat.****B. mceustus, Melsh.**

Brigantine Beach, in September—Hamilton.

**B. pulverulentus, Mann.**

Gloucester county, not common—Wenzel.

**B. interruptus, Say.**

Anglesea, in July—Schwarz. Brigantine Beach, in September—Hamilton.

**B. metallicus, Fabr.**

Gloucester county and sea-shore, not common—Wenzel. Hudson county—Linell. Brigantine Beach, in September—Hamilton. Madison.

**EPHALUS, Lec.****E. latimanus, Lec.**

Ocean Beach—Paulmier. A single specimen only, now in the College collection. A very rare species, which I have taken sparingly on Long Island.

**TRIBOLIUM, MacL.****T. ferrugineum, Fabr.**

Newark. Determined by myself. I have taken this commonly.

**GNATHOCERUS, Thunb.****G. cornutus, Fabr.**

On the Newark list. New Jersey—Collection Dr. Horn. Atlantic City—Castle.

**ALPHITOBIUS, Steph.****A. diaperinus, Panz.**

On the Newark list.

## CATALOGUE OF INSECTS.

233

**ULOMA, Lap.*****U. impressa*, Melsh.**

Generally distributed, common—Wenzel. Brigantine Beach, in September, mainland—Hamilton. Newark.

***U. imberbis*, Lec.**

Generally distributed, common—Wenzel. Brigantine Beach, in September, mainland—Hamilton.

***U. punctulata*, Lec.**

Generally distributed, less common than the preceding—Wenzel.

**EUTOCHIA, Lec.*****E. picea*, Melsh.**

Generally distributed, rare—Wenzel, Liebeck. Atlantic City—Castle.

**ANÆDUS, Blanch.*****A. brunneus*, Zieg.**

Generally distributed, rare—Wenzel. I have taken this not infrequently under leaves, almost anywhere in the State.

**PARATENETUS, Spin.*****P. fuscus*, Lec.**

Anglesea, in July—Schwarz.

**PHALERIA, Latr.*****P. testacea*, Say.**

Common all along the sea-coast, from Sandy Hook to Cape May.

**DIAPERIS, Geoff.*****D. hydni*, Fabr.**

Generally distributed throughout the State, and locally common.

**HOPLOCEPHALA, Lap.*****H. viridipennis*, Fabr.**

Generally distributed, common—Wenzel. Hudson county—Linell.

## 234 GEOLOGICAL SURVEY OF NEW JERSEY.

**H. bicornis**, Oliv.

On the Newark list. Caldwell, common—Crane.

**PLATYDEMA**, Lap.**P. excavatum**, Say.

Generally distributed, common—Wenzel. Anglesea, in July  
—Schwarz. Newark. Caldwell, common—Crane.

**P. ruficorne**, Sturm.

Generally distributed, common—Wenzel. Newark: Brigantine Beach, in September—Hamilton.

**P. ellipticum**, Fabr.

Locally common, generally distributed—Wenzel.

**P. americanum**, Lap.

Common, generally distributed—Wenzel.

**PHYLETUS**, Meg.**P. bifasciatus**, Say.

Hudson county—Linell. Newark.

**HYPOPHLCUS**, Fabr.**H. cavus**, Lec.

Generally distributed, rare—Wenzel.

**H. parallelus**, Melsh.

Newark. Brigantine Beach, in September, mainland—Hamilton. Generally distributed, common—Wenzel. Westville—Castle.

**H. thoracicus**, Melsh.

Generally distributed, rare—Wenzel.

**BOLETOTHERUS**, Cand.**B. bifurcus**, Fabr.

Common all over the State.

**BOLETOPHAGUS**, Ill.**B. corticola**, Say.

Hudson county—Linell.

## CATALOGUE OF INSECTS.

235

**B. depressus**, Rand.

Hudson county—Linell. Generally distributed, common—  
Wenzel.

**HELOPS**, Fabr.**H. micans**, Fabr.

Locally common throughout the State.

**H. americanus**, Beauv.

Generally distributed, rare—Wenzel.

**H. venustus**, Say.

Generally distributed, rare—Wenzel. Atlantic City—Castle.

**H. gracilis**, Bland.

Atlantic and Cape May counties, rare—Wenzel. Atlantic  
City and Central New Jersey—Castle.

**H. sereus**, Germ.

Common throughout the State; more rare than *micans*.

**MERACANTHA**, Kirby.**M. contracta**, Beauv.

Generally distributed, rare—Wenzel, Liebeck.

**STRONGYLIUM**, Kirby.**S. tenuicolle**, Say.

Hudson county—Linell. Madison.

**Family CISTELIDÆ.****ALLEOULA**, Fabr.**A. punctulata**, Melsh.

Generally distributed, rare—Wenzel. Anglesea, in July—  
Schwarz.

**HYMENORUS**, Muls.**H. obscurus**, Say.

Generally distributed, common—Wenzel.

**H. rufipes**, Lec.

Caldwell, rare—Crane.

## 236 GEOLOGICAL SURVEY OF NEW JERSEY.

**CISTELA, Fabr.***C. brevis*, Say.

Generally distributed, rare—Wenzel.

*C. sericea*, Say.

Newark; common.

**ISOMIRA, Muls.***I. quadristriata*, Coup.

Generally distributed, common—Wenzel.

**MYCETOCHARES, Lec.***M. fraterna*, Say.

New Jersey—Collection Dr. Horn.

**ANDROCHIRUS, Lec.***A. erythropus*, Kirby.

Generally distributed, not common—Wenzel.

**CAPNOCHROA, Lec.***C. fuliginosa*, Melsh.

On the Newark list. Caldwell, rare—Crane.

**Family LAGRIIDÆ.****ARTHROMACRA, Kirby.***A. ænea*, Say.

Atlantic and Cape May counties, rare—Wenzel. Newark.

**STATIRA, Latr.***S. resplendens*, Melsh.

Generally distributed, not common—Wenzel.

*S. gagatina*, Melsh.

Generally distributed, common—Wenzel. Newark; rare.

## CATALOGUE OF INSECTS.

237

## Family MELANDRYIDÆ.

## TETRATOMA, Fabr.

*T. truncorum*, Lec.

Westville, rare—Liebeck.

## PENTHE, Newn.

*P. obliquata*, Fabr.Generally distributed, common—Liebeck, Wenzel. Newark.  
Madison. Caldwell, rare—Crane.*P. pimelia*, Fabr.I have taken this not rarely, with the preceding, along the  
Palisades.

## SYNCHROA, Newn.

*S. punctata*, Newn.

Generally distributed, common—Wenzel.

## MELANDRYA, Fabr.

*M. striata*, Say.

On the Newark list.

## EMMESA, Newn.

*E. labiata*, Say.

I have taken this rarely near Fort Lee.

## ENCHODES, Lec.

*E. sericea*, Hald.

Recorded on the Newark list.

## HYPULUS, Payk.

*H. simulator*, Newn.

Newark. Determined by myself.

## DIROÆA, Fabr.

*D. liturata*, Lec.Newark. Determined by myself. Anglesea, in July—  
Schwarz. Caldwell, rare—Crane.

## 238 GEOLOGICAL SURVEY OF NEW JERSEY.

**SYMPHORA, Lec.****S. rugosa**, Hald.

Anglesea, in July—Schwarz. Newark—Loeffler.

**ANISOXYA, Muls.****A. glaucula**, Lec.

Anglesea, in July—Schwarz. Newark—Loeffler.

**EUSTROPHUS, Ill.****E. confinis**, Lec.

Generally distributed, rare—Wenzel.

**E. bicolor**, Say.

Taken by me near Hoboken.

**E. bifasciatus**, Say.

Generally distributed, rare—Wenzel.

**E. tomentosus**, Say.

I have taken this near Hoboken.

**HALLOMENUS, Panz.****H. scapularis**, Mels.

Newark—Loeffler.

**ORCHESIA, Latr.****O. castanea**, Melsh.

Anglesea, in July—Schwarz. Newark.

**SORAPTIA, Latr.****S. sericea**, Melsh.

Newark—Loeffler.

**CANIFA, Lec.****C. pallipes**, Mels.

Newark—Loeffler.

**MYCTERUS, Clairv.****M. scaber**, Hald.

Not rare in the vicinity of Jersey City and Hoboken.

There will be considerable additions in this family when the State is more thoroughly collected over.

## CATALOGUE OF INSECTS.

239

## Family PYTHIDÆ.

## PYTHO, Latr.

*P. americanus*, Kirby.

I have taken this rarely along the Palisades.

## Family ODEMERIDÆ.

## MICROTONUS, Lec.

*M. sericans*, Lec.

Anglesea, in July—Schwarz. Newark—Loeffler.

## NACERDES, Schm.

*N. melanura*, Linn.

Common near Newark and Jersey City. Madison.

## XANTHOCHROA, Schm.

*X. lateralis*, Melsh.

Recorded on the Newark list.

## OXAOIS, Lec.

*O. notoxoides*, Fabr.

Newark. Determined by myself.

*O. dorsalis*, Melsh.

Common along the shore, from Sandy Hook to Cape May.

## ASCLERA, Schm.

*A. ruficollis*, Say.

Newark. Determined by myself.

## Family CEPHALOIDÆ.

## CEPHALOON, Newn.

*C. lepturoides*, Newn.

Newark. Determined by myself.

## 240 GEOLOGICAL SURVEY OF NEW JERSEY.

**Family MORDELLIDÆ.****PENTARIA, Muls.***P. trifasciata*, Melsh.

Generally distributed, not common—Wenzel.

**ANASPIS, Geoffr.***A. rufa*, Say.

Common in the Orange Mountains.

**TOMOXIA, Costa.***T. bidentata*, Say.

Newark. On dead trees; not common. Caldwell, rare—Crane.

**MORDELLA, Linn.***M. melæna*, Germ.

Orange Mountains, not rare—Smith. Caldwell, common—Crane.

*M. scutellaris*, Fabr.Camden and Gloucester counties, not common—Wenzel.  
Orange Mountains, common—Smith. Caldwell, common—Crane.*M. octopunctata*, Fabr.

Camden and Gloucester counties, rare—Wenzel.

*M. marginata*, Melsh.

Generally distributed, not common—Wenzel. Orange Mountains, common—Smith.

*M. triloba*, Say.

Newark. Determined by myself.

*M. discoidea*, Melsh.

Rare in the Orange Mountains. Caldwell, rare—Crane.

**MORDELLISTENA, Costa.***M. trifasciata*, Say.

Newark. Determined by myself.

*M. lepidula*, Lec.

Orange Mountains, rare—Smith.

## CATALOGUE OF INSECTS.

241

- M. limbalis**, Melsh.  
Orange Mountains, rare—Smith.
- M. vapida**, Lec.  
Orange Mountains, rare—Smith.
- M. fulvicollis**, Melsh.  
Orange Mountains, only a single specimen—Smith.
- M. scapularis**, Say.  
Orange Mountains, rare—Smith.
- M. comata**, Lec.  
Generally distributed, not common—Wenzel. Orange Mountains, common—Smith.
- M. aspersa**, Melsh.  
Orange Mountains, the most common species—Smith.
- M. ancilla**, Lec.  
Generally distributed, not common—Wenzel.
- M. varians**, Lec.  
Orange Mountains, common—Smith. Brigantine Beach, in September—Hamilton.
- M. nigricans**, Melsh.  
Generally distributed, not common—Wenzel. Orange Mountains, not uncommon—Smith.
- M. ruficeps**, Lec.  
New Jersey, exact locality unknown—Smith.
- M. splendens**, Smith.  
Mr. Wenzel has taken a specimen in New Jersey.
- M. pustulata**, Mels.  
Orange Mountains, not rare—Smith.
- M. fuscipennis**, Mels.  
New Jersey, near Hoboken—Smith.
- M. ambusta**, Lec.  
New Jersey, rare—Smith.
- M. unicolor**, Lec.  
Generally distributed, rare—Wenzel. Orange Mountains—Smith.

## 242 GEOLOGICAL SURVEY OF NEW JERSEY.

**M. marginalis, Say.**

Orange Mountains, not rare—Smith.

**M. pubescens, Fabr.**

Orange Mountains, rather common—Smith.

**M. bihamata, Melsh.**

Newark. Determined by myself.

**M. liturata, Melsh.**

Anglesea, in July—Schwarz.

**M. fuscata, Melsh.**

Orange Mountains, rare—Smith.

Most of my collections in this family were made in the hills back of Montclair, and on the first ridge, and almost always in July.

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**Family ANTHICIDÆ.****CORPHYRA, Say.****C. funebris, Horn.**

Along the coast, not rare—Wenzel.

**C. collaris, Say.**

Along the coast, not rare—Wenzel. Caldwell, rare—Crane.

**C. elegans, Hentz.**

Caldwell, rare—Crane.

**MACRATRIX, Newn.****M. murina, Newn.**

I have taken this commonly in Ocean county. Newark—Loeffler.

**NOTOXUS, Geoffr.****N. bicolor, Say.**

Generally distributed, rather common—Wenzel, Liebeck.

**N. bifasciatus, Lec.**

Atco, rather common—Wenzel, Liebeck. Clifton, locally common—Smith. Newark.

## CATALOGUE OF INSECTS.

243

*N. planicornis*, Laf.

Anglesea, in July—Schwarz.

*N. monodon*, Fabr.

Common throughout the State.

*Var. delicatus*, Casey.

Brigantine Beach, in September—Hamilton.

*N. anchora*, Hentz.

Ocean county, not common—Smith.

**MECYNOTARSUS, Laf.***M. candidus*, Lec.

Westville, not rare—Liebeck.

**ANTHICUS, Payk.***A. formicarius*, Laf.

Sea-shore, common—Wenzel. Anglesea, in July—Schwarz.

Brigantine Beach, in September, abundant—Hamilton.

*A. cinotus*, Say.

Anglesea, in July—Schwarz.

*A. rejectus*, Lec.

Brigantine Beach, in September, frequent—Hamilton.

*A. floralis*, Linn.

Sea-shore, common—Wenzel. Newark—Loeffler.

*A. cibratus*, Lec.

Recorded on the Newark list.

*A. difficilis*, Lec.

Anglesea, in July—Schwarz.

*A. confusus*, Lec.

Anglesea—Wenzel.

*A. cervinus*, Laf.

Sea-shore, not rare—Wenzel. New Jersey—Collection Dr. Horn.

*A. spretus*, Lec.

Anglesea, in July—Schwarz.

## 244 GEOLOGICAL SURVEY OF NEW JERSEY.

**A. fulvipes**, Laf.

Newark—Loeffler.

**A. pallens**, Lec.Sea-shore, not rare—Wenzel. Anglesea, in July—Schwarz.  
Brigantine Beach, in September, rare—Hamilton.**Family PYROCHROIDÆ.****PYROCHROA**, Geoff.**P. filabellata**, Fabr.New Jersey—Collection Dr. Horn. Caldwell, common—  
Crane.**P. femoralis**, Lec.

Generally distributed, rare—Wenzel.

**DENDROIDES**, Latr.**D. canadensis**, Latr.

Recorded on the Newark list. Caldwell, rare—Crane.

**Family MELOIDÆ.****MELOE**, Linn.**M. angusticollis**, Say.

On the Newark list. Caldwell, rare—Crane. Madison.

**M. americanus**, Leach.

Recorded on the Newark list.

**MACROBASIS**, Lec.**M. unicolor**, Kirby.

Generally distributed; sometimes common. Madison. Caldwell.

## CATALOGUE OF INSECTS.

245

**EPICAUTA, Redt.****E. trichrus**, Pall.

Westville, rare—Liebeck.

**E. vittata**, Fabr.

On the Newark list. Madison. Caldwell, common—Crane.

**E. cinerea**, Först.

Not uncommon throughout the State.

**E. pennsylvanica**, De G.Common in fall, on *Solidago*, almost everywhere. Brigantine Beach, in September—Hamilton.**POMPHOPÆA, Lec.****P. senea**, Say.

Westville, rare—Liebeck.

**Family RHIPIPHORIDÆ.****RHIPIPHORUS, Fabr.****R. flavipennis**, Lec.

Generally distributed, rare—Wenzel.

**R. dimidiatus**, Fabr.

Hudson county—Linell.

**R. pectinatus**, Fabr.

Generally distributed, rare—Wenzel. Newark. Caldwell, rare—Crane.

**R. limbatus**, Fabr.

Generally distributed, rare—Wenzel. Newark.

**Family STYLOPIDÆ.****XENOS, Rossi.****X. peckii**, Kirby.I have frequently caught the infested *Polistes*, but have not taken or bred the imago.

## 246 GEOLOGICAL SURVEY OF NEW JERSEY.

**Family RHINOMACERIDÆ.****RHINOMACER,** Fabr.**R. pilosus,** Lec.

Gloucester, rare—Wenzel.

**R. elongatus,** Lec.

Gloucester, rare—Wenzel. Westville, rather common—Liebeck. Morristown, on dry pine branches—Julich.

**Family RHYNCHITIDÆ.****AULETES,** Sch.**A. ater,** Lec.

Landisville, Dacosta, rare—Liebeck. Fort Lee, on Sweet Fern—Julich. Anglesea—Wenzel.

**EUGNAMPTUS,** Sch.**E. angustatus,** Hbst.

Generally distributed, rather common—Liebeck. On Hickory—Wenzel. Newark. Madison.

**E. collaris,** Fabr.

On the Newark list. New Jersey—Julich.

**RHYNCHITES,** Hbst.**R. bicolor,** Fabr.

Common throughout the State, on Rose.

**R. hirtus,** Fabr.

Atlantic and Cape May counties, rare—Wenzel. Dacosta, rare—Liebeck. Newark. Bergen—Julich.

**R. fossifrons,** Lec.

Atco, very rare—Wenzel.

**R. aeratus,** Say.

Landisville, not uncommon—Liebeck. Bloomfield—Julich. Anglesea—Wenzel.

## CATALOGUE OF INSECTS.

247

## PTEROOCOLUS, Sch.

**P. ovatus**, Fabr.

Generally distributed, rather common—Liebeck. Camden, Atco, on Scrub Oak, rather common—Wenzel. Newark. Orange, Fort Lee, on Oak—Julich.

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## Family ATTELABIDÆ.

## ATTELABUS, Linn.

**A. analis**, Ill.

Generally distributed, rather common—Liebeck. Newark. On Sumac—Julich. Caldwell, common—Crane.

**A. nigripes**, Lec.

Atlantic and Cape May counties, on Scrub Oak, not rare—Wenzel.

**A. bipustulatus**, Fabr.

Same as before—Wenzel. Generally distributed, not rare—Liebeck. Ocean county, common—Smith.

**A. rhois**, Boh.

Newark. Ocean county, on *Rhus*, not rare—Smith. Orange, on Hazel—Julich.

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## Family OTIORHYNCHIDÆ.

## EPICÆRUS, Sch.

**E. imbricatus**, Say.

Camden, rare—Liebeck. Generally distributed—Wenzel.

## HORMORUS, Horn.

**H. undulatus**, Uhler.

On the Newark list. West Hoboken—Julich.

## ANAMETIS, Horn.

**A. grisea**, Horn.

On the Newark list.

## 248 GEOLOGICAL SURVEY OF NEW JERSEY.

**PANSCOPUS, Sch.****P. erinaceus, Say.**

On the Newark list. Under stones—Julich.

**PHYXELIS, Sch.****P. rigidus, Say.**Generally distributed, rare—Wenzel. Camden, rare—Liebeck.  
Newark, under stones—Julich. Madison.**AGRAPHUS, Say.****A. bellicus, Say.**On the Newark list. Shrewsbury, on *Solidago*—Julich.**OTIORHYNCHUS, Germ.****O. sulcatus, Fabr.**

On the Newark list. New Jersey—Julich.

**O. ovatus, Linn.**Generally distributed, rare—Liebeck. Newark. New Jersey  
—Julich.**CEROOPEUS, Sch.****C. chrysorrhœus, Say.**

Orange—Julich.

**TANYMECUS, Sch.****T. confertus, Gyll.**Generally distributed, rather common—Wenzel, Liebeck.  
Newark. Hudson county—Linell.**PANDELETEJUS, Sch.****P. hilaris, Hbst.**

Generally distributed, common—Liebeck, Julich. Newark.

**BRACHYSTYLUS, Sch.****B. acutus, Say.**

On the Newark list.

## CATALOGUE OF INSECTS.

249

**ARAMIGUS, Horn.****A. fulleri,** Horn.New Jersey—Collection Dr. Horn. West Hoboken—Julich.  
Madison.**APHRASTUS, Gyll.****A. teeniatus,** Gyll.

Rather common throughout the State.

**CYPHOMIMUS, Horn.****C. dorsalis,** Horn.Hudson county—Linell. Fort Lee, on *Prunus virginica*—  
Julich.**Family CURCULIONIDÆ.****SITONES, Sch.****S. hispidulus,** Germ.Anglesea, in July—Schwarz. Generally distributed, rare—  
Wenzel. Hudson county—Linell. New Brunswick, rather  
common—Smith. This is a clover-root pest.**S. flavescens,** Marsh.Generally distributed, rare—Wenzel. Hudson county—Linell.  
New Jersey—Julich.**S. crinitus,** Oliv.

New Jersey—Julich.

**ITHYCHRUS, Sch.****I. noveboracensis,** Först.Generally distributed, rare—Wenzel, Liebeck. Hudson county  
—Linell. Newark. New Jersey—Julich.**APION, Hbst.****A. decoloratum,** Smith.

Camden and Gloucester counties—Wenzel.

**A. herculaneum,** Smith.On the Newark list. On *Crataegus*—Julich.

## 250 GEOLOGICAL SURVEY OF NEW JERSEY.

**A. segnipes**, Say.

Gloucester county, common—Wenzel.

**A. griseum**, Smith.

Gloucester county—Wenzel.

**A. rostrum**, Say.

Sweet Fern—Julich.

**A. nigrum**, Hbst.

August 26th—Chittenden.

Many more species of this genus will be added to the list when full collections are made.

**PHYTONOMUS**, Sch.**P. punctatus**, Fabr.

Camden, common—Wenzel, Liebeck. Brigantine Beach, in September, one dead specimen—Hamilton. Anglesea, in July—Schwarz. Newark. This species has invaded New Jersey the present year (1889), and has become extremely abundant in the vicinity of Philadelphia and Camden. I received it early in the season from the northwestern part of the State. Beaten from trees at Fort Lee—Julich. Newark, common—Bischoff.

**P. comptus**, Say.

Westville, rare—Liebeck. Gloucester, rare—Wenzel. Hudson county—Linell. New Jersey—Julich.

**P. nigrirostris**, Fabr.

Hudson county—Linell. Newark. This is a common species on the Long Island coast in early summer. Communipaw—Julich.

**LISTRONOTUS**, Jek.**L. tuberosus**, Lec.

Gloucester county, rare—Wenzel.

**L. squamiger**, Say.

Gloucester, rare—Wenzel.

**L. callosus**, Lec.

Hudson county—Linell.

**L. inæqualipennis**, Boh.

Hudson county—Linell. Newark—Bischoff.

## CATALOGUE OF INSECTS.

251

**L. appendiculatus, Boh.**

Camden county. Atoo, common on Pickerel Weed—Wenzel.  
In reeds, New Jersey—Julich. Newark, in reeds—Bischoff.

**L. latiusculus, Boh.**

Gloucester and Camden counties, rare—Wenzel. Hudson  
county—Linell.

**L. teretirostris, Lec.**

New Jersey, in reeds—Julich.

**STROPHISOMA, Billb.****S. coryli, Fabr.**

Orange Mountains, on *Betula lenta*—Julich.

**MACROPS, Kirby.****M. sparsus, Say.**

New Jersey—Julich. Newark—Bischoff.

**M. humilis, Gyll.**

Brigantine Beach, in September, three specimens—Hamilton.  
New Jersey—Julich. Ocean county, not common—Smith.

**M. solutus, Boh.**

Generally distributed, rare—Liebeck. Camden and Gloucester  
counties, not rare—Wenzel. New Jersey—Julich. Newark  
—Bischoff.

**PISSODES, Germ.****P. strobi, Peck.**

Generally distributed throughout the State; injurious to Pine  
and Spruce.

**PACHYLOBIUS, Lec.****P. picivorus, Germ.**

Generally distributed, common—Wenzel. Rare—Liebeck.  
Brigantine Beach, in September, four specimens washed up—  
Hamilton.

**HYLOBIUS, Germ.****H. pales, Hbst.**

Generally distributed throughout the State and common.

## 252 GEOLOGICAL SURVEY OF NEW JERSEY.

**EUDOCIMUS, Sch.***E. mannerheimii*, Boh.

In cedar swamps—Julich.

**LIXUS, Fabr.***L. sylvius*, Boh.

Fort Lee—Linell, Julich.

*L. terminalis*, Lec.Generally distributed, rather common—Wenzel. Westville,  
rather common—Liebeck. Hudson county—Linell.*L. rectus*, Lec.

Arlington—Julich.

*L. concavus*, Say.

More or less common throughout the State.

*L. musculus*, Say.Westville, rare—Liebeck. Camden and Gloucester counties,  
rare—Wenzel. Hudson county—Linell. Newark. New Jersey—Julich.**DORYTOMUS, Steph.***D. mucidus*, Say.

New Jersey—Julich.

*D. laticollis*, Lec.

Guttenburg, on Poplar—Julich.

*D. brevicollis*, Lec.

Hudson county—Linell.

**ERYCUS, Tourn.***E. puncticollis*, Lec.Hudson county—Linell. West Hoboken—Julich. Newark  
—Bischoff.**BARYTYCHIUS, Jek.***B. amoenus*, Say.

On the Newark list.

**SMICRONYX, Sch.***S. griseus*, Lec.

Hudson county—Linell. Newark—Bischoff.

## CATALOGUE OF INSECTS.

253

**S. squammulatus**, Lec.  
Anglesea—Wenzel.

**PHYLLOTROX**, Sch.  
**P. ferrugineus**, Lec.  
Anglesea, in July—Schwarz.

**MUNDALUS**, Lap.  
**E. limatulus**, Gyll.  
Hoboken, salt meadows—Julich.

**TANYSPHYRUS**, Sch.  
**T. lemnae**, Fabr.  
Westville, rather common—Liebeck. Hudson county—Linell.  
Hoboken, salt meadows—Julich.

**ANCHODEMUS**, Lec.  
**A. angustus**, Lec.  
Hoboken, salt meadows—Julich.

**LISSORHOPTRUS**, Lec.  
**L. apiculatus**, Gyll.  
Generally distributed, rare—Liebeck. Camden and Gloucester counties, common—Wenzel.  
**L. simplex**, Say.  
Hudson county—Linell. Hoboken, salt meadows—Julich.

**BAGOUS**, Germ.  
**B. obliquus**, Lec.  
Hudson county—Linell. New Jersey—Julich.  
**B. magister**, Lec.  
Hudson county—Linell.

**OTIDOCEPHALUS**, Chevr.  
**O. myrmex**, Hbst.  
Generally distributed, rather common—Wenzel, Liebeck.  
Hudson county—Linell. New Jersey—Julich.

## 254 GEOLOGICAL SURVEY OF NEW JERSEY.

*O. scrobicollis*, Boh.

Generally distributed, rare—Wenzel. Hudson county—Linell.

*O. chevrolatii*, Horn.

Generally distributed, rare—Wenzel. Hudson county—Linell, Julich.

*O. lœvicollis*, Horn.

Hudson county—Linell, Julich.

**MAGDALIS, Germ.**

*M. perforata*, Horn.

Generally distributed, rare—Wenzel.

*M. lecontei*, Horn.

Generally distributed, rare—Wenzel. Rather common—Liebeck.

*M. barbita*, Say.

Generally distributed, rare—Wenzel. Newark. New Jersey—Julich. Caldwell, rare—Crane.

*M. seneocens*, Lec.

Anglesea—Wenzel.

*M. olyra*, Hbst.

Generally distributed, rare—Wenzel. Hudson county—Linell. Atlantic City. Anglesea.

*M. pandura*, Say.

Sea-shore counties, rare—Wenzel. Westville, rare—Liebeck. New Jersey—Julich.

*M. armicollis*, Say.

Generally distributed, rare—Wenzel. Newark. New Jersey—Julich. Atlantic City—Castle.

*M. pallida*, Say.

As before—Wenzel. Newark. New Jersey—Julich. Atlantic City—Castle.

**ANTHONOMUS, Germ.**

*A. quadrigibbus*, Say.

Camden and Gloucester counties, on Wild Cherry—Wenzel. Dacosta, rather common—Liebeck. Newark. New Jersey—Julich.

## CATALOGUE OF INSECTS.

255

- A. profundus**, Lec.  
Westville, rare—Liebeck.
- A. scutellatus**, Gyll.  
Dacosta, rare—Liebeck. New Jersey—Julich.
- A. signatus**, Say.  
Generally distributed, rare—Wenzel. Westville, rather common—Liebeck. Hudson county—Linell, Julich. Anglesea.
- A. helvolus**, Boh.  
Hudson county—Linell. New Jersey—Julich.
- A. sycophanta**, Walsh.  
On the Newark list. New Jersey—Julich.
- A. suturalis**, Lec.  
Generally distributed, rare—Wenzel. Newark. New Jersey—Julich.
- A. musculus**, Say.  
Generally distributed, rare—Wenzel. Newark.
- A. corvulus**, Lec.  
New Jersey—Julich.
- A. disjuncta**, Lec.  
Gloucester county, rare—Wenzel. New Jersey—Collection Dr. Horn. Atlantic City—Castle.
- A. unguaris**, Lec.  
New Jersey—Julich.
- A. mixtus**, Lec.  
Generally distributed, rare—Wenzel.

## ORCHESTES, III.

- O. pallicornis**, Say.  
Newark. Determined by myself.
- O. niger**, Horn.  
New Jersey—Julich.
- O. ephippiatus**, Say.  
New Jersey—Julich.

## 256 GEOLOGICAL SURVEY OF NEW JERSEY.

**ELLESCHUS, Steph.**

- E. bipunctatus*, Linn.  
New Jersey—Julich.  
*E. ephippiatus*, Say.  
New Jersey—Julich. Newark—Bischoff.

**PRIONOMERUS, Sch.**

- P. calceatus*, Say.  
Sea-shore, rare—Liebeck. Newark.

**PIAZORHINUS, Sch.**

- P. scutellaris*, Say.  
Generally distributed, rare—Liebeck. Hudson county—  
Linell, Julich.  
*P. pictus*, Lec.  
Shrewsbury, collected by Soltau—Julich.

**THYSANOONEMIS, Lec.**

- T. fraxini*, Lec.  
Westville, rare—Liebeck. Gloucester, in a hard fungus, rare  
—Wenzel. Atlantic City—Castle.

**PLOCETES, Lec.**

- P. ulmi*, Lec.  
Westville, rare—Liebeck. Gloucester, a single specimen only  
—Wenzel. Hudson county—Linell. Atlantic City—Castle.

**TYCHIUS, Sch.**

- T. sordidus*, Lec.  
Anglesea—Wenzel.

**GYMNETRON, Sch.**

- G. teter*, Fabr.  
Rather common throughout the State, on Mullen.

**MIARUS, Steph.**

- M. hispidulus*, Lec.  
On the Newark list. New Jersey—Julich.

## CATALOGUE OF INSECTS.

257

**LÆMOSACCUS, Sch.****L. plagiatus, Sch.**

Generally distributed, rather common—Liebeck. Not common, on Oak—Wenzel. Hudson county—Linell. Newark. On Oak—Julich.

**CONOTRACHELUS, Sch.****C. juglandis, Lec.**

Generally distributed, rare—Wenzel. Hudson county—Linell. Newark. New Jersey—Julich.

**C. nenuphar, Hbst.**

The plum curculio; common throughout the State.

**C. elegans, Say.**

Generally distributed, common—Wenzel. Hudson county—Linell. Newark. New Jersey—Julich.

**C. aratus, Germ.**

Atlantic county, rare—Wenzel.

**C. crataegi, Walsh.**

Atlantic county, rare—Wenzel. New Jersey—Julich. Caldwell, common—Crane.

**C. naso, Lec.**

Atlantic county, rare—Wenzel.

**C. posticatus, Boh.**

Atlantic county, rare—Wenzel. Hudson county—Linell. Newark. New Jersey—Julich.

**C. geminatus, Lec.**

Atlantic county, rare—Wenzel. Westville, rare—Liebeck. Hudson county—Linell. New Jersey—Julich.

**C. anaglypticus, Say.**

Rather common throughout the State.

**C. fissunguis, Lec.**

Sea-shore, rather common—Liebeck. Cape May county, on Wild Hollyhock—Wenzel.

## 258 GEOLOGICAL SURVEY OF NEW JERSEY.

**RHYSSEMATUS, Chevr.****R. lineaticollis, Say.**

I used to find this not rarely along the Palisades. On *Asolepias*  
—Julich. Caldwell, rare—Crane.

**CHALCODERMA, Sch.****C. collaris, Horn.**

Atlantic City—Castle.

**ACALLES, Sch.****A. spec. indet.**

Newark, in ants' nests—Bischoff. This most resembles the southern *clavatus*, but seems to differ from all the species in Dr. Horn's collection.

**TYLODERMA, Say.****T. foveolatum, Say.**

Generally distributed, rare—Wenzel. Westville, rare—Liebeck. New Jersey—Julich. Newark—Bischoff.

**T. fragariae, Riley.**

Arlington, Maplewood, under stones—Julich.

**T. ærum, Say.**

Westville, rare—Liebeck. New Jersey—Julich. Newark—Bischoff.

**PHYRDENUS, Lec.****P. undatus, Lec.**

In cedar swamps—Julich.

**CRYPTORHYNCHUS, Ill.****C. parochus, Hbst.**

On the Newark list. On Butternut—Julich.

**C. bisignatus, Say.**

Generally distributed, rare—Wenzel. Landisville, rare—Liebeck. New Jersey—Julich.

**C. fuscatus, Lec.**

Newark. Determined by myself. In cedar swamps—Julich.

## CATALOGUE OF INSECTS.

259

*C. pumilus*, Boh.

New Jersey, in cedar swamps—Julich.

*C. obliquus*, Say.

Hudson county—Linell. Generally distributed, rare—Wenzel.

New Jersey, in cedar swamps—Julich.

*C. fallax*, Lec.

Camden, rare—Wenzel. New Jersey—Julich.

*C. minutissimus*, Lec.

Hudson county—Linell. New Jersey—Julich.

*C. tristis*, Lec.

Newark—Bischoff.

*C. ferratus*, Say.

Gloucester, rare—Wenzel. Sea-shore, rare—Liebeck. Hudson county—Linell. New Jersey—Julich. Newark—Bischoff.

*C. lapathi*, Linn.

Newark. Determined by myself. Bergen—Julich.

## BAROPSIS, Lec.

*B. cribratus*, Lec.

New Jersey—Collection Dr. Horn.

## PIAZURUS, Sch.

*P. oculatus*, Say.

Westville, rare—Liebeck. New Jersey—Julich. Newark—Bischoff.

## COPTURUS, Sch.

*C. operculatus*, Say.

New Jersey—Julich.

*C. quercus*, Say.

Hudson county—Linell.

*C. longulus*, Lec.

Atco, one specimen—Wenzel.

*C. binotatus*, Lec.

Hudson county—Linell. Snake Hill, Fort Lee—Julich.

*C. minutus*, Lec.

Anglesea, rare—Wenzel. Anglesea; in July—Schwarz.

## 260 GEOLOGICAL SURVEY OF NEW JERSEY.

**AACOPTUS, Lec.****A. suturalis, Lec.**

Hudson county—Linell. Newark. Orange—Julich.

**TACHYGONUS, Sch.****T. lecontei, Gyll.**

Atco, Red Bank, on Pine, rare—Wenzel. Caldwell—Crane.

**T. centralis, Lec.**

Landisville, rather common—Liebeck.

**T. tardipes, Lec.**

Atlantic City—Castle.

**MONONYCHUS, Germ.****M. vulpeculus, Fabr.**

Generally distributed, rather common, on Blue Flag—  
Wenzel. Hudson county—Linell. Newark. New Jersey—  
Julich.

**CRAPONIUS, Lec.****C. inaequalis, Say.**

West Hoboken—Julich.

**OELIODES, Sch.****O. curtus, Say.**

Anglesea, not uncommon—Liebeck. Newark.

**O. cruralis, Lec.**

Hudson county—Linell. New Jersey—Julich.

**O. nebulosus, Lec.**

New Jersey—Julich.

**O. flavicaudis, Boh.**

Shrewsbury, on White Nettle—Julich.

**O. acephalus, Say.**

Common on the coast—Wenzel. Hudson county—Linell.  
Shrewsbury—Julich.

## CATALOGUE OF INSECTS.

261

**ACALLODES, Lec.****A. ventricosus, Lec.**

On the Newark list. Newark—Julich. Ocean county—  
Smith.

**CHUTORHYNCHUS, Germ.****C. rapæ, Gyll.**

West Hoboken—Julich.

**C. sulcipennis, Lec.**

Weehawken—Julich.

**C. semirufus, Lec.**

New Jersey—Julich.

**C. septentrionalis, Gyll.**

New Jersey—Julich.

**PELONOMUS, Thom.****P. sulcicollis, Fabr.**

Generally distributed, common—Liebeck. Camden and Gloucester counties, common—Wenzel.

**OCHLOGASTER, Sch.****C. zimmermanni, Gyll.**

On the Newark list. South Orange, on Beggar's Nits—Julich.

**C. cretura, Hbst.**

New Jersey—Julich. Caldwell, rare—Crane.

**RHINONCUS, Sch.****R. pyrrhopus, Lec.**

Generally distributed, rather common—Liebeck. Camden and Gloucester counties, not rare—Wenzel. Anglesea, in July—Schwarz. New Jersey—Julich.

**R. longulus, Lec.**

New Jersey—Julich.

**RHOPTOBARIS, Lec.****R. nova species, Horn dixit.**

Anglesea—Wenzel.

## 262 GEOLOGICAL SURVEY OF NEW JERSEY.

**BARIS, Germ.****B. umbilicata**, Lec.Atco, rare—Wenzel. Hudson county—Linell. Ocean county  
—Smith.**B. subænea**, Lec.

Generally distributed, not rare—Wenzel.

**B. confinis**, Lec.

Ocean county—Smith.

**B. ærea**, Boh.

Atlantic City—Castle.

**B. interstitialis**, Say.

On Yarrow—Julich.

**PSEUDOBARIS, Lec.****P. nigrina**, Say.Generally distributed, common—Wenzel. On *Solidago*—  
Julich.**ONYCHOBARIS, Lec.****O. rugicollis**, Lec.Atco, rare—Wenzel. On *Aesclepias*—Julich.**MADARUS, Sch.****M. undulatus**, Say.Generally distributed, not common—Wenzel. Westville,  
rather common—Liebeck. Hudson county—Linell. New Jersey—Julich.**STETHOBARIS, Lec.****S. tubulatus**, Say.

New Jersey—Julich.

**CENTRINUS, Sch.****C. scutellum-album**, Say.

Common throughout the State.

**C. penicellus**, Hbst.

Anglesea—Wenzel.

## CATALOGUE OF INSECTS.

263

*C. picumnus*, Hbst.

Found throughout the State; sometimes excessively abundant.

*C. lineicollis*, Lec.

New Jersey—Julich.

*C. rectirostris*, Lec.

South Orange—Julich.

*C. confinis*, Lec.

New Jersey—Julich.

**ZYGOBARIS, Lec.***Z. quadricolle*, Lec.

West Hoboken, one specimen only—Julich.

**BALANINUS, Germ.***B. uniformis*, Lec.

Newark. Determined by myself. New Jersey—Julich.

*B. nasicus*, Say.Generally distributed, rare—Wenzel, Liebeck. Newark.  
Anglesea, in July—Schwarz. New Jersey—Julich.*B. caryæ*, Horn.

New Jersey—Julich.

*B. rectus*, Say.Generally distributed, rare—Wenzel, Liebeck. Newark.  
New Jersey—Julich. Caldwell, common—Crane.*B. quercus*, Horn.Brigantine Beach, mainland, in September—Hamilton. New  
Jersey—Julich.*B. caryatrypes*, Boh.

New Jersey—Julich.

**Family BRENTHIDÆ.****EUPSALIS, Lec.***E. minuta*, Dru.

Generally distributed, rare—Liebeck. New Jersey—Julich.

## 264 GEOLOGICAL SURVEY OF NEW JERSEY.

**Family CALANDRIDÆ.****RHQDOBÆNUS, Lec.****R. tredecimpunctata, Ill.**

Generally distributed, not uncommon—Wenzel, Liebeck. Newark. Caldwell, common—Crane. Madison.

**SPHENOPHORUS, Sch.****S. simplex, Lec.**

New Jersey—Collection Dr. Horn; also Julich.

**S. inæqualis, Say.**

Rare on the shore—Wenzel. New Jersey—Collection Dr. Horn.

**S. ochreus, Lec.**

Generally distributed, rare—Linell. New Jersey—Julich. Orange Mountains—Hess.

**S. pertinax, Lec.**

Anglesea, in July—Schwarz. Sea-shore, common—Wenzel, Liebeck. Brigantine Beach, in September—Hamilton. Newark. Breeds in reed,—*Calmus*—Julich.

**S. costipennis, Horn.**

Sea-shore, rare—Wenzel. Brigantine Beach, in September—Hamilton. New Jersey—Julich. Caldwell, rare—Crane.

**S. cariosus, Oliv.**

Brigantine Beach, in September—Hamilton. New Jersey—Julich.

**S. sculptilis, Uhler.**

Sea-shore, common—Wenzel, Liebeck. New Jersey—Julich. Caldwell, rare—Crane.

**S. melanocephalus, Fabr.**

Sea-shore, rare—Liebeck. Hudson county—Linell. New Jersey—Julich.

**S. sayi, Gyll.**

Anglesea, in July—Schwarz.

## CATALOGUE OF INSECTS.

265

**S. placidus, Say.**

Sea-shore, rare—Wenzel. Rather common—Liebeck. Brigantine Beach, in September, abundant—Hamilton. Hudson county—Linell. New Jersey—Julich. Newark—Bischoff.

**S. parvulus, Gyll.**

Generally distributed, rare—Liebeck. Sea-shore, common—Wenzel. New Jersey—Julich.

**S. retusus, Gyll.**

Sea-shore, not common—Wenzel. Brigantine Beach, in September, abundant—Hamilton.

**OALANDRA, Clairv.****C. oryzæ, Linn.**

Generally distributed, common—Wenzel. Newark.

**C. remotepunctata, Gyll.**

Generally distributed, rather common—Liebeck. New Jersey—Julich.

**C. granaria, Linn.**

New Jersey—Julich.

**DRYOPHTHORUS, Sch.****D. corticalis, Say.**

Generally distributed, rare—Wenzel, Liebeck. New Jersey—Julich.

**COSSONUS, Clairv.****C. platalea, Say.**

Generally distributed, not common—Wenzel. New Jersey—Julich.

**C. concinnus, Boh.**

New Jersey—Julich.

**C. corticola, Say.**

As before—Wenzel. Newark. New Jersey—Julich. Anglesea.

**C. impressifrons, Boh.**

Brigantine Beach, mainland and island, frequent—Hamilton.

## 266 GEOLOGICAL SURVEY OF NEW JERSEY.

**MESITES, Sch.****M. subcylindricus, Horn.**

Anglesea, rare—Wenzel. Cape May, in July—Schwarz.

**PHLCEOPHAGUS, Sch.****P. minor, Horn.**

Anglesea, in July—Schwarz. New Jersey—Julich.

**WOLLASTONIA, Horn.****W. quercicola, Boh.**

Landisville, rare—Liebeck. Sea-shore, rare—Wenzel. New Jersey—Julich.

**RHYNOCHOLUS, Germ.****R. brunneus, Mann.**

New Jersey—Julich.

**R. oregonensis, Horn.**

Anglesea—Wenzel.

**STENOSCELIS, Woll.****S. brevis, Boh.**

Hudson county—Linell. New Jersey—Julich. Ocean county—Smith.

**Family SCOLYTIDÆ.****MONARTHROUM, Kirsch.****M. fasciatum, Say.**

Gloucester, rare—Wenzel. New Jersey—Julich.

**M. mali, Fitch.**

Dacosta, rare—Wenzel. New Jersey—Julich.

**PITYOPHTHORUS, Eich.****P. minutissimus, Zimm.**

New Brunswick, common in oak twigs—Smith. New Jersey—Julich.

## CATALOGUE OF INSECTS.

267

**P. pullus**, Zimm.

Atco, rare—Wenzel. New Jersey—Julich.

**P. pulicarius**, Zimm.

Cape May Court House, in July—Schwarz.

**P. puberulus**, Lec.

Cape May Court House, in July—Schwarz.

**HYPOTHENEMUS**, Westw.**H. eruditus**, Westw.

Bred from Grape and Oak, New Brunswick. Anglesea, in July—Schwarz. New Jersey—Julich.

**H. hispidulus**, Lec.Bred from Hickory and Oak. This is *not* the same as *eruditus*.**H. dissimilis**, Zimm.Bred from Grape and Oak. I consider this = *eruditus*. Anglesea.**H. erectus**, Lec.

Bred from Hickory and Oak, New Brunswick.

**XYLOTERUS**, Br.**X. politus**, Say.

New Jersey—Julich.

**XYLEBORUS**, Eich.**X. pyri**, Peck.

Anglesea—Wenzel.

**X. celsus**, Eich.

Dacosta, rare—Wenzel. New Jersey—Julich.

**X. fuscatus**, Eich.

New Jersey—Julich.

**X. xylographus**, Say.

Dacosta, not rare—Wenzel. Anglesea, in July—Schwarz. New Jersey—Julich.

**X. pubescens**, Zimm.

Dacosta, not rare—Wenzel. On Oak—Julich.

## 268 GEOLOGICAL SURVEY OF NEW JERSEY.

**X. cælatus**, Eich.

Generally distributed, not rare—Wenzel. New Jersey—Julich.

**DRYOCETES**, Eich.**D. granicollis**, Lec.

New Jersey—Julich.

**TOMICUS**, Latr.**T. calligraphus**, Germ.

Generally distributed, common—Wenzel. Brigantine Beach, mainland, in September—Hamilton. New Jersey—Julich.

**T. cacographus**, Lec.

Same localities as before.

**T. pini**, Say.

Newark. Determined by myself. New Jersey—Julich.

**MICRACIS**, Lec.**M. asperula**, Lec.

New Jersey—Julich.

**M. opacicollis**, Lec.

Boring in the pith of small oak twigs, New Brunswick.

**SCOLYTUS**, Geoff.**S. quadrispinosus**, Say.

Generally distributed, not rare—Wenzel. Newark. New Jersey—Julich.

**S. rugulosus**, Ratz.

Peach and Wild Cherry—Julich.

**CHRAMESUS**, Lec.**C. icoræ**, Lec.

Hudson county—Linell. Common in hickory twigs, New Brunswick. New Jersey—Julich.

**PHLÆOTRIBUS**, Latr.**P. liminaria**, Harr.

New Jersey—Julich.

## CATALOGUE OF INSECTS.

269

**P. frontalis**, Oliv.  
New Jersey—Julich.

**H. aculeatus**, Say.  
On Ash, New Jersey—Julich.

**H. opaculus**, Lec.  
New Jersey—Julich.

**H. trifolii**, L.  
The clover-root borer. Bergen—Julich.

**PHLEOSINUS**, Chap.  
**P. serratus**, Lec.  
Anglesea, rare—Wenzel.  
**P. dentatus**, Say.  
Anglesea, in July—Schwarz. Brigantine Beach, in September—Hamilton. In Red Cedar—Julich.

**CARPHOBORUS**, Eich.  
**C. bifurcatus**, Eich.  
New Jersey—Julich.

**DENDROCTONUS**, Br.  
**D. terebrans**, Oliv.  
Generally distributed, common—Wenzel. Caldwell, common—Crane. New Jersey—Julich.

**CRYPTURGUS**, Br.  
**C. atomus**, Lec.  
New Jersey—Julich.

**HYLASTES**, Br.  
**H. porculus**, Br.  
Generally distributed, common—Wenzel.  
**H. cavernosus**, Zimm.  
New Jersey—Julich.

## 270 GEOLOGICAL SURVEY OF NEW JERSEY.

**HYLURGOPS, Lec.****H. pinifex**, Fitch.

New Jersey—Julich.

The list is very incomplete in this family, because collectors have not generally sought for the species and they are difficult of determination.

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**Family ANTHRIBIDÆ.****BURYMYCTER, Lec.****E. fasciatus**, Oliv.

On the Newark list. Sea-coast, rare—Wenzel. Orange, Snake Hill—Julich.

**TROPIDERES, Sch.****T. rectus**, Lec.

Sea-coast, rare—Wenzel.

**ALLANDRUS, Lec.****A. bifasciatus**, Lec.

On Linden—Julich.

**HORMISCUS, Waterh.****H. saltator**, Lec.

Gloucester, rare—Wenzel. Anglesea, in July—Schwarz.  
New Jersey—Julich.

**H. nova species**, Schwarz dixit.

Anglesea, in July—Schwarz.

**EUSPHYRUS, Lec.****E. walshii**, Lec.

Gloucester, rare—Wenzel.

**PIEZOCORYNUS, Sch.****P. mixtus**, Lec.

New Jersey—Julich.

## CATALOGUE OF INSECTS.

271

**P. moestus**, Lec.

Sea-coast, rare—Wenzel. Brigantine Beach, in September,  
rare—Hamilton.

**CRATOPARIS**, Sch.**C. lunatus**, Fabr.

Occurs throughout the State more or less commonly.

**BRACHYTARSUS**, Sch.**B. alternatus**, Say.

Hudson county—Linell. New Jersey—Julich.

**B. tomentosus**, Say.

Gloucester, one specimen only—Wenzel. Hudson county—  
Linell. New Jersey—Julich.

**B. variegatus**, Say.

Generally distributed, not uncommon—Wenzel, Liebeck.

**ANTHRIBULUS**, Lec.**A. rotundatus**, Lec.

Anglesea—Wenzel.

**ORDER LEPIDOPTERA.****Family NYMPHALIDÆ.****Sub-Family SATYRINÆ.****SATYRUS**, Westw.**S. pegala**, Fabr.

Rare along the coast of southern New Jersey. Seven Mile  
Beach, Mount Holly—Aaron.

**S. slope**, Fabr.

Common throughout the State.

**Var. maritima**, Edw.

Jamesburg, Ocean county, Cape May county, and there the  
common form; at Jamesburg it runs into the typical form.

## 272 GEOLOGICAL SURVEY OF NEW JERSEY.

*Form nephele*, Kirby.

Occurs with and generally replaces the typical form in the northern counties. Warren county; common.

**DEBIS, Westw.****D. portlandia**, Fabr.

General throughout the State, but rather local. Newark. Caldwell, rare—Crane.

**NEONYMPHA, Westw.****N. canthus**, Bd.-Lec.

Mount Holly, Westville—Aaron. Newark. Quite generally distributed, but rare.

**N. areolatus**, Sm.-Abb.

Atlantic City, Seven Mile Beach—Aaron. Morristown—Edwards. A southern species; its occurrence in the State occasional.

**N. eurytris**, Fabr.

Common throughout the State.

**N. sosybius**, Fabr.

Mount Holly—Aaron. Occasional in southern New Jersey.

**Sub-Family NYMPHALINÆ.****APATURA, Fabr.****A. clyton**, Bd.-Lec.

New Jersey is included in the faunal map of this species, but I have no record of its capture.

**LIMENITIS, Fabr.****L. ursula**, Fabr.

Common throughout the State.

**L. arthemis**, Dru.

Schooley's Mountain—Aaron. Also recorded on the Newark list.

**Var. proserpina**, Edw.

On the Newark list, without definite locality.

## CATALOGUE OF INSECTS.

273

**L. disippus**, Gdt.

Common throughout the State.

**GRAPTA**, Kirby.**G. interrogationis**, Fabr.

Both forms of the species—*fabricii*, Edw., and *umbrosa*, Lint.—are rather common throughout the State.

**G. comma**, Harr.

Less common, but equally distributed throughout the State.  
Forms *harrisii*, Edw., and *dryas*, Edw.

**G. faunus**, Edw.

Schooley's Mountain—Aaron. A northern and mountain form.

**G. progne**, Cram.

Caldwell, common—Crane.

**G. J-album**, Bd.-Lec.

Schooley's Mountain—Aaron. Also recorded on the Newark list. Caldwell, rare—Crane.

**VANESSA**, Fabr.**V. antiopa**, Linn.

Common throughout the State, the larvæ often defoliating Willow.

**V. milberti**, Gdt.

Schooley's Mountain—Aaron. Orange Mountains, rare. It is a northern form.

**PYRAMEIS**, Doubl.**P. atalanta**, Linn.

Common throughout the State.

**P. huntera**, Fabr.

Common throughout the State.

**P. cardui**, Linn.

Common throughout the State.

## 274 GEOLOGICAL SURVEY OF NEW JERSEY.

**JUNONIA, Doubl.****J. cœnia, Hb.**

Common seasonally, south of Trenton—Aaron. Newark,  
also seasonally abundant. Caldwell, rare—Crane.

**EUPTOIETA, Doubl.****E. claudia, Cram.**

Cape May, Atlantic City, Mount Holly—Aaron. Occurs  
also northwardly, near the coast, and is on the Newark list.

**AGRAULIS, Bd.-Lec.****A. vanillæ, Linn.**

Cape May, Seven Mile Beach—Aaron. Camden county.

**ARGYNNIS, Fabr.****A. idalia, Dru.**

Found throughout the State; usually not common. Caldwell,  
common—Crane. Newark, in July—Seib.

**A. cybele, Fabr.**

Common throughout the State.

**A. aphrodite, Fabr.**

Schooley's Mountain—Aaron. Orange Mountains. Also on  
the Newark list, without definite locality.

**A. myrina, Cram.**

Common throughout the State. Abundant on cranberry bogs.

**A. bellona, Fabr.**

Found throughout the State; more common northwardly.

**PHYCIODES, Doubl.****P. nycteis, Doubl.-Hew.**

Gloucester, Mount Holly—Aaron. Also on the Newark list.  
Not common.

**P. tharos, Dru.**

Common throughout the State.

**P. batesii, Reak.**

Gloucester—Aaron. Not on the Newark list.

## CATALOGUE OF INSECTS.

275

**MELITÆA, Fabr.****M. phaeton, Dru.**

Occurs all over the State, in fresh-water swamps.

**M. harrisii, Scudd.**

Schooley's Mountain—Aaron. Also on the Newark list.

**DANAIS, Latr.****D. archippus, Fabr.**

Common throughout the State. Larva on *Asclepias*.

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**Sub-Family LIBYTHEINÆ.****LIBYTHEA, Fabr.****L. bachmanni, Kirtl.**

Gloucester—Aaron. Also on the Newark list. Common at Sandy Hook in 1886—Beutenmüller.

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**Family LYCÆNIDÆ.****Sub-Family ERYCININÆ.****CALEPHELIS, Grt. & Rob.****C. borealis, Grt. & Rob.**

Opposite Delaware Water Gap—Aaron. Not on the Newark list.

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**Sub-Family LYCÆNINÆ.****THECLA, Fabr.****T. halesus, Cram.**

Cape May, Gloucester, near Westville—Aaron. Also on the Newark list.

**T. m-album, Bd.-Lec.**

Atlantic City—Aaron. Not on the Newark list.

## 276 GEOLOGICAL SURVEY OF NEW JERSEY.

*T. favonius*, Sm.-Abb.

On the Newark list, without definite locality.

*T. humuli*, Harr.

Quite generally distributed, but nowhere common.

*T. melinus*, Hüb.

On the Newark list, without definite locality. The State is included in Mr. Scudder's faunal map of this species.

*T. acadica*, Edw.

New Jersey is included in Mr. Scudder's faunal map of this species, but I have received no records of its capture.

*T. edwardsii*, Saund.

Recorded on the Newark list, without definite locality.

*T. calanus*, Hüb.

Found throughout the State, but not common. Caldwell, rare—Crane. Newark, in July—Seib.

*T. strigosa*, Harr.

On the Newark list, without definite locality.

*T. smilacis*, Bd.-Lec.

Locally not rare in the Passaic Valley region, early in spring. Newark, in May—Seib.

*T. augustus*, Kirby.

Gloucester, Westville, Mount Holly—Aaron. Not taken by the Newark collectors.

*T. irus*, Goezt.

Gloucester—Aaron. Westville. Also taken by the Newark collectors.

*T. henrici*, Grt. & Rob.

Westville, local; also on the Newark list.

*T. niphon*, Hüb.

Gloucester, Mount Holly—Aaron. Westville, rare; also on the Newark list.

*T. lœta*, Edw.

Atlantic City—Aaron. Not on the Newark list.

*T. titus*, Fabr.

Mount Holly—Aaron. Also on the Newark list.

## CATALOGUE OF INSECTS.

277

## LYCÆNA, Fabr.

*L. couperi*, Grote.

New Jersey is included in Mr. Scudder's faunal map of this species, and he has it recorded from the vicinity of New York City. I know of no specimens from this State.

*L. pseudargiolus*, Bd.-Lec.

This species and its various forms and races are quite common throughout the State, but somewhat local.

*L. comyntas*, Godt.

Common throughout the State.

## CHRYSTOPHANUS, Doubl.

*C. thoe*, Bd.-Lec.

Schooley's Mountain—Aaron. Recorded on the Newark list. Said to be very local. Caldwell, rare—Crane. Newark, in July—Seib.

*C. exixanthe*, Bd.-Lec.

Dacoeta, not rare—Aaron. Not on the Newark list.

*C. hypophleus*, Bd.—(*americana*, D'Urb.)

Common throughout the State.

## FENISECA, Grt.

*F. tarquinius*, Fabr.

Mount Holly—Aaron. Also on the Newark list. Seems generally distributed, but local and nowhere common.

## Family PAPILIONIDÆ.

## Sub-Family PAPILIONINÆ.

## PAPILIO, Linn.

*P. ajax*, Linn.

Recorded on the Newark list, and said to be not rare seasonally and locally. There is considerable Paw-Paw in the State.

## 278 GEOLOGICAL SURVEY OF NEW JERSEY.

**P. philenor**, Linn.

Atlantic City, Westville, Mount Holly—Aaron. Quite generally distributed throughout the State; not common.

**P. brevicauda**, Saund.

Pemberton—Aaron. Mr. Aaron marks the name with a (?). I have seen a specimen from Hightstown, which, with a different locality label, would pass very well for this species.

**P. asterias**, Fabr.

Common throughout the State.

**P. troilus**, Linn.

Common throughout the State.

**P. turnus**, Linn.

Common throughout the State. The dimorphic female, *glancous*, is rare.

**P. cresphontes**, Cram.

Trenton—Aaron. On the Newark list. Isolated specimens occur throughout the State. Caldwell—Crane.

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**Sub-Family PIERINÆ.****CALLIDRYAS**, Bdv.**C. eubule**, Linn.

Mount Holly, Atlantic City—Aaron. Also on the Newark list. Long Branch—Edwards.

**ANTHOCHARIS**, Bdv.**A. genutia**, Fabr.

Westville, Mount Holly, Seven Mile Beach—Aaron. Timber Creek.

**COLIAS**, Fabr.**C. eurytheme**, Bdv.

Mount Holly—Aaron. Occasionally taken by members of the Newark Society.

**C. philodice**, Godt.

Common throughout the State.

## CATALOGUE OF INSECTS.

279

## TERIAS, Swains.

*T. nicippe*, Cram.

Mount Holly, Westville, Atlantic City—Aaron. I have seen it quite generally throughout the State, but nowhere common. Caldwell, rare—Crane. Newark, in September—Seib.

*T. lissa*, Bd.-Lec.

Not rare throughout the State. Newark, in October—Seib.

## PIERIS, Schr.

*P. protodice*, Bdv.

Mount Holly, Westville—Aaron. Occasional throughout the southern part of the State.

*P. rapæ*, Linn.

The common cabbage butterfly; found everywhere.

*P. oleracea*, Bdv.

Orange Mountains; rare. Probably more common in the hilly north of New Jersey.

## Family HESPERIDÆ.

## HEDAMUS, Swains.

*H. pylades*, Scudd.

Quite generally distributed, not common—Aaron.

*H. bathyllus*, Sm.-Abb.

Common throughout the State.

*H. lycidas*, Sm.-Abb.

Quite generally distributed, but rare. Taken both by the Philadelphia and Newark collectors. Caldwell, common—Crane. Taken in June—Seib.

*H. cellus*, Bd.-Lec.

Taken rarely by the Newark collectors.

*H. tityrus*, Fabr.

Common throughout the State. Taken in July—Seib.

## 280 GEOLOGICAL SURVEY OF NEW JERSEY.

*H. proteus*, Linn.

Cape May—Aaron. Also on the Newark list.

## NISONIADES, Speyer.

*N. brizo*, Bd.-Lec.

Gloucester—Aaron. Westville. Also on the Newark list.

Newark, in May—Seib. Not rare.

*N. icelus*, Lint.

Opposite Delaware Water Gap—Aaron. Also on the Newark list.

*N. lucilius*, Lint.

The State is included in Mr. Scudder's faunal map of the species, but it has not been taken by collectors, so far as I know.

*N. persius*, Scudd.

This is in the same case as the preceding.

*N. ausonius*, Lint.

Said to occur in the State, but I have seen no positive records of the fact.

*N. martialis*, Scudd.

Taken in New Jersey—Aaron. Not on the Newark list.

*N. juvenalis*, Fabr.

Common near Philadelphia, and quite generally distributed throughout the State, in my experience. Newark, in July—Seib. Caldwell, rare—Crane.

*N. horatius*, Scudd.

Occurs in this State, according to Scudder's faunal map, but I know of no actual records.

*N. torrentius*, Scudd.

This is in the same case with the preceding.

## PHOLISORA, Speyer.

*P. catullus*, Fabr.

Common throughout the State.

## PYRGUS, Westw.

*P. tessellata*, Scudd.

Quite common throughout the State.

## CATALOGUE OF INSECTS.

281

**P. centaureæ,** Ramb.

Recorded from all land sides of the State and almost certain to occur here.

**ANCYLOXYPHA,** Feld.**A. numitor,** Fabr.

Common throughout the State.

**AMBLYSCIRTES,** Speyer.**A. vialis,** Edw.

Locally common throughout the State. Not on the Newark list.

**A. samoset,** Scudd.

Said to occur from Maine to Georgia, but has not been actually recorded from this State.

**PAMPHILA,** Fabr.**P. massasoit,** Scudd.

Gloucester—Aaron. Swamps near Westville. Also on the Newark list. Not common.

**P. zabulon,** Bd.-Lec.

Not rare throughout the State. The form *hobomook* is more common, while *pooahontas* is rare.

**P. sassacus,** Harr.

Trenton—Aaron. Also on the Newark list. Caldwell—Crane.

**P. metea,** Scudd.

Schooley's Mountain—Aaron.

**P. seminole,** Scudd.

New Jersey—Edwards. Not taken by either the Philadelphia or Newark collectors.

**P. leonardus,** Harr.

Rare in the eastern part of the State. On the Newark list.

**P. huron,** Edw.

Mount Holly—Aaron. Also on the Newark list.

## 282 GEOLOGICAL SURVEY OF NEW JERSEY.

P. *phylaeus*, Dru.

Atlantic City—Aaron. I have taken this at Clifton, rarely.

P. *otho*, Sm.-Abb.

Gloucester, &c.—Aaron. Also on the Newark list. Not rare throughout the State. The form *egeremet* is more common.

P. *peckius*, Kirby.

Common throughout the State.

P. *mystic*, Scudd.

Trenton, Schooley's Mountain—Aaron. Also on the Newark list.

P. *cernea*, Bd.-Lec.

Common throughout the State.

P. *manataqua*, Scudd.

Generally distributed, but not common. Taken by Mr. Aaron, and also on the Newark list.

P. *verna*, Edw.

Recorded by Mr. Aaron, without definite locality.

P. *metacomet*, Harr.

Taken by Mr. Aaron, and also on the Newark list. Caldwell—Crane.

P. *accius*, Sm.-Abb.

Salem—Aaron. Not on the Newark list.

P. *panoquin*, Scudd.

Atlantic City—Edwards. New Jersey—Aaron. Not on the Newark list.

P. *ocola*, Edw.

Salem, rare—Aaron.

P. *bimacula*, Grt. & Rob.

A specimen labeled "N. J." is in Mr. Aaron's collection ; source unknown.

P. *pontiac*, Edw.

Westville—Aaron. "New Jersey"—Edwards. Not on the Newark list.

## CATALOGUE OF INSECTS.

283

*P. delaware*, Edw.

East bank of Delaware Bay, near Maurice River—Aaron.

*P. viator*, Edw.

Cape May—Aaron. Also on the Newark list.

## Family SPHINGIDÆ.

## Sub-Family MACROGLOSSINÆ.

## HEMARIS, Dalm.

*H. tenuis*, Grt.

Not rare. Taken by the Newark collectors and generally distributed in the State.

*H. diffinis*, Bdv.

Common all over the State.

*H. axillaris*, Grt. & Rob.

Morris Plains, rare—Neumoegen.

*H. gracilis*, Grt. & Rob.

Not rare, but not taken by the Newark collectors.

*H. thysbe*, Fabr.

Common. Caldwell—Crane. Newark, in August—Seib.

*Var. floridensis*, Grt. & Rob.

Morris Plains, rare—Neumoegen.

## Sub-Family CHEROCAMPINÆ.

## ÆLLOPOS, Hüb.

*A. tantalus*, Linn.

An occasional visitor; a typically southern species, yet not infrequently taken along the coast. On the Newark list.

## ENYO, Hüb.

*E. lugubris*, Linn.

Also a southern species which is occasionally taken in New Jersey. Not on the Newark list.

## 284 GEOLOGICAL SURVEY OF NEW JERSEY.

**AMPHION, Hüb.****A. nessus, Cram.**

Common locally, but by no means generally distributed. On the Newark list. May and June—Seib.

**THYREUS, Swains.****T. abbotii, Swains.**

Usually common. The ugly larva on Grape is familiar to most. Caldwell, rare—Crane. May—Seib.

**DEIDAMIA, Clem.****D. inscripta, Harr.**

Rare. Seems to be generally distributed, but never obtrusive. Taken by the Newark collectors.

**DEILEPHILA, Ochs.****D. gallii, var. chamaenerii, Harr.**

Not common; seems local and rather more northern. Taken at Newark. Caldwell, rare—Crane.

**D. lineata, Fabr.**

Common throughout the State. The imago is especially fond of flying about the newly-opened flowers of *Enothera* (*Evening Primrose*). July and August—Seib.

**CHEROOCAMPA, Dup.****C. tersa, Linn.**

Rather a southern species, habitually. Taken by the Newark collectors. Caldwell, common—Crane. May, July and September—Seib.

**ARGEUS, Hüb.****A. labruscæ, Linn.**

An occasional visitor from southern climes. I have picked up a specimen on the beach. Not on the Newark list.

## CATALOGUE OF INSECTS.

285

**PHILAMPELUS, Harr.****P. linnei, Grt. & Rob.**

Occasional along the coast. Not on the Newark list.

**P. vitis, Linn.**

Occasional along the coast. Taken by the Newark collectors.

**P. pandorus, Hüb.**Common all over the State. The larva feeds on Grape.  
August—Seib.**P. achemon, Dru.**Common all over the State. The larva on Grape. August—  
Seib.**AMPELOPHAGA, Brem. & Grey.****A. chœrilus, Cram.**Common. Larva on Grape and *Ampelopsis*.**A. myron, Cram.**Common. Larva on Grape and *Ampelopsis*. August—Seib.**A. versicolor, Harris.**Rare. Local in occurrence and seldom in any numbers.  
Taken by the Newark collectors. Larva on "Button-ball."**Sub-Family SPHINGINÆ.****DILOPHONOTA, Burm.****D. ello, Linn.**

Rare. A visitor from the South, and sometimes in some numbers. Taken by the Newark collectors.

**D. obscura, Fabr.**

A very occasional visitor. Recorded on the Newark list. At home in the West Indies.

**PROTOPARCE, Burm.****P. celeus, Hüb.**

Not usually common. The larva on Potato, throughout the State.

## 286 GEOLOGICAL SURVEY OF NEW JERSEY.

*P. carolina*, Linn.

Common. The larva is the well-known tomato worm, found everywhere in the State.

*P. rustica*, Fabr.

Not common. I have seen it from the State in some New York collection. Not taken by the Newark collectors.

*P. cingulata*, Fabr.

Rare. Generally distributed, but nowhere abundant. On the Newark list.

## SPHINX, Linn.

*S. kalmiae*, S. & A.

Not rare. Generally distributed. Taken by Newark collectors. June—Seib.

*S. drupiferarum*, S. & A.

Generally distributed. Taken by Newark collectors. Caldwell, rare—Crane. July and August—Seib.

*S. gordius*, Cram.

Not usually common. Generally distributed. It is on the Newark list. June—Seib. Caldwell, common—Crane.

*S. luscitiosa*, Clem.

Rare, and apparently very local; food-plant, Willow. Taken by Newark collectors.

*S. chersis*, Hüb.

Not usually common, somewhat local, but from all parts of the State. July—Seib.

*S. eremita*, Hüb.

Not rare, and sometimes quite common. Recorded on the Newark list. Caldwell, rare—Crane.

*S. plebeius*, Fabr.

Not rare. Generally distributed. Taken by the Newark collectors. Caldwell, rare—Crane. In June—Seib.

## DOLBA, Walk.

*D. hylaeus*, Dru.

Generally distributed, but by no means common. Taken by the Newark collectors. Caldwell, rare—Crane.

## CATALOGUE OF INSECTS.

287

CHLÆNOGRAMMA, Smith.**C. jasminearum**, Bdv.

Rare. Taken by Newark collectors. Caldwell, rare—Crane.

CERATOMIA, Harris.**C. amyntor**, Hüb.

Not rare. Generally distributed throughout the State. The larva feeds on Elm and Linden, and is readily recognized by the four thoracic horns in addition to the usual anal horn.

**C. undulosa**, Wlk.

Not usually rare. Quite generally distributed. Caldwell, rare—Crane. June and August—Seib.

ELLEMA, Clem.**E. harrisii**, Clem.Very rare. Feeds, in the larva state, on *Conifers*. Taken by Newark collectors.**E. coniferarum**, S. & A.Rare. Perhaps even more so than the preceding. Also on *Conifers*. It is on the Newark list.Sub-Family SMERINTHINÆ.TRIPTOGON, Brem.**T. modesta**, Harr.

Rare. One of the largest and the handsomest of our species. The larva on Poplar. Taken by Newark collectors.

SMERINTHUS, Latr.**S. geminatus**, Say.

Common. Generally distributed. On the Newark list. Caldwell, rare—Crane. In August—Seib.

PAONIAS, Hüb.**P. excruciatus**, S. & A.

Common throughout the State.

## 288 GEOLOGICAL SURVEY OF NEW JERSEY.

**P. myops**, S. & A.

Rare. Locally the larvæ are often somewhat common on Wild Cherry, *Prunus serotina*. Caldwell, rare—Crane. Newark.

**P. astylus**, Dru.

Very rare, and apparently very local. Taken by the Newark collectors. June and July—Seib.

**CRESSONIA**, Grt. & Rob.**O. juglandis**, S. & A.

Not rare, yet usually by no means common. Generally distributed. Caldwell, common—Crane. Newark, in June—Seib.

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**Family SESIIDÆ.****MELITTIA**, Hüb.**M. ceto**, Westw.

Generally distributed. The larva bores in the roots and stems of *Cucurbitaceæ*. Caldwell, common—Crane. Newark, in July—Seib.

**ALCATHOE**, Hy. Edw.**A. caudatum**, Harr.

Caldwell, rare—Crane.

**TROCHILIUM**, Scop.**T. apiforme**, Linn.

Rare. Taken by Newark collectors.

**BEMBECIA**, Hüb.**B. marginata**, Harr.

Rare. Generally distributed. The larva bores in canes of Blackberry.

**FATUA**, Hy. Edw.**F. denudata**, Harr.

Morris Plains, rare—Neumoegen.

## CATALOGUE OF INSECTS.

289

## PODOSESIA, Moeschl.

**P. syringæ**, Harris.Common. The larva bores in *Syringa*.

## SANNINA, Walk.

**S. exitiosa**, Say.

This is the well-known "Peach Borer," and occurs all over the State. May and June—Seib.

## SESSIA, Fabr.

**S. pictipes**, Grt. & Rob.

Not common. Generally distributed. Taken by the Newark collectors.

**S. pyri**, Harr.

Larva in Apple and Pear; usually not common.

**S. acerni**, Clem.

Larva in Maple; often quite common.

**S. tipuliformis**, Linn.

Larva in Currant and Gooseberry; sometimes quite destructive.

**S. albicornis**, Hy. Edw.

Morris Plains, rare—Neumoegen.

## Family THYRIDÆ.

## THYRIS, Illiger.

**T. maculata**, Harr.

Not common. Taken occasionally on flowers, quite early in the season. Caldwell, rare—Crane.

**T. lugubris**, Boisd.

Not rare. Taken quite commonly in Ocean county and Atlantic county. Not taken by the Newark collectors. Morris Plains—Neumoegen.

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## 290 GEOLOGICAL SURVEY OF NEW JERSEY.

**Family AGARISTIDÆ.****ALYPIA, Hüb.****A. octomaculata, Fabr.**

Common about cities, on Grape. Quite rarely found in the open country. Sometimes quite destructive, in June—Seib.

**PSYCHOMORPHA, Harr.****P. epimenis, Dru.**

Rare. The larva on Grape. Taken by the Newark collectors.

**EUDRYAS, Boisd.****E. unio, Hüb.**

Not usually common. Local, but occurring all over the State. Larva on Grape. Caldwell, common—Crane. June—Seib.

**E. grata, Fabr.**

Rare; local. Larva on Grape. Caldwell—Crane.

**Family SYNTOMIDÆ.****LYCOMORPHA, Harris.****L. pholus, Dru.**

Quite common late in summer, on Golden Rod.

**Family CTENUCHIDÆ.****SCEPSIS, Walk.****S. fulvicollis, Hüb.**

Not rare. Generally distributed.

**CTENUCHA, Kirby.****C. virginica, Charp.**

Not common. Often taken on *Spirea* when in bloom.

## CATALOGUE OF INSECTS.

291

## Family PYROMORPHIDÆ.

## HARRISINA, Pack.

*H. americana*, Harr.

Common locally. The larva is sometimes quite destructive to  
Grape.

## PYROMORPHA, H-S.

*P. dimidiata*, H-S:

Rare. I have taken two specimens in Ocean county. Not  
taken by the Newark collectors.

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## Family LITHOSIIDÆ.

## NOLA, Leach.

*N. melanopa*, Zell.

Not common. A few specimens at light.

Two species not satisfactorily determinable, taken by me this  
season (1889).

## ARGYROPHYES, Grt.

*A. nigrofasciata*, Zell.

Rare. Two specimens at light. Not on the Newark list.

## OLEMENSIÀ, Pack.

*O. albata*, Pack.

Rare. Taken by Newark collectors.

## HYPOPREPIA, Hüb.

*H. fucosa*, Hüb.

Common. Beaten from Pines; also in mossy meadows. July  
—Seib.

## EUPHANESSA, Pack.

*E. mendica*, Walk.

Not rare. I have taken it in the Orange Mountains. On the  
Newark list.

## 292 GEOLOGICAL SURVEY OF NEW JERSEY.

**Family ARCTIIDÆ.****CROCOTA, Hüb.*****O. rubicundaria*, Hüb.**

Not rare. Quite generally distributed. Taken by Newark collectors.

***O. brevicornis*, Walk.**

I have taken this in Ocean county. Not on the Newark list.

***O. ferruginosa*, Walk.**

Caldwell, rare—Crane.

***O. opella*, Grote.**

I have taken this near Jamesburg.

**UTETHEISA, Hüb.*****U. bella*, Linn.**

Locally common. I have taken it on the beach at Sandy Hook.

**CALLIMORPHA, Latr.*****C. clymene*, Brown.**

Taken by the Newark collectors. Locally common.

***C. militaris*, Harris.**

Taken by Newark collectors. Not rare.

***C. contigua*, Walk.**

Recorded on the Newark list.

***C. fulvicosta*, Clem.**

Taken by Newark collectors.

I have taken none of these forms in the State myself, but have taken them in the same faunal district. The species are locally common.

**ARCTIA, Schrank.*****A. virgo*, Linn.**

Not usually common. Generally distributed. Caldwell, common—Crane.

***A. saundersii*, Grt.**

Rare. A single specimen has been taken near Newark.

## CATALOGUE OF INSECTS.

293

**A. phyllira**, Dru.

Not commonly taken by Newark collectors. Caldwell, common—Crane.

**A. figurata**, Dru.

Rare. Only a few specimens taken.

**A. nais**, Dru.

Common. Found all over the State. May and September—Seib.

**A. decorata**, Saund.

Not common. Taken by Newark collectors.

**A. virguncula**, Kirby.

Not common. It is on the Newark list.

**A. arge**, Dru.

Not common. More general in the northern parts of the State. It is on the Newark list. Caldwell, rare—Crane. May—Seib.

**PYRRHAROTIA**, Pack.**P. isabella**, S. & A.

A common species all over the State. May—Seib.

**PHRAGMATOBIA**, Harris.**P. rubricosa**, Harris.

Not common. Taken by Newark collectors. Caldwell, rare—Crane.

**LEUCARCTIA**, Pack.**L. acrea**, Dru.

Common along the coast. Newark. Caldwell. Readily attracted by light.

**SPILOSOMA**, Steph.**S. virginica**, Fabr.

Common throughout the State.

**S. latipennis**, Stretch.

Rare. Taken in fresh water—swampy localities.

**S. antigone**, Strk.

Rare. Taken near Newark. I have myself taken it on Staten Island, N. Y., but not as yet in New Jersey. Mr. Beutenmüller says the larva feeds in mushrooms.

## 294 GEOLOGICAL SURVEY OF NEW JERSEY.

**HYPHANTRIA, Harris.****H. cunea, Dru.**

The parent of the common Fall Web Worm. Common throughout the State.

**EUCHÄTES, Harris.****E. egle, Drury.**

Common. Larva on *Asclepias*. June—Seib.

**E. eglenensis, Clem.**

More rare. Taken by Newark collectors.

**E. oregonensis, Stretch.**

Not recorded from New Jersey, but I have seen it from Long Island, and it is almost certain to occur with us.

**E. collaris, Fitch.**

Common. Generally distributed. Larva on *Asclepias*.

**EOPANTHERIA, Hüb.****E. scribonia, Stoll.**

Not rare. The larva is more commonly seen than the imago, and is more abundant southwardly.

**HALESIDOTA, Hub.****H. tessellata, S. & A.**

Common throughout the State. The larva quite a nuisance on shade trees. June—Seib.

**H. caryæ, Harris.**

Common. Generally distributed. May—Seib.

**Family LIPARIDÆ.****ORGYIA, Ochs.****O. leucosigma, S. & A.**

Common throughout the State. The larva is an indiscriminate feeder on shade trees.

## CATALOGUE OF INSECTS.

295

*O. oblivious*, Hy. Edw.

Probably only a variety of the preceding. Taken near the Hudson.

**PARORGYIA, Pack.***P. leucophæa*, S. & A.

Not common. Recorded on the Newark list. Morris Plains, rare—Neumoegen.

*P. clintonii*, Grt. & Rob.

• Not common. Recorded on the Newark list.

*P. parallela*, Grt. & Rob.

Not common. Recorded on the Newark list.

*P. schatina*, S. & A.

Not common. Recorded on the Newark list.

*P. cinnamomea*, Grt. & Rob.

I took a specimen of this species years ago near Jersey City.

**LAGOA, Harris.***L. crispata*, Pack.

Not rare. Generally distributed.

**Family LIMACODIDÆ.****EUCLEA, Hüb.***E. querceti*, H-S.

Not rare. Generally distributed.

*E. bifida*, Pack.

Recorded on the Newark list.

*E. paenulata*, Clem.

Recorded on the Newark list.

**PARASA, Moore.***P. chloris*, H-S.

Not usually rare. Quite generally distributed. Caldwell, rare—Crane.

## 296 GEOLOGICAL SURVEY OF NEW JERSEY.

**P. fraterna**, Grt.

Not rare. I have seen it only from the eastern part of the State.

**EMPRETIA**, Clem.**E. stimulea**, Clem.

Common. Generally distributed. Larva on Pear, Cherry and Apple.

**PHOBETRON**, Hüb.**P. pitheciun**, S. & A.

Not common. Generally distributed. Larva also on Pear.

**LIMACODES**, Latr.**L. scapha**, Harris.

Not rare. Generally distributed. Rare at Caldwell—Crane.

**L. biguttata**, Pack.

Taken by Newark collectors.

**L. Y-inversa**, Pack.

Not rare. Generally distributed.

**L. rectilinia**, Grt. & Rob.

I have had specimens from the northern part of the State, near the New York line.

**L. fasciola**, H-S.

Rather common. Generally distributed. Rare at Caldwell—Crane.

**SISYROSEA**, Grt.**S. inornata**, Grt. & Rob.

Recorded by the Newark collectors.

**ADONETA**, Clem.**A. spinuloides**, H-S.

Not rare. Quite generally distributed.

**PACKARDIA**, Grt. & Rob.**P. geminata**, Pack.

I have determined this species from New Jersey. It is not on the Newark list.

## CATALOGUE OF INSECTS.

297

*P. ocellata*, Grt.

Recorded on the Newark list.

*P. albipuncta*, Pack.

Recorded as taken near Newark.

*P. nigripunctata*, Good.

Recorded by the Newark collectors from that locality.

## TORTRICIDIA, Pack.

*T. testacea*, Pack.

Not common. Generally distributed. On the Newark list.

## Family PSYCHIDÆ.

## PSYCHE, Ochs.

*P. confederata*, Grt.

Recorded on the Newark list.

## THYRIDOPTERYX, Steph.

*T. ephemeraeformis*, Steph.

The common "bag-worm." Often very injurious to Arborvitæ, and feeding quite indiscriminately on shade trees.

## PEROPHORA, Harris.

*P. melsheimerii*, Harr.

Rare. Generally distributed. It is on the Newark list, and I have it from Ocean county. June—Seib.

## Family PTILODONTIDÆ.

## ICHTHYURA, Hüb.

*I. inclusa*, Hüb.

Common. Generally distributed.

*I. albosigma*, Fitch.

More rare. Recorded on the Newark list. June—Seib.

## 298 GEOLOGICAL SURVEY OF NEW JERSEY.

**APATELODES, Pack.****A. torrefacta, S. & A.**

Not common. Generally distributed.

**A. angelica, Pack.**

Rare. I have seen specimens from the State. Not on the Newark list. Lake Hopatcong—Palm.

**DATANA, Walk.****D. ministræ, Dru.**

Common. The larva is the well-known yellow-necked apple tree caterpillar.

**D. angusii, Grt. & Rob.**

Locally common. On the Newark list.

**D. major, Grt. & Rob.**

Not common. Taken by the Newark collectors.

**D. integerrima, Grt. & Rob.**

Not rare. Taken by the Newark collectors. Common at Caldwell—Crane.

**D. contracta, Walk.**

Locally common. Generally distributed.

**D. perspicua, Grt. & Rob.**

Common. Generally distributed.

**NADATA, Walk.****N. gibbosa, S. & A.**

Not common. Generally distributed. Caldwell, rare—Crane. August—Seib.

**N. doubledayi, Pack.**

Rare. On the Newark list.

**HYPARPAX, Hüb.****H. aurora, S. & A.**

Not common. Generally distributed. Newark, in June, August and September—Seib.

## CATALOGUE OF INSECTS.

299

## NOTODONTA, Ochs.

*N. stragula*, Grt.

Not common. On the Newark list. Caldwell, rare—Crane.  
July and August—Seib.

*N. basitriens*, Walk.

Not on the Newark list, but I have had it from the State.  
Probably rare.

## LOPHODONTA, Pack.

*L. ferruginea*, Pack.

On the Newark list. Not common.

*L. angulosa*, S. & A.

Taken by the Newark collectors. June—Seib.

*L. georgica*, H-S.

Not common. Taken by the Newark collectors.

## PHEOSIA, Hüb.

*P. rimosa*, Pack.

Rare. Taken near Newark. Also in Ocean county.

## NERICE, Walk.

*N. bidentata*, Walk.

Not rare. Generally distributed. Caldwell, rare—Crane.

## EDEMA, Walk.

*E. albifrons*, S. & A.

Common at Newark. Readily attracted to light. Rare at  
Caldwell—Crane.

## SEIROPONTA, Grt. &amp; Rob.

*S. bilineata*, Pack.

Not rare. Generally distributed. Not on the Newark list.

## EDEMOMASIA, Pack.

*O. concinna*, S. & A.

Common. Generally distributed.

*O. eximia*, Grt.

Morris Plains, rare—Edwards.

## 300 GEOLOGICAL SURVEY OF NEW JERSEY.

*O. badia*, Pack.

More rare. Taken near Newark. Morris Plains, rare—Edwards.

*DASYLOPHIA*, Pack.*D. anguina*, S. & A.

Not common. I have taken it near Jersey City. Newark, in July—Seib.

*D. interna*, Pack.

Taken near Jamesburg. Not on the Newark list.

*CŒLODASYS*, Pack.*C. leptinoides*, Grt.

Newark—Angelman. Morris Plains, rare—Neumoegen.

*C. unicornis*, S. & A.

Common, locally. On the Newark list.

*C. apicalis*, Grt. & Rob.

Recorded on the Newark list.

*C. biguttata*, Pack.

Not rare. Generally distributed.

*Var. cinereofrons*, Pack.

With the type form, in equal numbers.

*C. telfer*, Grt.

Recorded on the Newark list.

*IANASSA*, Walk.*I. lignicolor*, Walk.

Not common. Generally distributed. Not on the Newark list. Caldwell, rare—Crane.

*HETEROCLAMPA*, Doubt.*H. obliqua*, Pack.*Var. brunnea*, Grt. & Rob.*H. trouvelotii*, Pack.*H. pulvrea*, Grt. & Rob.

Caldwell, rare—Crane. Newark—Angelman.

## CATALOGUE OF INSECTS.

301

**H. marthesia**, Cram.**H. guttivitta**, Walk.**H. biundata**, Walk.**H. marina**, Pack.

All the above are on the Newark list. The following in addition I know occur in the State:

**H. cinerea**, Pack.**H. unicolor**, Pack.

Caldwell, rare—Crane.

**H. subalbicans**, Grt.

These I have either taken myself, or seen from the State.

**CERURA**, Schrank.**C. borealis**, Boisd.**C. occidentalis**, Lint.**C. cinerea**, Walk.**C. multiscripta**, Riley.

All of these are on the Newark list. I have taken *borealis* and *cinerea* only; *multiscripta* is rare.

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**Family PLATYPTERYGIDÆ.****PLATYPTERYX**, Laep.**P. arcuata**, Walk.

Not rare. Generally distributed. Newark, in August—Seib.

**PRIONIA**, Hub.**P. bilineata**, Pack.

Rare. I have taken it in Ocean county.

**DRYOPTERIS**, Grt.**D. rosea**, Walk.

Not rare. Generally distributed.

## 302 GEOLOGICAL SURVEY OF NEW JERSEY.

**Family SATURNIIDÆ.****Sub-Family ATTACINÆ.****ATTACUS, Linn.****A. promethea, Dru.**

Common all over the State.

**A. angulifera, Walk.**

Rare. Taken in small numbers all over the State.

**A. cecropia, Linn.**

Common. Sometimes injurious to Grape and small fruits.

**SAMIA, Hüb.****S. cynthia, Drury.**Common along the main line of the Pennsylvania railroad, and for some distance around Jersey City and Newark. Feeds on the *Ailanthus*.**Sub-Family SATURNIINÆ.****ACTIAS, Leach.****A. luna, Linn.**

Not rare. Generally distributed.

**TELEA, Hüb.****T. polyphemus, Cram.**

Common all over the State.

**HYPEROCHIRIA, Hüb.****H. io, Fabr.**

Common all over the State. The larva sometimes injurious to Corn.

## CATALOGUE OF INSECTS.

203

**Family CERATOCAMPIDÆ.****EACLES, Hüb.***E. imperialis*, Drury.

Usually common throughout the State. Rare at Caldwell—Crane. Newark, in July—Seib.

**CITHERONIA, Hüb.***C. regalis*, Fabr.

Not common. Generally distributed.

**SPHINGICAMPA, Walsh.***S. bicolor*, Harris.

I have taken this on the coast in a single specimen. Not on the Newark list.

**ANISOTA, Hüb.***A. stigma*, Fabr.*A. senatoria*, S. & A.

Caldwell, common—Crane.

*A. virginiensis*, Dru.

The latter is comparatively scarce, and is not on the Newark list. They are all generally distributed.

**DRYOCAMPA, Harris.***D. rubicunda*, Fabr.

Common throughout the State. Sometimes quite injurious to Maple.

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**Family LACHNÆIDÆ.****HEMILEUCA, Walk.***H. maia*, Drury.

Rare in this State, but I have seen it in collections marked "New Jersey."

## 304 GEOLOGICAL SURVEY OF NEW JERSEY.

**CLISIOOCAMPA, Curtis.***C. americana*, Harris.

Newark, in June—Seib.

*C. disstria*, Hüb.

Both species are quite common all over the State.

**GASTROPACHA, Ochs.***G. americana*, Harris.

Rare. Generally distributed. On the Newark list. Caldwell, rare—Crane.

**ARTACE, Walk.***A. punctistriga*, Walk.

Rare. Taken by Newark collectors.

**TOLYPE, Hüb.***T. velleda*, Stoll.

Not common. Generally distributed. Caldwell, rare—Crane. Newark, in September—Seib.

**Family COSSIDÆ.****COSSUS, Fabr.***C. reticulatus*, Lint.

Rare. Taken by Newark collectors.

**PRIONOXYSTUS, Grt.***P. robiniae*, Peck.Common. The larva bores in the Locust (*Robinia*). Rare at Caldwell—Crane. Newark, in June—Seib.*P. querciperda*, Fitch.

Rare. Taken by Newark collectors.

**ZEUZERA, Latr.***Z. aesculi*, Linn.

Confined to the vicinity of Newark as yet, where it bores in the branches of Elm. A quite recent importation.

## CATALOGUE OF INSECTS.

305

**HEPIALUS, Fabr.****H. auratus, Grt.**

Recorded on the Newark list.

**H. argenteomaculatus, Harr.**

Caldwell, rare—Crane.

**Family NOCTUIDÆ.**

The list in this family is largely compiled from my own notes of collections and recorded localities. The species are generally distributed except where otherwise noted, and I have starred (\*) those not on the Newark list. To this family belong the cut-worms, and sufficient material is not at hand to indicate the more accurate limits of local species.

**Sub-Family CYMATOPHORINÆ.****LEPTINA, Gn.****\*L. dormitans, Gn.****\*L. doubledayi, Gn.****THYATIRA, Oehs.****\*T. pudens, Gn.****PSEUDOTHYATIRA, Grt.****P. cymatophoroides, Gn.****Var. expultrix, Grt.**

Caldwell, common—Crane.

**HABROSYNE, Hüb.****H. scripta, Gosse.****Sub-Family NOCTUINÆ.****DICOPIS, Grt.****D. depilis, Grt.****D. muralis, Grt.**

Newark—Hampsen.

u

## 306 GEOLOGICAL SURVEY OF NEW JERSEY.

**DEMAS, Steph.****D. flavigornis**, Smith.

Newark; rare.

**CHARADRA, Walk.****C. deridens**, Gn.**RAPHIA, Hüb.****R. frater**, Grt.**FERALIA, Grt.****F. jocosa**, Gn.

A rare species. Taken only by the Newark collectors. On Hemlock.

**DIPHTHERA, Hüb.****D. fallax**, H-S.

Caldwell, rare—Crane. Newark, in May—Seib.

**ACRONYCTA, Ochs.****A. vinnula**, Grt.

Newark, in June—Seib.

\***A. grisea**, Walk.**A. tritona**, Hüb.**A. occidentalis**, Grt. & Rob.

Caldwell, common—Crane.

**A. lobeliae**, Gn.

Newark, in June and August—Seib.

\***A. morula**, Grt. & Rob.\***A. radcliffei**, Harv.**A. innotata**, Gn.**A. betulæ**, Riley.**A. americana**, Harris.

Caldwell, common—Crane. Common also at New Brunswick.

\***A. rubricoma**, Gn.**A. brumosa**, Gn.

Newark, in May—Seib.

## CATALOGUE OF INSECTS.

307

- A. noctivaga**, Grt.  
Caldwell, rare—Crane.
- A. superans**, Gn.  
Caldwell, rare—Crane.
- A. clarescens**, Gn.  
Caldwell, common—Crane.
- A. ovata**, Grt.
- A. hamamelis**, Gn.  
Caldwell, rare—Crane. Newark, in May—Seib.
- \***A. hæsitata**, Grt.
- A. dissecta**, Grt. & Rob.  
Caldwell, rare—Crane. Newark—Seib.
- A. sperata**, Grt.
- A. lithospila**, Grt.
- \***A. connecta**, Grt.
- A. oblinita**, S. & A.  
Common at Caldwell—Crane.

**ARSILONCHE**, Led.

- A. albovenosa**, Goetze.  
Anglesea. Newark.

**HARRISIMEMNA**, Grote.

- H. triagnata**, Walk.  
A rare and strikingly-marked species. Caldwell, one specimen—Crane.

**MICROCELIA**, Gn.

- M. diphtheroides**, Gn.  
*Var. obliterata*, Grt.  
Caldwell, common—Crane. Newark—Seib.

**BRYOPHILA**, Tr.

- \***B. lepidula**, Grt.  
Caldwell, rare—Crane.

## 308 GEOLOGICAL SURVEY OF NEW JERSEY.

## CHYTONIX, Grt.

\**C. palliatricula*, Gn.

## AGROTIS, Tr.

\**A. sigmoides*, Gn.

\**A. perattenta*, Grt.

*A. phyllophora*, Grt.

Newark, in May—Seib.

*A. rubifera*, Grt.

*A. baja*, S. V.

Caldwell, common—Crane.

*A. normaniana*, Grt.

Caldwell—Crane.

*A. c-nigrum*, Linn.

Caldwell, common—Crane. Found throughout the State.

*A. bicarnea*, Gn.

Caldwell, rare—Crane.

*A. haruspica*, Grt.

*A. subgothica*, Haw.

Caldwell, common—Crane. Found throughout the State.

*A. tricosa*, Lint.

*A. herelis*, Grt.

*A. plecta*, Linn.

Caldwell, rare—Crane.

*A. cupida*, Grt.

*A. alternata*, Grt.

Newark—Angelman.

\**A. brunneicollis*, Grt.

*A. clandestina*, Harris.

Caldwell, common—Crane. Newark, in June—Seib.

*A. messoria*, Harris.

*A. murænula*, Grt. & Rob.

## CATALOGUE OF INSECTS.

309

- A. bostoniensis**, Grt.  
**A. pitychrous**, Grt.  
**A. tessellata**, Harris.  
    Caldwell, rare—Crane.  
**A. campestris**, Grt.  
**\*A. redimicula**, Morr.  
**A. geniculata**, Grt. & Rob.  
    Caldwell, rare—Crane.  
**A. badinodes**, Grt.  
    Caldwell, common—Crane.  
**\*A. collaris**, Grt. & Rob.  
**A. velleripennis**, Grt.  
    In the Newark collections.  
**\*A. pastoralis**, Grt.  
**\*A. morrisoniana**, Riley.  
**\*A. gladiaria**, Morr.  
    Newark—Angelman.  
**\*A. venerabilis**, Walk.  
**\*A. volubilis**, Harv.  
**A. annexa**, Tr.  
**A. malefida**, Gn.  
**A. ypsilon**, Rott.  
    Common throughout the State.  
**A. saucia**, Hüb.  
    Caldwell, rare—Crane.  
**A. incivis**, Gn.  
    Caldwell, rare—Crane.  
**A. lubricans**, Gn.  
  
**ANYTUS**, Grt.  
**A. sculptus**, Grt.  
  
**ADITA**, Grt.  
**\*A. chionanthi**, S. & A.  
    A rare species, but occurring in single specimens in the State.  
    Not yet taken by the Newark collectors.

## 310 GEOLOGICAL SURVEY OF NEW JERSEY.

MAMESTRA, Ochs.

**M. purpurissata**, Grt.

**M. nimbosa**, Gn.

Recorded on the Newark list. Caldwell, common—Crane.

**M. imbrifera**, Gn.

Recorded on the Newark list. Caldwell, rare—Crane.

**M. latex**, Gn.

**M. adjuncta**, Boisd.

Newark, in August—Seib.

**M. lubens**, Grt.

Newark, in June—Seib.

**M. legitima**, Grt.

**M. lilacina**, Harv.

Newark—Angelman.

**M. rosea**, Harv.

**M. picta**, Harris.

Caldwell, common—Crane. Newark, in June and August—  
Seib.

**M. grandis**, Boisd.

**M. subjuncta**, Grt. & Rob.

\***M. distincta**, Hüb.

Caldwell, common—Crane.

\***M. confusa**, Hüb.

Taken not uncommonly at sugar, by myself. Caldwell, rare  
—Crane. Newark—Seib.

\***M. trifolii**, Rott.

I have taken this during the day on flowers of *Solidago*.  
Caldwell, common—Crane.

**M. pensilis**, Grt.

\***M. detracta**, Walk.

Newark, in June—Seib.

**M. laudabilis**, Gn.

On the Newark list. I have never taken it myself.

## CATALOGUE OF INSECTS.

311

*\*M. olivacea*, Morr.

I have taken this in Ocean county.

*M. lustralis*, Grt.*\*M. meditata*, Grt.

Not rare. Taken at New Brunswick this season (1889), and elsewhere in former years.

*M. renigera*, Steph.*\*M. ectypa*, Morr.Very rare. A unique specimen of this species taken by Mr. Neumoegen, near the Orange Mountains, forms the type of *M. bella*, Grt.LUCERIA, Von Hein.*L. delicata*, Grt.*L. passer*, Gn.HADENA, Schrank.*H. devastatrix*, Brace.

The larva of this species is one of the most injurious cut-worms we have in the State.

*H. arctica*, Boisd.Caldwell, common—Crane. Newark, in September—Seib.  
Generally distributed.*\*H. bridghami*, Grt. & Rob.

The type of this pretty and rare species was collected in this State.

*H. sputatrix*, Grt.

Caldwell, common—Crane.

*H. suffusca*, Morr.*\*H. apamiformis*, Gn.*\*H. vultuosa*, Grt.*H. lignicolor*, Gn.

Caldwell, rare—Crane.

*H. verbascooides*, Gn.

Caldwell, rare—Crane.

*\*H. cariosa*, Gn.

## 312 GEOLOGICAL SURVEY OF NEW JERSEY.

- \**H. sectilis*, Gn.
- \**H. vulgaris*, Grt. & Rob.
- \**H. remissa*, Hüb.
- \**H. finitima*, Gn.
- \**H. impulsa*, Gn.
- \**H. turbulenta*, Gn.

This species I found quite abundant in Ocean county some years since.

*H. miseloides*, Gn.

Caldwell, rare—Crane. Newark, in June and August—Seib.

\**H. modica*, Gn.

Caldwell, rare—Crane.

\**H. vulvivaga*, Morr.

\**H. fractilinea*, Grt.

It is rather strange that the Newark list contains so few species of *Hadena*. All of the starred species are well recorded from the State, and many of them are not at all rare.

**OLIGIA**, Hüb.

\**O. festivoides*, Gn.

Taken not rarely at light, in Ocean county.

*O. grata*, Hüb.

Taken rarely. It is a southern species and common in the District of Columbia.

**PERIGEA**, Gn.

*P. xanthiooides*, Gn.

Caldwell, common—Crane.

*P. infelix*, Gn.

Specimens are in the Newark collections.

*P. luxa*, Grt.

*P. fabrefacta*, Morr.

None of these species are really common, and *P. infelix* is rare, occurring only along the coast on a northern extension of its range, which is southward to Florida.

## CATALOGUE OF INSECTS.

313

## DIPTERYGIA, Steph.

*D. scabriuscula*, Linn.

Caldwell, rare—Crane. Newark, in August—Seib.

## HYPPA, Dup.

*H. xylinoides*, Gn.

Caldwell, rare—Crane. Newark, in August—Seib.

## VALERIA, Gn.

*\*V. grotei*, Morr.

A rare species; single specimens occurring each year in some part of the State. Not on the Newark list.

## DRYOBOTA, Led.

*\*D. stigmata*, Grt.

## ACTINOTIA, Hüb.

*A. ramosula*, Gn.

Caldwell, rare—Crane.

## LAPHYGMA, Gn.

*L. frugiperda*, S. & A.

## PRODENIA, Gn.

*P. commelina*, S. & A.

In Newark collections.

*P. flavimeda*, Harv.

In Newark collections.

*P. lineatella*, Harv.

In the Newark collections.

## TRIGONOPHORA, Hüb.

*T. periculosa*, Gn.*Var. v-brunneum*, Grt.

## EUPLEXIA, Steph.

*E. lucipara*, Linn.

## 314 GEOLOGICAL SURVEY OF NEW JERSEY.

**BROTOLOMIA, Led.***B. iris*, Gn.**NEPHELODES, Gn.***N. minians*, Gn.*Var. violans*, Gn.

Caldwell, rare—Crane. This species is also sometimes quite injurious as a cut-worm. The imago flies during the day, and I have taken it in September, on *Solidago*.

**TRICHLITIA, Grt.***T. semiaperta*, Morr.

Not common. Recorded on the Newark list.

**HELOTROPHIA, Led.***H. reniformis*, Grt.

Caldwell, rare—Crane.

**APAMEA, Tr.***\*A. purpuripennis*, Grt.*\*A. sera*, Grt. & Rob.*A. nictitans*, Bkh.

Caldwell, rare—Crane.

*\*A. immanis*, Gn.

*Purpuripennis* is rare; *sera* is more common; *nictitans* is very abundant and variable throughout the State. *Immanis* is local and not common: in the hop-growing districts of New York it is a serious pest, the larva boring into the crown roots of the Hop and eating off the vine.

**GORTYNIA, Hüb.***\*G. rutila*, Gn.*G. harrisii*, Grt.

Newark—Seib.

*G. speciocissima*, Grt. & Rob.

On the Newark list. I have never seen it from the State.

## CATALOGUE OF INSECTS.

315

**\*G. limpida, Gn.**

Newark, in August—Seib.

**G. cerussata, Grt.**

Newark, in September—Seib.

**G. cataphracta, Grt.**

Caldwell, rare—Crane.

**G. nitela, Gn.**

Bores in stalks of Corn, and sometimes quite injurious.

**ACHATODES, Gn.****A. zea, Harris.**

The larva is also a stalk borer. Rare at Caldwell—Crane.

**ARZAMA, Walk.****A. obliquata, Grt. & Rob.**

Newark, in May and June—Seib.

**A. diffusa, Grt.**

The larvæ of both species bore in the stems of *Typha*, and the insects are of course confined to swampy localities where Cat-tails are abundant.

**MACRONOCTUA, Grt.****M. onusta, Grt.**

Newark—Stortz.

**EUTHISANOTIA, Grt.****E. timais, Cram.**

Rare. A southern species which occasionally finds its way northward.

**SCOЛЕCOСАМРА, Gn.****S. liburna, Geyer.**

Newark, in July—Seib.

**EUCALYPTERA, Morr.****\*E. bipuncta, Morr.**

Found on salt marshes, where the larva probably bores into some of the reeds or grasses.

## 316 GEOLOGICAL SURVEY OF NEW JERSEY.

## DORYODES, Gn.

*D. acutaria*, H-S.

Found on salt marshes.

## PLATYSENTA, Grt.

*P. atriciliata*, Grt.

Also a swamp species, but not, I believe, confined to salt marshes. Caldwell, rare—Crane.

## OMMATOSTOLA, Grt.

*O. lintneri*, Grt.

Anglesea, rare—Laurent.

## LEUCANIA, Ochs.

*L. pallens*, Linn.*L. albilinea*, Hüb.

Known as the "Wheat-head Army Worm" in the larva state; sometimes quite injurious. Caldwell, common—Crane.

*L. phragmatidicola*, Gn.*L. adonea*, Grt.*L. commoides*, Gn.*L. unipuncta*, Haw.

This is the parent of the "Army Worm." Common all over the State.

*L. pseudargyria*, Gn.

Newark, in April and June. Caldwell, rare—Crane.

## UFEUS, Grt.

*U. plicatus*, Grt.

Newark—Seib.

## CARADRINA, Tr.

\**C. multifera*, Walk.

## PYROPHILA, Hüb.

*P. tragopogonis*, Linn.*P. pyramidoides*, Gn.

The larva of this species is sometimes quite abundant on Grape. Newark, in July and August—Seib.

## CATALOGUE OF INSECTS.

317

## ORTHODES, Gn.

*\*O. infirma*, Gn.*\*O. cynica*, Gn.*\*O. enervis*, Gn.

These species are not rare—*infirma*, indeed, is quite common, though it seems to have escaped the Newark collectors.

## TÆNIOCAMPA, Gn.

*\*T. oviduca*, Gn.*\*T. modesta*, Morr.*\*T. alia*, Gn.

Newark, in April—Seib.

*\*T. subterminata*, Smith.

Newark, in April—Seib.

None of these appear on the Newark list, yet all are well recorded from New Jersey.

## CROCIGRAPHA, Grt.

*C. normani*, Grt.

Newark, in April—Seib.

## MORRISONIA, Grt.

*M. vomerina*, Grt.

Newark, in April and May—Seib.

## CALYMNIA, Hüb.

*C. orina*, Gn.

## IPIMORPHA, Hüb.

*I. pleonectusa*, Grt.

## ORTHOSIA, Ochs.

*O. ferrugineoides*, Gn.*Var. bicolorago*, Gn.*\*O. aurantiago*, Gn.*O. disticha*, Morr.

## 318 GEOLOGICAL SURVEY OF NEW JERSEY.

*O. conradi*, Grt.*O. helva*, Grt.

Caldwell, common—Crane.

\**O. lutosa*, Andrews.**GLÆA**, Hüb.\**G. inulta*, Grt.

Caldwell, rare—Crane.

*G. anchoceloides*, Gn.**EPIGLÆA**, Grt.*E. sericea*, Morr.

Fort Lee—Beutenmüller.

**EUCIRREDIA**, Grt.*E. pampina*, Gn.

Caldwell, common—Crane. Newark, in September—Seib.

**JODIA**, Hüb.*J. rufago*, Hüb.

Newark, in April—Seib.

**SCOLIOPTERYX**, Germ.*S. libatrix*, Linn.**SCOPELOSOMA**, Curtis.*S. græflana*, Grt.

Caldwell, rare—Crane. Newark, in April—Seib.

*S. tristigmata*, Grt.*S. ceromatica*, Grt.

Recorded from New Jersey.

*S. devia*, Grt.

Newark, in April—Seib.

*S. sidus*, Gn.*Var. walkeri*, Grt.

Newark, in April—Seib.

## CATALOGUE OF INSECTS.

319

**XYLINA, Ochs.**

- X. petulca**, Grt.  
Caldwell, rare—Crane.
- X. ferrealis**, Grt.  
New Brunswick, in April—Smith.
- X. bethunei**, Grt. & Rob.
- X. fagina**, Morr.
- X. antennata**, Walk.  
Caldwell, rare—Crane. Newark, in September—Seib.
- \***X. laticinerea**, Grt.
- X. cinerosa**, Grt.
- X. unimoda**, Lint.
- X. thaxteri**, Grt.  
Newark—Seib.

**CALOCAMPA, Steph.**

- C. nupera**, Lint.
- C. cineritia**, Grt.
- \***C. curvimacula**, Morr.

**CUCULLIA, Schr.**

- C. convexipennis**, Grt. & Rob.  
Caldwell, rare—Crane.
- C. asteroides**, Gn.
- C. intermedia**, Speyer.

The handsome larvæ of this genus are sometimes seen on  
Golden Rod.

**CRAMBODES, Gn.**

- \***C. talidiformis**, Gn.  
Favors swampy meadows.

**NOLOPHANA, Grt.**

- N. malana**, Fitch.  
Caldwell, common—Crane. Newark, in May—Seib.

## 320 GEOLOGICAL SURVEY OF NEW JERSEY.

\**N. zelleri*, Grt.

Newark, in May—Seib.

These two species are quite frequently confused, and this may account for its absence from the Newark list, though Mr. Seib has taken it there.

**ANOMIS, Hüb.**

*A. erosa*, Hüb.

Really a southern species, but found northwardly each year.

**ALETIA, Hüb.**

*A. argillacea*, Hüb.

The famous cotton moth. It does not breed in this State, so far as has been observed, but is found in considerable numbers almost every year, the imago emigrating from the South.

**MARASMALUS, Grt.**

\**M. ventilator*, Grt.

\**M. histrion*, Grt.

Caldwell, common—Crane.

I have seen both of these handsome species from the State, but the Newark collectors seem not to have run across them as yet.

**INGURA, Gn.**

*I. abrostoloides*, Gn.

*I. delineata*, Gn.

\**I. oculatrix*, Gn.

Caldwell, common—Crane.

The last-named is really the most common everywhere, but is not generally recognized as an *Ingura*.

**CALPE, Tr.**

*C. canadensis*, Beth.

**PLUSIODONTA, Gn.**

\**P. compressipalpis*, Gn.

One of our most beautiful species, and rare. It is rather more common to the north, and has not yet turned up near Newark.

## CATALOGUE OF INSECTS.

321

## PHIPROSOPUS, Grt.

*P. callitrichoides*, Grt.

## HYPSOROPHA, Hüb.

*\*H. hormos*, Hüb.

Newark—Macheaney. Taken in Ocean county; also near Jersey City.

## THELESILLA, H-S.

*T. cinereola*, Gn.

Caldwell, common—Crane.

## ABROSTOLA, Ochs.

*A. ovalis*, Gn.

Newark—Seib.

*\*A. urentis*, Gn.

I have collected this species on Long Island, and I have seen it from the vicinity of Philadelphia. It is certain to occur in New Jersey.

## PLUSIA, Fabr.

*P. serea*, Hüb.

Caldwell, common—Crane.

*P. sereoides*, Grt.*P. contexta*, Grt.

Caldwell, rare—Crane.

*P. putnami*, Grt.*P. formosa*, Grt.

Rare near Newark.

*\*P. verruca*, Fabr.

This handsome form has been taken not rarely, near Greenville, by Mr. Loitloff. Newark, in May—Seib.

*P. precatonis*, Gn.

Newark, in September—Seib.

*P. laticlavia*, Morr.

Newark, in October—Seib.

## 322 GEOLOGICAL SURVEY OF NEW JERSEY.

**P. brassicæ**, Riley.

Sometimes quite injurious to Cabbages, in the larva state.

**P. mortuorum**, Gn.

Rare. Taken near Newark.

**P. simplex**, Gn.

Newark, in October—Seib. Caldwell, rare—Crane.

**PLAGIOMIMICUS**, Grt.

**P. pitychromus**, Grt.

**SOCHINIA**, Hüb.

**S. trifascia**, Hüb.

Caldwell, rare—Crane.

**S. nundina**, Dru.

Taken on *Spiraea*, near Jamesburg. Also on the Newark list.

**S. spinosæ**, Gn.

Sandy Hook—Beutenmüller.

**ANTHCEOIA**, Gn.

**A. rivulosa**, Gn.

**A. lynx**, Gn.

I have seen specimens in collections. One near Newark.

**RHODOPHORA**, Gn.

**R. florida**, Gn.

The larva feeds in the buds and seed capsules of *Oenothera*.

**PYRRHIA**, Hüb.

**P. umbra**, Hüb.

Caldwell, rare—Crane. Newark, in June—Seib.

**DERRIMA**, Walk.

**D. henrietta**, Grt.

**HELIOTHIS**, Hüb.

**H. armiger**, Hüb.

The larva is the cotton-boll worm of the South, the corn worm of the North, and it varies its diet on occasions by eating into Tomatoes.

## CATALOGUE OF INSECTS.

323

## CIRRHOPHANUS, Grt.

*C. triangulifer*, Grt.Caldwell, rare—Crane. Newark—Hampsen. Philadelphia  
—Laurent.

## TARACHE, Hüb.

*T. aprica*, Hüb.*T. erastrioides*, Gn.\**T. candefacta*, Hüb.*T. delecta*, Walk.

## THALPOCHARES, Led.

*T. patula*, Morr.

## LITHACODIA, Hüb.

*L. bellicula*, Hüb.

## CHAMYRIS, Gn.

*C. cerintha*, Tr.

Caldwell, rare—Crane. Newark, in June—Seib.

## EUSTROTIA, Hüb.

*E. concinnimacula*, Gn.

Caldwell, rare—Crane.

\**E. synochitis*, Grt. & Rob.*E. musta*, Grt. & Rob.*E. muscosula*, Gn.

Caldwell, common—Crane.

*E. carneola*, Gn.

Caldwell, rare—Crane.

*E. apicosa*, Harv.

Caldwell, common—Crane. Newark, in July—Seib.

## HERRICHLIA, Grt.

*H. mollissima*, Gn.\**H. monetifera*, Gn.

I have taken this in Ocean county. Newark—Seib.

## 324 GEOLOGICAL SURVEY OF NEW JERSEY.

**SPRAGUEIA, Grt.****\*S. onagrus, Gn.**

A pretty little species, apparently rare here.

**XANTHOPTERA, Gn.****\*X. nigrofimbria, Gn.****X. semiflava, Gn.****EXYRA, Grt.****E. semicrocea, Gn.****PROTHYMIA, Hüb.****P. coccineifascia, Grt.****\*P. rosalba, Grt.****METOPONIA, Dup.****M. obtusa, H-S.**

Caldwell, common—Crane.

**GALGULA, Gn.****\*G. hepara, Gn.****\*G. subpartita, Morr.****DRASTERIA, Hüb.****D. erechtea, Cram.**

Caldwell, common—Crane. Newark, in April—Seib.

**EUOLIDIA, Hüb.****E. cuspidea, Hüb.****SYNEDA, Gn.****S. graphica, Hüb.**

Sandy Hook—Seib. Ocean county, in May—Smith.

**S. jucunda, Hüb.****CATOCALA, Schrank.**

As this is a favorite genus with collectors, the list is large, and perhaps fairly complete. All are on the Newark list, and I imagine but few species will be added to it. All the species are quite general.

## CATALOGUE OF INSECTS.

325

ally distributed, though each locality differs somewhat in the make-up of its fauna, and species rare in one district will be common in others.

- C. epione*, Dru.  
*C. lacrymosa*, Gn.  
*C. viduata*, Gn.  
*C. desperata*, Gn.  
    Caldwell, common—Crane.  
*C. reecta*, Grt.  
    Caldwell, common—Crane.  
*C. flebilis*, Gr.  
    Caldwell, rare—Crane.  
*C. robinsonii*, Gr.  
    Caldwell, rare—Crane.  
*C. obscura*, Strk.  
    Caldwell, rare—Crane.  
*C. insolabilis*, Gn.  
    Caldwell, rare—Crane.  
*C. angusi*, Grt.  
*C. residua*, Grt.  
*C. tristis*, Edw.  
    Caldwell, rare—Crane.  
*C. relicta*, Walk.  
*Var. phrynia*, Hy. Edw.  
*C. amatrix*, Hüb.  
    Caldwell, rare—Crane.  
*C. cara*, Gn.  
    Caldwell, common—Crane. Newark, in July—Seib.  
*C. concumbens*, Walk.  
    Caldwell, common—Crane. Newark, in August—Seib.  
*C. unijuga*, Walk.  
    Newark, in August and September—Seib.  
*C. briseis*, Edw.

## 326 GEOLOGICAL SURVEY OF NEW JERSEY.

- C. faustina**, Strk.  
Caldwell, rare—Crane.
- C. parta**, Gn.
- C. coccinata**, Grt.
- C. verrilliana**, Grt.
- C. ultronia**, Hüb.  
Caldwell, common—Crane. Newark, in August—Seib.
- C. marmorata**, Edw.
- C. ilia**, Cram.  
Caldwell, common—Crane. Newark, in July—Seib.
- C. innubens**, Gn.
- C. cerogama**, Gn.  
*Var. bunkeri*, Grt.  
Caldwell, rare—Crane.
- C. neogama**, S. & A.  
Caldwell, common—Crane.
- C. subnata**, Grt.  
Caldwell, rare—Crane.
- C. piatrix**, Grt.  
Caldwell, common—Crane. Newark, in August—Seib.
- C. paleogama**, Gn.  
Caldwell, rare—Crane. Newark, in August and September—  
Seib.  
*Var. phalanga*, Grt.
- C. habilis**, Grt.  
*Var. basilis*, Grt.
- C. nebulosa**, Edw.
- C. muliercula**, Gn.
- C. consors**, Gn.
- C. antinympha**, Hüb.  
Caldwell, common—Crane.
- C. badia**, Grt. & Rob.
- C. serena**, Edw.  
Caldwell, rare—Crane.

## CATALOGUE OF INSECTS.

327

*C. polygama*, Gn.

Caldwell, rare—Crane.

*C. pretiosa*, Lint.*C. similis*, Edw.*C. præclara*, Grt. & Rob.

Caldwell, common—Crane.

*C. grynea*, Cram.

Caldwell, common—Crane. Newark, in July—Seib.

*C. gracilis*, Edw.

Newark, in August—Seib.

*C. minuta*, Edw.*Var. parvula*, Edw.*C. amica*, Hüb.*Var. lineella*, Grt.

Caldwell, common—Crane.

**ALLOTRIA**, Hüb.*A. elonympha*, Hüb.

Caldwell, rare—Crane.

**PARTHENOS**, Hüb.*P. nubilis*, Hüb.

Caldwell, rare—Crane. Newark, in June—Seib.

**PHOBERIA**, Hüb.*P. atomaris*, Hüb.**PSEUDOLIMACODES**, Grt.*P. littera*, Gn.

Newark—Hampsen.

**OELIPTERA**, Gn.*O. frustulum*, Gn.

Caldwell, common—Crane.

**PARALLELIA**, Hüb.*P. bistriaris*, Hüb.

Caldwell, common—Crane. Newark, in May and June—Seib.

## 328 GEOLOGICAL SURVEY OF NEW JERSEY.

**AGNOMONIA, Hüb.***A. anilis*, Dru.**PANOPODA, Gn.***P. carneicosta*, Gn.*P. rufimargo*, Hüb.

Caldwell, rare—Crane. Newark, in June—Seib.

*Var. roseicosta*, Gn.**PLEONECTOPTERA, Grt.***P. geometralis*, Grt.**REMIGIA, Gn.***\*R. latipes*, Gn.**POAPHILA, Gn.***P. quadrifilaris*, Hüb.**TRAMA, Harv.***T. arrossa*, Harv.**HREBUS, Latr.***H. odora*, Linn.**ZALE, Hüb.***Z. horrida*, Hüb.

Caldwell, common—Crane.

**PHEOCYMA, Hüb.***\*P. lunifera*, Hüb.**HOMOPTERA, Boisd.***H. edussa*, Dru.

Newark, in July—Seib.

*Var. saundersii*, Beth.*Var. lunata*, Dru.

Caldwell, common—Crane. Newark, in September—Seib.

*Var. nigricans*, Beth.*H. unilineata*, Grt.*H. obliqua*, Gn.

## CATALOGUE OF INSECTS.

329

**YPSIA, Gn.**

- Y. undularis*, Dru.  
*Var. aeruginosa*, Gn.  
*Var. umbripennis*, Grt.

**PSEUDANTHRCEOIA, Grt.**

- P. coracias*, Gn.

**HOMOPYRALIS, Grt.**

- H. tactus*, Grt.  
Caldwell, common—Crane.

**SPARGOLOMA, Grt.**

- S. umbrifascia*, Grt.

**PANGRAPTA, Hüb.**

- P. decoralis*, Hüb.

**PSEUDAGLOSSA, Grt.**

- P. lubricalis*, Gey.  
Caldwell, common—Crane.

\**P. scobialis*, Grt.

**EPIZHEUXIS, Hüb.**

- E. semula*, Hüb.

Caldwell—Crane. The larva of this species is said to feed on dry, dead leaves.

- E. americanalis*, Gn.

Caldwell—Crane. The larva of this species lives in ants' nests. Food as yet not positively known.

**MEGACHYTA, Grt.**

- \**M. lituralis*, Hüb.

**LITOGNATHA, Grt.**

- \**L. nubilifascia*, Grt.

**CHYTOLITA, Grt.**

- C. morbidalis*, Gn.  
*C. petrealis*, Grt.

## 330 GEOLOGICAL SURVEY OF NEW JERSEY.

**ZANCLOGNATHA, Led.***\*Z. lœvigata*, Grt.*\*Z. ochreipennis*, Grt.**RIVULA, Gn.***R. propinqualis*, Gn.**PALTHIS, Hüb.***P. angulalis*, Hüb.

Caldwell—Crane.

*\*P. asopialis*, Gn.**PHALENOOPHANA, Grt.***\*P. rurigena*, Grt.**RENIA, Gn.***\*R. discoloralis*, Gn.*\*R. brevirostralis*, Grt.*\*R. flavipunctalis*, Geyer.**BLEPTINA, Gn.***B. caradrinalis*, Gn.**HYPENULA, Grt.***H. opacalis*, Grt.**HYPENA, Fabr.***\*H. baltimorensis*, Gn.

Caldwell—Crane. Newark—Seib.

*\*H. bijugalis*, Walk.*\*H. manalis*, Walk.*\*H. abalienalis*, Walk.*\*H. toreuta*, Grt.*\*H. scabra*, Fabr.

Common everywhere in the State.

*H. humuli*, Harr.

Caldwell, common—Crane.

## CATALOGUE OF INSECTS.

331

## Family GEOMETRIDÆ.\*

## CHEROODES, Gn.

*C. clemataria*, S. & A.

Caldwell, common—Crane.

*C. transversata*, Dru.

A generally distributed and rather common species.

*C. furciferata*, Pack.

## TETRACIS, Gn.

*T. crocallata*, Gn.

Caldwell, common—Crane.

*T. lorata*, Grt.

Caldwell, rare—Crane.

## METANEMA, Gn.

*M. quercivoraria*, Gn.*M. inatomaria*, Gn.*M. carnaria*, Pack.

Caldwell, rare—Crane.

## DREPANODES, Gn.

*D. puber*, Grt. & Rob.*D. varus*, Grt. & Rob.

Found, not rarely, in pine woods.

*D. hortularia*, Hulst.

## CABEROODES, Gn.

*C. confusaria*, Hüb.

Occurs everywhere and in the greatest variety, though scarcely abundant.

*C. majoraria*, Gn.

Caldwell, rare—Crane.

\*The material for the list in this family was furnished by Rev. Geo. D. Hulst, of Brooklyn, N. Y., who has made it a special study. It includes the list made by the Newark Society, and the whole is given without distinction by Mr. Hulst, as to source. All comments are my own, and from my own experience, except where otherwise stated.

## 332 GEOLOGICAL SURVEY OF NEW JERSEY.

**ENNOMOS, Tr.****E. alniaria, Linn.**

Sometimes quite common locally.

**EUDALIMIA, Hüb.****E. subsignaria, Hüb.**

Caldwell, common—Crane.

**SELENIA, Hüb.****S. kentaria, Grt. & Rob.****S. alciphearia, Walk.****AZELINA, Gn.****A. hubnerata, Gn.**

Caldwell, rare—Crane.

**ENDROPIA, Gn.****E. serrataria, Dru.**

Caldwell, rare—Crane.

**E. obtusaria, Hüb.****E. effectaria, Walk.****E. pectinaria, W. V.****E. bilinearia, Pack.**

Caldwell, rare—Crane.

**E. armataria, H-S.****E. amoenaria, Gn.**

Caldwell, common—Crane.

**E. madusaria, Walk.**

Caldwell, rare—Crane.

**E. marginata, Minot.****E. warneri, Harv.****E. hypochraria, H-S.**

Caldwell, common—Crane.

**E. duaria, Gn.**

Caldwell, rare—Crane.

**E. decoloraria, Hulst.**

## CATALOGUE OF INSECTS.

333

**EPIRRANTHIS, Hüb.***E. obfirmaria*, Hüb.

Caldwell, rare—Crane.

**THERINA, Hüb.***T. fervidaria*, Hüb.

I have taken this at Jamesburg. Caldwell, rare—Crane.

*T. endropiaria*, Grt. & Rob.*T. bibularia*, Grt. & Rob.**METROCAMPA, Gn.***M. margaritata*, Linn.**ANAGOGA, Hüb.***A. pulveraria*, Linn.**ANTEPIONE, Pack.***A. depontanata*, Grt.

Caldwell, rare—Crane.

*A. sulphurata*, Pack.

Caldwell, rare—Crane.

**SIOYA, Gn.***S. macularia*, Harr.**ANGERONA, Dup.***A. crocatoria*, Fabr.

Caldwell, common—Crane.

**NEMATOCAMPA, Gn.***N. filamentaria*, Gn.

Not uncommon throughout the State.

**PLAGODIS, Hüb.***P. rosaria*, Grt. & Rob.*P. floscularia*, Grt.*P. keutzsingaria*, Grt.

## 334 GEOLOGICAL SURVEY OF NEW JERSEY.

*P. fervidaria*, H-S.

*P. phlogosaria*, Gn.

*P. alcoolaria*, Gn.

**HYPERETIS, Gn.**

*H. amicaria*, H-S.

A common and extremely variable species found throughout the State.

**GEOMETRA, Linn.**

*G. iridaria*, Gn.

Not common, but seems generally distributed.

**APLODES, Gn.**

*A. rubrolinearia*, Pack.

*A. brunnearia*, Pack.

*A. mimosaria*, Gn.

Caldwell, rare—Crane.

**SYNCHLORA, Gn.**

*S. glaucaria*, Gn.

**NEMORIA, Hüb.**

*N. subcroceata*, Walk.

Caldwell, rare—Crane.

*N. gratata*, Walk.

*N. pistaciata*, Gn.

Caldwell, rare—Crane.

**EUCROSTIS, Hüb.**

*E. chloroleucaria*, Gn.

Caldwell, common—Crane.

**DYSPTERIS, H-S.**

*D. abortivaria*, H-S.

Caldwell, rare—Crane.

**EPHYRA, Dup.**

*E. pendulinaria*, Gn.

Caldwell, rare—Crane.

## CATALOGUE OF INSECTS.

335

**ACIDALIA, Tr.**

- A. ossularia**, Hüb.  
**A. granitaria**, Pack.  
**A. insularia**, Gn.  
**A. nivosata**, Gn.  
    Caldwell, rare—Crane.  
**A. inductata**, Gn.  
**A. punctofimbriata**, Pack.  
    Caldwell, rare—Crane.  
**A. cacuminata**, Morr.  
**A. enucleata**, Gn.

One of the most common species of the genus; usually among Fern and Bracken, in woods.

**ASTHENIA, Hüb.**

- A. albogilvaria**, Morr.

**CALOTHYSANIS, Hüb.**

- C. amaturaria**, Walk.  
    Caldwell, rare—Crane.

**CALLEDAAPTERYX, Grt.**

- C. dryopterata**, Grt.

- STEGANIA, Gn.**  
**S. pustularia**, Gn.  
    Caldwell, common—Crane.

**GUENERIA, Pack.**

- G. basiata**, Walk.

- DEILINEA, Hüb.**  
**D. variolaria**, Gn.  
**D. erythemaria**, Gn.

**HUDEILINEA, Pack.**

- H. herminiata**, Gn.

## 336 GEOLOGICAL SURVEY OF NEW JERSEY.

**CORYCIA, Dup.**

- C. vestaliata*, Gn.  
Caldwell, rare—Crane.  
*C. semiclarata*, Walk.

**SEMIOTHISA, Hüb.**

- S. præatomata*, Harv.  
*S. minorata*, Pack.  
*S. enotata*, Gn.  
*S. granitata*, Gn.  
*S. ocellinata*, Gn.

**PHASIANE, Dup.**

- P. orillata*, Walk.  
*P. mellistrigata*, Grt.

**MARMOPHERYX, Pack.**

- M. strigularia*, Min.

**THAMNONOMA, Led.**

- T. quadrilineararia*, Pack.  
*T. wavaria*, Linn.  
*T. subcessaria*, Pack.  
*T. sulphuraria*, Pack.  
*T. argillacearia*, Pack.

**LOZOGRAMMA, Steph.**

- L. lactisparaga*, Walk.  
*L. detersata*, Gn.  
*L. defluata*, Walk.

**HUFITCHIA, Pack.**

- H. ribearia*, Fitch.  
The gooseberry span worm; sometimes common. Caldwell,  
rare—Crane.

## CATALOGUE OF INSECTS.

337

**CARIPETA, Walk.***C. divisata*, Walk.

Caldwell, rare—Crane.

*C. angustiorata*, Walk.**FIDONIA, Tr.***F. truncataria*, Walk.*F. notataria*, Walk.**HÆMATOPIS, Hüb.***H. grataria*, Fabr.

Common throughout the State. Newark, in May—Seib.

**CATERVA, Grt.***C. catenaria*, Dru.Locally common. Not rare at Jamesburg. Caldwell, common  
—Crane.**TORNOS, Morr.***T. rubiginosus*, Morr.*T. approximaria*, Pack.**ASPILATES, Tr.***A. lintneraria*, Pack.*A. coloraria*, Fabr.**OLEORA, Curtis.***O. pulchraria*, Minot.**HEMEROPHILA, Steph.***H. unitaria*, H-S.

Caldwell, rare—Crane. Newark—Machesney.

**EPIMECOIS, Hüb.***E. hortaria*, Fabr.**CYMATOPHORA, Hüb.***C. umbrosaria*, Hüb.*C. polygrammaria*, Pack.

W

## 338 GEOLOGICAL SURVEY OF NEW JERSEY.

- C. larvaria*, Gn.  
Caldwell, rare—Crane.
- C. humaria*, Gn.  
Caldwell, rare—Crane.
- C. pampinaria*, Gn.  
Caldwell, common—Crane.
- C. crepuscularia*, Tr.  
Quite common throughout the State.

## TEPHROSIA, Bd.

- T. canadaria*, Gn.  
Caldwell, rare—Crane.
- T. cognataria*, Hüb.
- T. cibrataria*, Gn.  
Caldwell, rare—Crane.

## PARAPHIA, Gn.

- P. subatomaria*, Gn.  
Caldwell, rare—Crane.

## EUBYJA, Hüb.

- E. cognataria*, Gn.  
*E. pænulataria*, Grt.

## HYBERNIA, Latr.

- H. tiliaria*, Harris.  
Caldwell, rare—Crane.

## PHIGALIA, Dup.

- P. strigataria*, Minot.  
*P. olivacearia*, Morr.

## ANISOPTERYX, Steph.

- A. vernata*, Harris.  
The spring canker worm. Seldom injurious in this State.
- A. autumnata*, Pack.  
Also quite rare in my experience.

## CATALOGUE OF INSECTS.

339

**OPHROPHTERA, Hüb.****O. boreata, Hüb.****HETEROPHLEPS, H-S.****H. harveiata, Pack.****H. triguttata, H-S.**

A common species throughout the State.

**HELIOMATA, Grt.****H. cycladata, Grt.****BAPTRIA, Hüb.****B. albovittata, Gn.****LOBOPHORA, Curtis.****L. atroliturata, Walk.****L. anguilineata, Grt.****L. fuscifasciata, Walk.****HYDRIA, Hüb.****H. undulata, Linn.****PHIBALAPTERYX, Steph.****P. latirupta, Walk.**

Caldwell, common—Crane.

**P. intestinata, Gn.****OCHRIA, Hüb.****O. ferrugata, Linn.****O. munitata, Hüb.****PETROPHORA, Hüb.****P. diversilineata, Hüb.**

Caldwell, common—Crane.

**P. prunata, Linn.**

## 340 GEOLOGICAL SURVEY OF NEW JERSEY.

**EPIRRITA, Hüb.***E. cambricaria*, Curt.*E. dilutata*, Borkh.*E. duodecimlineata*, Pack.**PLEMYRIA, Hüb.***P. fluviata*, Hüb.*P. multiferata*, Walk.**GLAUCOPTERYX, Hüb.***G. cumatilis*, Grt. & Rob.*G. cæsiata*, Borkh.**EUPETHECIA, Curtis.***E. miserulata*, Grt.*E. interruptofasciata*, Pack.**Family PYRALIDÆ.\*****Sub-Family PYRALINÆ.****AGLOSSA, Latr.***A. domalis*, Gn.**ASOPIA, Tr.***A. farinalis*, Linn.

Often injurious to stored grain, and quite common.

*A. costalis*, Fabr.

The clover clay worm. Quite common throughout the State.

*A. olinalis*, Gn.*A. squamealis*, Grt.

\* Mr. Hulst has also kindly furnished the list of species in this family, of some parts of which he has made special study. No other lists have been available, and Mr. Hulst must be considered sole authority for all the species cited, except where I have especially indicated another. The comments are, in all cases, my own.

## CATALOGUE OF INSECTS.

341

**SIPAROCERA, Rob.****S. nobilis, Rob.**

I have taken this rarely, in Ocean county.

**MELANOMMA, Grt.****M. auricinctaria, Grt.****SCOPARIA, Haw.****S. centuriella, S. V.****S. libella, Grt.****THELCTERIA, Led.****T. pupula, Hüb.**

I have seen this pretty species, not uncommonly.

**BOTIS, Schrank.****B. octomaculata, Linn.****B. insequalis, Gn.****B. rufofimbrialis, Grt.****B. harveyana, Grt.****B. badipennis, Grt.****B. fodinalis, Led.****B. nelumbialis, Smith.**Bordentown. The larva bores in stems, &c., of the Egyptian  
Lotus—Smith.**B. erectalis, Grt.****B. flavidalis, Gn.****B. oxydalidis, Gn.****B. langdonalis, Grt.****B. citrina, Grt. & Rob.****B. marcuenta, Grt. & Rob.**

New Brunswick—Smith.

**B. opialis, Grt.****B. oscitalis, Grt.**

## 342 GEOLOGICAL SURVEY OF NEW JERSEY.

*B. pertextalis*, Led.  
*B. gentilis*, Grt.  
*B. magistralis*, Grt.  
*B. quinquelinealis*, Grt.  
*B. feudalis*, Grt.

New Brunswick, Jamesburg—Smith.

*B. terrealis*, Tr.  
*B. illibalis*, Hüb.  
*B. pectilis*, Grt. & Rob.  
*B. subolivalis*, Pack.  
*B. niveicilialis*, Grt.  
*B. ventralis*, Grt.

## EURYCREON, Led.

*E. sticticalis*, Linn.  
*E. cereralis*, Zell.

Ocean county, May 20th—Smith.

*E. chortalis*, Grt.  
Ocean county, May 20th—Smith.

*E. rantalisa*, Gn.  
I have found this quite common, yet not injurious.

## NOMOPHILA, Hüb.

*N. noctuella*, S. V.  
Common everywhere throughout the State.

## MESOGRAPHE, Hüb.

*M. rimosalis*, Gn.  
*M. stramentalis*, Hüb.

## CROCIDOPHORA, Led.

*C. tuberculalis*, Led.  
*C. serratissimalis*, Zell.

## PANTOGRAPHA, Led.

*P. limata*, Grt. & Rob.

## CATALOGUE OF INSECTS.

343

## BLEPHAROMASTIX, Led.

**B. ranalis**, Gn.

Newark, at light—Smith.

## EUDIOPTUS, Hüb.

**E. hyalinata**, Linn.

A pretty species, not uncommon in Ocean county.

## DESMIA, Westw.

**D. maculalis**, Westw.

## CINDAPHIA, Led.

**C. bicoloralis**, Gn.

Not uncommon at light, at New Brunswick.

## CONCHYLODES, Gn.

**C. platinalis**, Gn.

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## Sub-Family HYDROCAMPINÆ.

## OLIGOSTIGMA, Gn.

**O. albalis**, Rob.

## HYDROCAMPA, Gn.

**H. genuinalis**, Led.

Not uncommon along ditches of running water, in Ocean county.

## CATACLYSTA, Hüb.

**C. bifascialis**, Rob.

## NYMPHÆLLA, Grt.

**N. dispar**, Grt.

## 344 GEOLOGICAL SURVEY OF NEW JERSEY.

## Sub-Family HOMOPHYSINÆ.

## LIPOCOSMA, Led.

*L. sicalis*, Walk.

## HOMOPHYSA, Gn.

*H. glaphyralis*, Gn.*H. sesquistrialis*, Hüb.

## Sub-Family EPIPASCHIINÆ.

## EPIPASCHIA, Clem.

*E. superatalis*, Clem.

## LANTAPHE, Clem.

*L. platanella*, Clem.

## SALUDA, Hulst.

*S. asperatella*, Clem.*S. diluculella*, Grt.

## Sub-Family PHYCETINÆ.

## ACROBASIS, Zell.

*A. angusella*, Grt.*A. caryæ*, Grt.

Quite common on Hickory, in Ocean county.

*A. rubrifasciella*, Pack.*A. vaccinii*, Riley.The "Cranberry Fruit Worm." Found on all the bogs, but  
in small numbers, and never seriously injurious.*A. indiginella*, Zell.

Common at New Brunswick.

## DIORYOTRIA, Zell.

*D. abietella*, S. V.

## CATALOGUE OF INSECTS.

345

**NEPHOPTERYX, Hüb.***N. ovalis*, Pack.*N. basilaris*, Zell.**MEROPTERA, Grote.***M. pravella*, Grt.**SALEBRIA, Zell.***S. fusca*, Haw.**ZOPHODIA, Hüb.***Z. grossulariae*, Pack.**EUZOPHORA, Zell.***E. semifuneralis*, Walk.**VITULA, Rag.***V. edmandsii*, Pack.**PSOROSA, Zell.***P. pneumatella*, Hulst.

Common at New Brunswick, larva on Elm—Smith.

**HETEROGRAPHIS, Rag.***H. oblitella*, Zell.**EPHESTIA, Hüb.***E. elutella*, Hüb.**PLODIA, Gn.***P. interpunctella*, Hüb.

Often injurious to grain, the larva eating out the kernel.

**PEORIA, Rag.***P. haematica*, Zell.**Sub-Family GALLERIINÆ.****GALLERIA, Linn.***G. mellonella*, Linn.

The "Bee Moth." Larva infesting bee-hives, and sometimes very injurious.

## 346 GEOLOGICAL SURVEY OF NEW JERSEY.

**APHOMIA, Hüb.****A. sociella, Linn.****ACHRÆA, Hüb.****A. grisella, Fabr.****Sub-Family CRAMBIDINÆ.****ARGYRIA, Hüb.****A. nivalis, Dru.**

Found throughout the State. Hardly rare.

**A. nummulalis, Hüb.****A. pulchella, Walk.****CRAMBUS, Fabr.****C. girardellus, Clem.****C. sericinellus, Zell.****C. præfectellus, Zinck.****C. leachellus, Zinck.****C. agitatellus, Clem.****C. saltuellus, Zell.**

Ocean county, on cranberry bogs—Smith.

**C. albellus, Clem.**

Newark, Jamesburg—Smith.

**C. bipunctellus, Zell.****C. laqueatellus, Clem.**

Ocean county, in May—Smith.

**C. topiarius, Zell.**

Ocean county, on cranberry bogs, in May—Smith.

**C. plejadellus, Zinck.****C. teterellus, Zinck.****C. elegans, Clem.****C. exsiccatus, Zell.****C. caliginosellus, Clem.****C. vulvivagellus, Clem.**

## CATALOGUE OF INSECTS.

347

**SCHENOBIUS, Dup.****S. melinellus, Rob.****S. clemensellus, Rob.****Family TORTRICIDÆ.**

In this family I have been unable to get at any collections made in New Jersey. The few species taken by myself form only a small part of the Tortricid fauna, and none of the local collectors to whose collections I had access, collected the family. I have therefore included in this list such species of Prof. Fernald's Catalogue of *Tortricidæ* as, from the distribution given, are likely to occur in this State. Where I have taken the species myself, I have, of course, indicated it.

**TERAS, Tr.****T. subnivana, Walk.**

Recorded from New York and Pennsylvania.

**T. scabrina, Curt.**

I have taken this near Jersey City.

**T. hastiana, Linn.**

Occurs all over the United States and Europe.

**T. permutana, Dup.**

Extends across the continent, but not recorded from New Jersey.

**T. ferrugana, Schiff.**

I have taken this near New Brunswick, and it is probably generally distributed in the State.

**T. minuta, Rob. (*vacciniivorana*, Pack.)**

This is the "Fire Worm," or "Old Vine Worm," so destructive on cranberry bogs.

**T. oxycoccana, Pack.**

Also said to be a Cranberry feeder. This name has usually been used to represent the preceding species.

## 348 GEOLOGICAL SURVEY OF NEW JERSEY.

**CACCIA, Hüb.****C. rosacea**, Harris.

Common throughout the State. Often injurious to Roses.

**C. purpurana**, Clem.

I have seen this, taken in the State.

**C. cerasivora**, Fitch.

Not rare. Generally distributed.

**C. parallela**, Rob.

Recorded from New York and Pennsylvania.

**C. obsoletana**, Walk.**C. transitoria**, Walk.

Both of these are from New York and Pennsylvania.

**C. argyrospila**, Walk.

Recorded from the Atlantic to the Pacific.

**C. semiferana**, Walk.

I have seen the larva quite abundant on Oak, in Burlington county. I have not seen it near New Brunswick.

**C. fervidana**, Clem.

Recorded from New York and Pennsylvania.

**C. fractivittana**, Clem.

Recorded from Massachusetts to Virginia, to Ohio and Illinois.

**LOXOTÆNIA, Steph.****L. afflictana**, Walk.

I have taken several specimens in Ocean county.

**PTYCHOLOMA, Steph.****P. persicana**, Fitch.

Not rare. Generally distributed.

**P. melaleucana**, Walk.

I have taken this near Montclair.

**PANDEMIS, Hüb.****P. lamprosana**, Rob.

Recorded from New York and Pennsylvania.

## CATALOGUE OF INSECTS.

349

**LOPHODERUS, Steph.****L. juglandana, Fern.**

Not uncommon in Ocean county.

**L. trifera, Walk.**

Recorded from Maine to Texas. Dr. Packard gives Cranberry as a food-plant, but I have not found it on New Jersey bogs.

**L. politana, Haw.**

Recorded from Maine to District of Columbia.

**L. velutinana, Walk.**

New Brunswick, in April; common.

**TORTRIX, Linn.****T. pallorana, Rob.**

Not common. I have taken only a few specimens.

**T. albicomana, Clem.**

I have taken this, not rarely, in Ocean county.

**T. peritana, Clem.**

Recorded from New York and Pennsylvania.

**T. fumiferana, Clem.**

I have taken this in the Orange Mountains.

**AMORBIA, Clem.****A. humerosana, Clem.**

Recorded from New York and Pennsylvania.

**CENOTRA, Gn.****CE. unifasciana, Clem.**

Recorded from New York and Pennsylvania.

**CE. xanthoides, Walk.**

Recorded along the coast from Maine to Virginia.

**CENOPIS, Zell.****C. reticulatana, Clem.**

Not rare near Jersey City.

## 350 GEOLOGICAL SURVEY OF NEW JERSEY.

*C. cana*, Rob.

Recorded from New York and Pennsylvania.

**DICHELIA, Gn.**

*D. sulfureana*, Clem.

Not rare. Generally distributed in my experience.

**AMPHISA, Curt.**

*A. discopunctana*, Clem.

Recorded from New York and Pennsylvania.

**CAPUA, Steph.**

*C. furcatana*, Walk.

Recorded from New York and Pennsylvania.

**PLATYNOTA, Clem.**

*P. flavedana*, Clem.

I have taken this in the State, but forget exactly where.

*P. sentana*, Clem.

New Brunswick; not common.

**CONCHYLIS, Treits.**

*C. rutilana*, Hüb.

I have received this from the western part of the State, as injurious to Trailing Juniper.

*C. dorsimaculana*, Rob.

I have taken this in Ocean, Middlesex and Monmouth counties, not rarely.

**RETINIA, Gn.**

*R. frustrana*, Comst.

I have taken this rarely in Ocean county.

**EUDEMIS, Hüb.**

*E. botrana*, Schiff.

Not rare along the base of the Orange Mountains.

## CATALOGUE OF INSECTS.

351

**ECCOPSIS, Zell.*****E. permundana*, Clem.**

I have seen no New Jersey specimens, but feel confident it will be found in the State.

***E. fasciatana*, Clem.*****E. inornatana*, Clem.**

Both of these are recorded from New York and Pennsylvania.

**PENTHINA, Treits.*****P. nimbatana*, Clem.**

Recorded from New York and Pennsylvania.

***P. hartmanniana*, Linn.**

Newark; specimens taken by me.

***P. hebesana*, Walk.**

Recorded from New Jersey, by Fernald.

***P. chionosema*, Zell.**

New Brunswick; not common.

**SERRICORIS, Tr.*****S. auricapitana*, Wlsm.**

Recorded from New York and Pennsylvania.

***S. coruscana*, Clem.**

I have taken this not rarely near Jersey City.

***S. instrutana*, Clem.**

Recorded from New York and Pennsylvania.

**PHACASIOPHORA, Grt.*****P. confixana*, Walk.**

Recorded from New York and Pennsylvania.

**PÆDISCA, Tr.*****P. juncticiliata*, Wlsm.**

Recorded from New York to California.

***P. abbreviatana*, Wlsm.**

Recorded from New York and Pennsylvania.

## 352 GEOLOGICAL SURVEY OF NEW JERSEY.

**P. strenuana**, Walk.

New Brunswick; not common.

**P. scudderiana**, Clem.

I have seen the work of this species on *Solidago*, in Ocean and Atlantic counties.

**P. dorsisignatana**, Clem.

I have taken this near Montclair and in Ocean county, not uncommonly.

**SEMASIA**, Steph.**S. formosana**, Clem.

I have taken this in Ocean county, May 20th.

**S. striatana**, Clem.

Recorded from New York and Pennsylvania.

**S. signatana**, Clem.

Recorded from Maine to Virginia.

**S. argutana**, Clem.

Recorded from Massachusetts to Texas.

**PROTEOPTERYX**, Wlsm.**P. spoliata**, Clem.

New Brunswick, in April; common.

**STEGANOPTYCHA**, Steph.**S. fasciolana**, Clem.

Recorded from New York and Pennsylvania.

**TMETOCERA**, Lederer.**T. ocellana**, Schiff.

Not rare. Generally distributed in the State.

**RHOPOBOTA**, Lederer.**R. vacciniana**, Pack.

Very injurious to Cranberries, and found wherever this fruit is grown.

## CATALOGUE OF INSECTS.

353

## PHOXOPTERIS, Treits.

*P. nubeculana*, Clem.

I have this from several parts of the State, and it seems not rare. Ocean county, May 20th.

*P. comptana*, Frohl.

Widely distributed, but not recorded from New Jersey.

*P. cornifoliana*, Riley.

New Brunswick; rare.

## GRAPHOLITA, Treits.

*G. caryana*, Fitch.

I have seen what I take to be the work of this species, in Ocean county.

*G. interstictana*, Clem.

Recorded from New York and Pennsylvania.

## CARPOCAPSA, Treits.

*C. pomonella*, Linn.

The codling moth. Common all over the State.

## DICHRORAMPHA, Gn.

*D. simulana*, Clem.

Recorded from New York and Pennsylvania.

## Family TINEIDÆ.

The list in this family, or rather aggregation of families, has been kindly furnished by Mr. Wm. Beutenmüller, the Curator of Insects in the American Museum of Natural History, New York City.

Mr. Beutenmüller says "The list has been made up from personal observation, and not from published records; in fact, no species of *Tineidae*, to my knowledge, have as yet been recorded from New Jersey." Small as is the list, the accuracy of the record and the

## 354 GEOLOGICAL SURVEY OF NEW JERSEY.

notes on the food plants are very valuable. I have made few additions to or comments in the list, and it is to be credited in its entirety to Mr. Beutennüller.

## CHOREUTES, Hüb.

*C. pavonicella*, Clem.

Rare. Food-plant and early stages unknown.

## ACROLOPHUS, Poey.

*A. plumifrontella*, Clem.

Common. Food-plant and early stages unknown.

## PSEUDANOPHORA, Wlsm.

*P. arcanella*, Clem.

Common. Food and early stages unknown.

## AMADRYA, Clem.

*A. effrenatella*, Clem.

Not common.

## TINEA, Linn.

*T. biselliella*, Hum.

Common. Larva very injurious to carpets, furs, woolens, &c.

*T. pellionella*, Linn.

Common. Larva very injurious to furs, carpets, woolens, &c.

*T. granella*, Linn.

Common. Larva injurious to grain.

## BLABOPHANES, Zell.

*B. ferruginella*, Hüb.

Common. Early stages and food unknown.

*B. dorsistrigella*, Clem.

Common. Early stages and food unknown.

## HYPONEUMEUTA, Zell.

*H. multipunctella*, Clem.

Not common. Early stages and food unknown.

## CATALOGUE OF INSECTS.

355

## PRONUBA, Riley.

**P. yuccasella**, Riley.

Common. Larva infests the seed pods of Yucca.

## PLUTELLA, Schr.

**P. cruciferarum**, Zell.

Common. Larva injurious to Cabbage.

## EPIGRAPHIA, Steph.

**E. packardella**, Clem.

Rare. Early stages and food unknown.

## CRYPTOLECHIA, Zell.

**C. contrariella**, Walk.

Not common. Early stages and food unknown.

**C. tentoriferella**, Clem.

Common. Larva in web on Oak, Cherry and Walnut.

**C. schlægeri**, Zell.Common. Food, Wax Myrtle (*Myrica*) and Oak.**C. quercicella**, Clem.

Not common. Food, Oak, Aspen.

## DEPRESSARIA, Haw.

**D. atrodorsella**, Clem.Not common. Food, Beggar-tick (*Bidens*).**D. hilarella**, Zell.Not common. Food, Locust and *Sanicula*.**D. fulvipenella**, Clem.Not common. Food, Golden Rod (*Solidago*).**D. lecontella**, Clem.

Common.

**D. heracliana**, De G.

Not common. Larva in stems of Parsnip and other umbelliferous plants.

## 356 GEOLOGICAL SURVEY OF NEW JERSEY.

## GELECHIA, Zell.

**G. agrimoniella**, Clem.Not common. Food, *Agrimonia*.**G. alacella**, Clem.

Not common. Early stages and food unknown.

**G. bilobella**, Zell.

Not common. Early stages and food unknown.

**G. inscripta**, Wlsm.

New Brunswick, in April, rare—Smith.

**G. pinifoliella**, Chamb.Jamesburg, common in *Pinus rigida*—Smith.**G. flavicostella**, Clem.

Not common. Early stages and food unknown.

**G. atributella**, Walk.

Common.

**G. querciella**, Chamb.

Common. Food, Oak.

**G. rhoifructella**, Clem.

Common. Food, Poplar and Sumac.

**G. rubidella**, Clem.

Not common. Early stages and food unknown.

**G. roseosuffusella**, Clem.

Not common. According to Dr. Packard, the larva inhabits the fruit panicles of the Sumac. (Guide, p. 350, 8th ed.)

**G. gallæsolidaginis**, Riley.Not common. Food, in stems of Golden Rod (*Solidago*), larva producing a fusiform swelling.

## HAMADRYAS, Clem.

**H. bassettella**, Clem.

Jamesburg, in July, rare—Smith.

## SITOTROGA, Hein.

**S. cerealella**, Oliv.

Common. Larva in kernels of Corn, Wheat, &amp;c.

## CATALOGUE OF INSECTS.

357

**STROBISIA, Clem.****S. emblemella,** Clem.

Scarce. Early stages and food not known.

**S. lepidella,** Clem.

Rare. Early stages and food unknown.

**YPSOLOPHUS, Fabr.****Y. pometellus,** Harr.

Common. Food, Apple, Pear, Plum, &amp;c.

**DASYCHERA, Haw.****D. newmanella,** Clem.

Rare. Early stages and food unknown.

**ECOPHORA, Zell.****E. argenticinctella,** Clem.

Common. Early stages and food unknown.

**BUTALIS, Tr.****B. impositellus,** Zell.Common. Food, various species of *Aster*.**B. basilaris,** Zell.

Common. Early stages and food unknown.

**B. glandulella,** Riley.

Not common. Larva in Acorns.

**ARGYRESTHIA, Hüb.****A. andereggella,** Dup.

Common. Early stages and food in this country unknown.

Larva, in Europe, in buds of Hazel and Apple..

**GRACILARIA, Zell.****G. sassafrasella,** Chamb.

Common. Food, Sassafras.

## 358 GEOLOGICAL SURVEY OF NEW JERSEY.

## COLEOPHORA, Zell.

**C. malivorella**, Riley.

Common. Food, Apple, Plum, Cherry.

## LAVERNA, Curt.

**L. eloisella**, Clem.Scarce. Larva burrows in stalk of Primrose (*Enothera*).**L. phragmitella**, Steph.Common at light, in Newark. In Europe this feeds on *Typha*—Smith.

## COSMOPTERYX, Hüb.

**C. gemmiferella**, Clem.

Rare. Early stages and food unknown.

## ANTISPILA, Hüb.

**A. nyssæfoliella**, Clem.Common. Food, Pepperidge (*Nyssa sylvatica*). Very destructive.

## ASPIDISCA, Clem.

**A. splendoriferella**, Clem.

Common. Food, Apple.

## TISCHERIA, Zell.

**T. citripennella**, Clem.

Common. Food, Oak.

## LITHOCOLLETIS, Zell.

**L. hamadryadella**, Clem.

Very common. Food, Oak.

**L. fitchella**, Clem.

Common. Food, Oak.

**L. robinella**, Clem.

Common. Food, Locust.

## CATALOGUE OF INSECTS.

359

*L. caryæfoliella*, Clem.

Common. Food, Hickory.

*L. guttifinitella*, Clem.Very common. Food, Poison Ivy (*Rhus radicans*).*L. desmodiella*, Clem.Scarce. Food, *Desmodium viridiflorum*.**LEUCANTHIZA**, Clem.*L. amphicarpæfoliella*, Clem.Common. Food, Hog-peanut (*Amphicarpa monoica*).**PHYLLOONISTIS**, Zell.*P. vitiginella*, Clem.

Common. Food, Grape.

**Family PTEROPHORIDÆ.\*****PLATYPTILUS**, Hüb.*P. ochreodactylus*, var. *bischoffii*, Zell.**OXYPTILUS**, Zell.*O. nigriciliatus*, Zell.

Rare.

*O. periscelidactylus*, Fitch.

Common. Food, Grape.

**PTEROPHORUS**, Wallgr.*P. monodactylus*, Linn.

Common.

\*Mr. Meyrick considers the *Pterophoridae* as belonging to the *Pyralidae* rather than the *Tineidae*, and I am not sure but that he is right. In placing them at the foot of the series, I have followed both precedent and Mr. Beutenmüller's MSS.—J. B. S.

## 360 GEOLOGICAL SURVEY OF NEW JERSEY.

## ORDER DIPTERA.

## Family CECIDOMYIDÆ.

## CECIDOMYIA, Meigen.

- C. *anthophila*, O. S.  
 C. *cornuta*, Walsh.  
 C. *culmicola*, Morris.  
 C. *destructor*, Say.

The Hessian fly. Not destructive in New Jersey.

- C. *grossulariae*, Fitch.  
 C. *ornata*, Say.  
 C. *salicis-brassicoides*, Walsh.

I have seen the galls of this species not rarely.

- C. *vaccinii*, J. B. Smith.

Common on Cranberry (*Vaccinium*) and Loose Strife (*Lysimachia*).

## DIPLOYSIS, Lw.

- D. *caliptera*, Fitch.  
 D. *caryæ*, O. S.  
 D. *graminis*, Fitch.  
 D. *inimica*, Fitch.  
 D. *robiniae*, Hald.  
 D. *tritici*, Kirby.

Was reported as doing some damage in New Jersey during the season of 1889.

## ASPHONDYLIA, Lw.

- A. *monacha*, O. S.  
 A. *recondita*, O. S. •  
 A. *rudebeckiae-conspicua*, O. S.

**CATALOGUE OF INSECTS.**

361

**LASIOPTERA, Meigen.***L. ventralis*, Say.*L. vitis*, O. S.

I have seen the galls of this species not infrequently during the present season (1889).

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**Family MYCETOPHILIDÆ.****MYCETOBLIA, Meigen.***M. divergens*, Walk.**DITOMYIA, Winnertz.***D. euzona*, Lw.**PLESIASTINA, Winnertz.***P. lauta*, Lw.**BOLITOPHILA, Meigen.***B. cinerea*, Meigen.**MACROCERA, Meigen.***M. formosa*, Lw.**PLATYURA, Meigen.***P. mendica*, Lw.**POLYLEPTA, Winnertz.***P. fragilis*, Lw.**SCIOPHILA, Meigen.***S. appendiculata*, Lw.**LASIOSOMA, Winnertz.***L. fasciata*, Say.**EUDICRANA, Lw.***E. obumbrata*, Lw.**SYNTEMNA, Winnertz.***S. polyzona*, Lw.**PHTHINIA, Winnertz.***P. tanypus*, Lw.

## 362 GEOLOGICAL SURVEY OF NEW JERSEY.

## NEOGLAPHYROPTERA, O. S.

*N. bivittata*, Say.*N. melæna*, Lw.*N. oblectabilis*, Lw.*N. sublunata*, Lw.*N. winthemi*, Leh.

## LEJA, Meigen.

*L. abbreviata*, Lw.*L. sororcula*, Lw.

## ALLODIA, Winnertz.

*A. crassicornis*, Stannius.

## TRICHONTA, Winnertz.

*T. foeda*, Lw.

## ZYGOMYIA, Winnertz.

*Z. ignobilis*, Lw.*Z. ornata*, Lw.

## EPICYPTA, Winnertz.

*E. pulicaria*, Lw.

## MYCOTHERA, Winnertz.

*M. paula*, Lw.

## MYCETOPIHLA, Meigen.

*M. extincta*, Lw.*M. fallax*, Lw.*M. ichneumonea*, Say.*M. inculta*, Lw.*M. mutica*, Lw.*M. polita*, Lw.*M. procera*, Lw.*M. scalaris*, Lw.*M. sigmoides*, Lw.

## SCIARA, Meigen.

*S. femorata*, Say.*S. fuliginosa*, Fitch.

## CATALOGUE OF INSECTS.

363

**S. inconstans**, Fitch.**S. mali**, Fitch.**S. vulgaris**, Fitch.**TRICHOSIA**, Winnertz.**T. hebes**, Lw.**Family SIMULIDÆ.**

There are several species of *Simulium* in the running streams, but I have taken no imagoes, and cannot even give a guess at what species we have, from published data.

**Family BIBIONIDÆ.****BIBIO**, Geoff.**B. albipennis**, Say.

I have taken this species in the State. Caldwell, common—Crane.

**B. articulatus**, Say.**B. femoratus**, Wied.

I have taken this species in the State. Caldwell, common—Crane.

**B. pallipes**, Say.**B. rufithorax**, Wied.**B. xanthopus**, Wied.**DILOPHUS**, Meigen.**D. dimidiatus**, Lw.**D. orbatus**, Say.**D. thoracicus**, Say.**PLECIA**, Wied.**P. heteroptera**, Say.**SCATOPSE**, Geoff.**S. astrata**, Say.

## 364 GEOLOGICAL SURVEY OF NEW JERSEY.

**Family CULICIDÆ.****CULEX, Linn.*****C. ciliatus*, Fabr.**

Caldwell, common—Crane. Taken quite frequently in New Jersey. One of the common mosquitos. It as frequently takes the collector.

***C. consobrinus*, R. Desv.*****C. damnosus*, Say.**

Also quite abundant in New Jersey.

***C. triseriatus*, Say.**

More rare, but still obtrusively abundant on occasion.

**ANOPHELES, Meigen.*****A. quadrimaculatus*, Say.**

Not common. I was taken by only a single specimen.  
Caldwell, common—Crane.

**AEDES, Meigen.*****A. sapphirinus*, O. S.****CORETHRA, Meigen.*****C. punctipennis*, Say.****Family CHIRONOMIDÆ.****CHIRONOMUS, Meigen.*****C. cristatus*, Fabr.*****C. geminatus*, Say.*****C. glaucurus*, Wied.*****C. lineola*, Wied.*****C. lobifer*, Say.*****C. modestus*, Say.*****C. tricinctus*, Meigen.**

## CATALOGUE OF INSECTS.

365

**TANYPUS, Meigen.**

- T. annulatus*, Say.  
*T. flaviginctus*, Lw.  
*T. pinguis*, Lw.  
*T. tibialis*, Say.  
*T. tricolor*, Lw.

**CERATOPOGON, Meigen.**

- C. festivus*, Lw.  
*C. longipennis*, Lw.  
*C. lineatus*, Lw.  
*C. plebejus*, Lw.  
*C. rufus*, Lw.

**HETEROMYIA, Say.**

- H. fasciata*, Say.
- 

**Family ORPHNEPHILIDÆ.****ORPHNEPHILA, Haliday.**

- O. testacea*, Ruthe.
- 

**Family PSYCHODIDÆ.****PSYCHODA, Latr.**

- P. alternata*, Say.  
 Common almost everywhere throughout the State.
- 

**Family TIPULIDÆ.****DICRANOMYIA, Steph.**

- D. brevirena*, O. S.  
*D. defuncta*, O. S.

## 366 GEOLOGICAL SURVEY OF NEW JERSEY.

**D. globithorax**, O. S.

**D. immodesta**, O. S.

**D. liberta**, O. S.

**D. longipennis**, Schum.

**D. pubipennis**, O. S.

**D. rostrifera**, O. S.

**GERANOMYIA**, Haliday.

**G. canadensis**, Westw.

**G. rostrata**, Say.

**RHIPIDIA**, Meigen.

**R. maculata**, Meigen.

**R. fidelis**, O. S.

**R. domestica**, O. S.

**LIMNOBIA**, Meigen.

**L. cinctipes**, Say.

**L. indigena**, O. S.

**L. triocellata**, O. S.

**RHAMPHIDIA**, Meigen.

**R. flavipes**, Macq.

**ELEPHANTOMYIA**, O. S.

**H. westwoodi**, O. S.

**TOXORRHINA**, Lw.

**T. magna**, O. S.

Described from New Jersey specimens.

**ANTOCHA**, O. S.

**A. opalizans**, O. S.

**ATARBA**, O. S.

**A. picticornis**, O. S.

**THEUCHOLABIS**, O. S.

**T. complexa**, O. S.

## CATALOGUE OF INSECTS.

367

## RHYPHOLOPHUS, O. S.

*R. holotrichus*, Say.*R. innocens*, O. S.

Recorded from New Jersey.

*R. meigenii*, O. S.*R. nubilus*, O. S.*R. rubellus*, O. S.

## ERIOPTERA, Meigen.

*E. chrysocoma*, O. S.*E. chlorophylla*, O. S.*E. septemtrionis*, O. S.*E. straminea*, O. S.*E. villosa*, O. S.*E. vespertina*, O. S.*E. armillaris*, O. S.*E. venusta*, O. S.*E. armata*, O. S.*E. caloptera*, Say.*E. parva*, O. S.

Recorded from New Jersey.

*E. hirtipennis*, O. S.

Recorded from New Jersey.

## SYMPLECTA, Meigen.

*S. punctipennis*, Meigen.

## GNOPHOMYIA, O. S.

*G. tristissima*, O. S.

## GONOMYIA, Megerle.

*G. blanda*, O. S.*G. manca*, O. S.

Recorded from New Jersey.

*G. subcinerea*, O. S.*G. sulphurella*, O. S.

## 368 GEOLOGICAL SURVEY OF NEW JERSEY.

**CLADURA, O. S.***O. indivisa*, O. S.**EPIPHRAGMA, O. S.***E. fascipennis*, Say.**LIMNOPHILA, Macq.***L. adusta*, O. S.*L. areolata*, O. S.*L. contempta*, O. S.*L. fuscovaria*, O. S.*L. gracilis*, Wied.*L. imbecilla*, O. S.*L. lenta*, O. S.*L. macrocera*, Say.*L. montana*, O. S.*L. quadrata*, O. S.*L. recondita*, O. S.*L. rufibasis*, O. S.*L. tenuipes*, Say.*L. ultima*, O. S.**TRICHOERA, Meigen.***T. regulationis*, Linn.**PENTHOPTERA, Schiner.***P. albitarsis*, O. S.**AMALOPIS, Haliday.***A. inconstans*, O. S.*A. vernalis*, O. S.**RAPHIDOLABIS, O. S.***R. terripes*, O. S.*R. flaveola*, O. S.**TRIGOMA, Schiner.***T. exsculpta*, O. S.

## CATALOGUE OF INSECTS.

369.

## PTYCHOPTERA, Meigen.

- P. quadrifasciata*, Say.  
*P. rufocincta*, O. S.

## BITTACOMORPHA, Westw.

- B. clavipes*, Fabr.  
 Common along ditches of cranberry marshes in Ocean county,  
 in May. Rare at Jamesburg, in June.

## IDIOPLASTA, O. S.

- I. fitchii*, O. S.

## TIPULÄ, Linn.

- T. abdominalis*, Say.  
*T. bella*, Lw.  
*T. costalis*, Say.  
*T. cunctans*, Say.  
*T. dejecta*, Walk.  
*T. fasciata*, Lw.

Recorded from the Palisades, New Jersey.

- T. flavicans*, Fabr.  
*T. fuliginosa*, Say.  
*T. grata*, Lw.  
*T. infuscata*, Lw.  
*T. ignobilis*, Lw.  
*T. maculipennis*, Wied.  
*T. tetrocephala*, Lw.

Recorded from New Jersey.

- T. tricolor*, Fabr.  
*T. trivittata*, Say.

## PACHYRRHINA, Macq.

- P. collaris*, Say.  
*P. ferruginea*, Fabr.  
*P. incurva*, Lw.

Y

## 370 GEOLOGICAL SURVEY OF NEW JERSEY.

*P. macrocera*, Say.*P. unifasciata*, Lw.*P. virescens*, Lw.

Recorded from New Jersey.

## DOLICHOPEZA, Curt.

*D. annulata*, Say.

## Family RHYPHIDÆ.

## RHYPHUS, Latr.

*R. alternatus*, Say.*R. fenestralis*, Scop.*R. punctatus*, Meigen.

## Family XYLOPHAGIDÆ.

## XYLOPHAGUS, Meigen.

*X. lugens*, Lw.*X. reflectens*, Walk.

## SUBULA, Meigen.

*S. palipes*, Lw.

## Family CÆNOMYIDÆ.

## CÆNOMYIA, Latr.

*C. pallida*, Say.

## Family STRATYOMYIDÆ.

## METOPONIA, Macq.

*M. fuscitarsis*, Say.*M. obscuriventris*, Lw.

## CATALOGUE OF INSECTS.

371

**BERIS, Latr.***B. viridis*, Say.**SARGUS, Fabr.***S. decorus*, Say.

Common at Jamesburg.

*S. elegans*, Lw.*S. xanthopus*, Wied.**CHLOROMYIA, Dunc.***C. viridis*, Say.

Common throughout the State.

**OXYCERA, Meigen.***O. maculata*, Oliv.*O. unifasciata*, Lw.**ODONTOMYIA, Meigen.***O. flavigornis*, Oliv.*O. laziophthalma*, Lw.

Recorded from New Jersey.

*O. nigerrima*, Lw.**STRATIOMYIA, Lw.***S. angularis*, Lw.*S. flaviceps*, Macq.*S. marginalis*, Lw.*S. vicina*, Macq.**NEMOTELUS, Geoff.***N. pallipes*, Say.**Family TABANIDÆ.****PANGONIA, Latr.***P. chrysocoma*, O. S.*P. pigra*, O. S.*P. tranquilla*, O. S.

## 372 GEOLOGICAL SURVEY OF NEW JERSEY.

**CHRYSOOPS, Meigen.**

- C. callidus**, O. S.  
**C. celer**, O. S.  
**C. excitans**, Walk.  
**C. fallax**, O. S.  
**C. flavidus**, Wied.  
**C. hilaris**, O. S.  
**C. moechus**, O. S.  
**C. niger**, Macq.  
 Caldwell, not common—Crane.  
**C. obsoletus**, Say.  
**C. plangens**, Wied.  
**C. pudicus**, O. S.  
**C. univittatus**, Macq. .  
**C. vittatus**, Wied.  
 Caldwell, common—Crane.

**THERIOPLECTES, Zeil.**

- T. cinctus**, Fabr.  
**T. lasiophthalmus**, Macq.  
 Caldwell, common—Crane.  
**T. trispilus**, Wied.

**TABANUS, Linn.**

- T. americanus**, Först.  
**T. atratus**, Fabr.  
 Common throughout the State.  
**T. catentatus**, O. S.  
**T. cingulatus**, Macq.  
**T. coffeatus**, Macq.  
**T. costalis**, Wied.  
**T. exul**, O. S.  
 Recorded from New Jersey.  
**T. fulvulus**, Wied.  
**T. giganteus**, De G.

## CATALOGUE OF INSECTS.

373

- T. lineola*, Fabr.  
The most common species in the State.
- T. longulus*, O. S.
- T. melanocerus*, Wied.
- T. mexicanus*, Linn.  
Recorded from New Jersey.
- T. nigrescens*, Pal. Beauv.  
Recorded from New Jersey.
- T. nigrovittatus*, Macq.  
Recorded from New Jersey.
- T. nivosus*, O. S.  
Described from New Jersey specimens.
- T. pumilus*, Macq.  
Caldwell, not common—Crane.
- T. reinwardtii*, Wied.
- T. stygius*, Say.
- T. sulcifrons*, Macq.
- T. trimaculatus*, Pal. Beauv.  
Caldwell, common—Crane.
- T. variegatus*, Fabr.

**ATYLOTUS, O. S.**

- A. bicolor*, Wied.
- 

**Family LEPTIDÆ.****TRIPTOTRICHA, Lw.**

- T. fasciventris*, Lw.  
*T. rufithorax*, Say.

**CHrysopila, Macq.**

- C. basilaris*, Say.  
*C. fasciata*, Say.  
Caldwell, not common—Crane.

## 374 GEOLOGICAL SURVEY OF NEW JERSEY.

- O. ornata*, Say.  
Caldwell, rare—Crane.  
*O. quadrata*, Say.  
*O. thoracica*, Fabr.

## LEPTIS, Fabr.

- L. albicornis*, Say.  
*L. mystacea*, Macq.  
Caldwell, rare—Crane.  
*L. punctipennis*, Say.  
*L. plumbea*, Say.  
*L. scapularis*, Lw.
- 

## Family ASILIDÆ.

## LEPTOGASTER, Meigen.

- L. flavipes*, Lw.  
*L. histrio*, Wied.  
*L. ochraceus*, Schiner.  
*L. testaceus*, Lw.

## CERATURGUS, Wied.

- O. cruciatus*, Say.

## DIOCTRIA, Meigen.

- D. albius*, Walk.

## LAPHYSTIA, Lw.

- L. sexfasciata*, Say.

Recorded from New Jersey.

## ECHTHOPODA, Lw.

- E. formosa*, Lw.

## HOLOPOGON, Lw.

- H. guttula*, Wied.  
*H. philadelphicus*, Schiner.

## CATALOGUE OF INSECTS.

375

## STICHOPOGON, Lw.

*S. argenteus*, Say.

Sandy Hook, August. Anglesea, July 22d. Not rare.

*S. trifasciatus*, Say.

## HOLCOCEPHALA, Jaenn.

*H. abdominalis*, Say.

## NICOCLES, Jaenn.

*N. politus*, Say.

## TARACTICUS, Lw.

*T. octopunctatus*, Say.

## DEROMYIA, Phillipi.

*D. discolor*, Lw.*D. umbrina*, Lw.*D. winthemi*, Wied.

## ATOMOSIA, Macq.

*A. glabrata*, Say.*A. puella*, Wied.

Caldwell, rare—Crane.

## CEROTAINIA, Schiner.

*C. macrocera*, Say.

## DASYLLIS, Lw.

*D. flavigollis*, Say.*D. posticata*, Say.*D. thoracica*, Fabr.*D. tergissa*, Say.

## HYPERECHIA, Schiner.

*H. atrox*, Wied.

## DASYLLIS, Lw.

*D. thoracica*, Fabr.

Caldwell, common—Crane.

## 376 GEOLOGICAL SURVEY OF NEW JERSEY.

**LAPHRIA, Meigen.***L. sericea*, Say.**LAMPRIA, Macq.***L. bicolor*, Wied.**MALLOPHORA, Macq.***M. laphroides*, Wied.*M. clausicella*, Macq.**PROMACHUS, Lw.***P. bastardi*, Macq.*P. apivorus*, Fitch.

Caldwell, common—Crane.

**ERAX, Macq.***E. bastardi*, Macq.*E. æstuans*, Wied.**PROCTACANTHUS, Macq.***P. philadelphicus*, Macq.**ASILUS, Linn.***A. sericeus*, Say.

I have observed a few specimens of this species the present season. Caldwell, common—Crane.

*A. femoralis*, Macq.*A. tibialis*, Macq.**NEOITAMUS, O. S.***N. ænobarbus*, Lw.**TOLMERUS, Lw.***T. annulipes*, Macq.**OMMATIUS, Illiger.***O. tibialis*, Say.

## CATALOGUE OF INSECTS.

377

## Family MIDAIDÆ.

## MIDAS, Fabr.

*M. clavatus*, Dru.

Not common. Taken at Jamesburg. Generally distributed.  
Caldwell, common—Crane.

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## Family BOMBYLIDÆ.

## EXOPROSOPA, Macq.

*E. emarginata*, Macq.*E. fascipennis*, Say.

Caldwell, rare—Crane.

*E. fasciata*, Macq.

Caldwell, common—Crane.

## ANTHRAX, Scop.

*A. alternata*, Say.*A. fulvohirta*, Wied.

Caldwell, common—Crane.

*A. gracilis*, Macq.*A. sinuosa*, Wied.

## ARGYRAMŒBA, Schiner.

*A. analis*, Say.*A. cedipus*, Fabr.

Caldwell, rare—Crane.

*A. simson*, Fabr.

Caldwell, common—Crane.

## LOMATIA, Meigen.

*L. elongata*, Say.

## 378 GEOLOGICAL SURVEY OF NEW JERSEY.

**BOMBYLIUS, Linn.**

- B. atriceps**, Lw.  
**B. fratellus**, Wied.  
     Caldwell, common—Crane.  
**B. pygmaeus**, Fabr.  
     Caldwell, not common—Crane.  
**B. varius**, Fabr.

**SPARNOPOLIUS, Lw.**

- S. fulvus**, Wied.

**PHTHIRIA, Meigen.**

- P. sulphurea**, Lw.  
     Recorded from New Jersey.

**GERON, Meigen.**

- G. calvus**, Lw.  
**G. macropterus**, Lw.  
**G. subauratus**, Lw.  
**G. vitripennis**, Lw.

**SYSTROPUS, Wied.**

- S. macer**, Lw.

**TOXOPHORA, Meigen.**

- T. amphitea**, Walk.
- 

**Family THEREVIDÆ.****PSILOCEPHALA, Zett.**

- P. erythrura**, Lw.  
**P. melanoprocta**, Lw.  
**P. nigra**, Say.

**THEREVA, Latr.**

- T. candidata**, Lw.  
**T. gilvipes**, Lw.

## CATALOGUE OF INSECTS.

379

**TABUDA, Walk.****T. fulvipes, Walk.**

Recorded from New Jersey.

**Family SCENOPINIDÆ.****SCENOPINUS, Latr.****S. feneentralis, Linn.****S. lœvifrons, Meigen.****Family CYRTIDÆ.****OPSEBIUS, Costa.****O. gagatinus, Lw.****ONCODES, Latr.****O. pallidipennis, Lw.****Family EMPIDÆ.****SYNECHES, Walk.****S. simplex, Walk.****S. thoracicus, Say.****EMPIS, Linn.****E. longipes, Lw.**

Recorded from New Jersey.

**E. varipes, Lw.****RHAMPHOMYIA, Meigen.****R. dimidiata, Lw.****R. fumosa, Lw.****R. gracilis, Lw.****R. scolopacea, Say.**

## 380 GEOLOGICAL SURVEY OF NEW JERSEY.

*R. tristis*, Walk.*R. umbilicata*, Lw.**HILARA, Meigen.***H. gracilis*, Lw.*H. nigriventris*, Lw.**CYRTOMA, Meigen.***C. longipes*, Lw.**STILPON, Lw.***S. varipes*, Lw.**TACHYDROMIA, Meigen.***T. mesogramma*, Lw.*T. pachycnema*, Lw.*T. trivialis*, Lw.**TACHYPEZA, Meigen.***T. fenestrata*, Say.**HEMERODROMIA, Meigen.***H. notata*, Lw.*H. vittata*, Lw.**CLINOCERA, Meigen.***C. lineata*, Lw.*C. conjuncta*, Lw.*C. maculata*, Lw.**Family DOLICHOPODIDÆ.****DOLICHOPUS, Latr.***D. batillifer*, Lw.*D. bifractus*, Lw.*D. comatus*, Lw.*D. cuprinus*, Wied.*D. funditor*, Lw.*D. gratus*, Lw.

Recorded from New Jersey.

## CATALOGUE OF INSECTS.

381

- D. longipennis*, Lw.
- D. ovatus*, Lw.
- D. pachycnemus*, Lw.
- D. quadrilamellatus*, Lw.  
Recorded from New Jersey.
- D. ruficornis*, Lw.
- D. scapularis*, Lw.
- D. scoparius*, Lw.
- D. setifer*, Lw.

**GYMNOPTERNUS, Lw.**

- G. albiceps*, Lw.
- G. barbatulus*, Lw.
- G. calacochrus*, Lw.
- G. debilis*, Lw.
- G. despicatus*, Lw.
- G. exilis*, Lw.
- G. flavus*, Lw.
- G. frequens*, Lw.
- G. lœvigatus*, Lw.
- G. minutus*, Lw.
- G. nigribarbus*, Lw.
- G. parvicornis*, Lw.
- G. subdilatatus*, Lw.
- G. ventralis*, Lw.

**PELASTONEURUS, Lw.**

- P. cognatus*, Lw.
- P. vagans*, Lw.

**ARGYRA, Macq.**

- A. calceata*, Lw.
- A. calcitrans*, Lw.

**SYNARTHROUS, Lw.**

- S. barbatus*, Lw.
- S. cinereiventris*, Lw.

## 382 GEOLOGICAL SURVEY OF NEW JERSEY.

**PORPHYROPS, Meigen.**

- P. fumipennis, Lw.**  
**P. melampus, Lw.**

**DIAPHORUS, Meigen.**

- D. lamellatus, Lw.**  
**D. mundus, Lw.**  
**D. opacus, Lw.**  
**D. sodalis, Lw.**

**CHRYSOTUS, Meigen.**

- C. affinis, Lw.**  
**C. discolor, Lw.**  
**C. longimanus, Lw.**  
**C. validus, Lw.**

**SYMPYONUS, Lw.**

- S. lineatus, Lw.**

**CAMPIONEMUS, Haliday.**

- C. hirtipes, Lw.**

**LIANCALUS, Lw.**

- L. genualis, Lw.**

**SCELLUS, Lw.**

- S. exustus, Walk.**

**HYDROPHORUS, Fallen.**

- H. parvus, Lw.**  
**H. pirata, Lw.**

**MEDETERUS, Fischer.**

- M. nigripes, Lw.**

**CHRYSOTIMUS, Lw.**

- C. delicatus, Lw.**  
**C. pusio, Lw.**

**SAUCROPUS, Lw.**

- S. carbonifer, Lw.**  
**S. superbiens, Lw.**  
**S. tenuis, Lw.**

## CATALOGUE OF INSECTS.

383

**PSILOPUS, Meigen.**

- P. bicolor*, Lw.
- P. comatus*, Lw.
- P. filipes*, Lw.
- P. inermis*, Lw.
- P. patibulatus*, Say.
- P. scintillans*, Lw.
- P. siphon*, Say.

Common throughout the State. Caldwell, common—Crane.

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**Family LONCHOPTERIDÆ.****LONCHOPTERA, Meigen.**

- L. lutea*, Panz.
  - L. riparia*, Meigen.
- 

**Family SYRPHIDÆ.****MICRODON, Meigen.**

- M. globosus*, Fabr.
- M. tristis*, Lw.
- M. rufipes*, Macq.

**CHRYSOTOXUM, Meigen.**

- C. laterale*, Lw.
- C. pubescens*, Lw.
- C. ventricosum*, Lw.

**PARAGUS, Latr.**

- P. angustifrons*, Lw.
- P. bicolor*, Fabr.
- P. tibialis*, Fallen.

**PIPIZA, Fallen.**

- P. modesta*, Lw.
- P. calcarata*, Lw.

## 384 GEOLOGICAL SURVEY OF NEW JERSEY.

*P. salax*, Lw.  
*P. nigribarba*, Lw.  
*P. femoralis*, Lw.  
*P. albipilosa*, Will.  
*P. nigripilosa*, Will.

**PSILOTA, Meigen.**  
*P. buccata*, Macq.

**CHRYSOGASTER, Meigen.**  
*C. nigripes*, Lw.  
 Recorded from New Jersey.  
*C. nitida*, Wied.  
*C. pictipennis*, Lw.  
 Recorded from New Jersey.

**CHILOSIA, Meigen.**  
*C. cyanescens*, Lw.

**MELANOSTOMA, Schiner.**  
*M. obscurum*, Say.  
*M. mellinum*, Linn.  
 Jamesburg—Smith.

**PYROPHÄNA, Schiner.**  
*P. rosarium*, Fabr.  
*P. ocymi*, Fabr.

**PLATYCHIRUS, St. F. & Serv.**  
*P. quadratus*, Say.  
*P. hyperboreus*, Staeger.  
*P. peltatus*, Meigen.

**SYRPHUS, Fabr.**  
*S. arcuatus*, Fallen.  
*S. diversipes*, Macq.  
*S. ribesii*, Linn.  
*S. torvus*, O. S.  
 Caldwell, common—Crane.

## CATALOGUE OF INSECTS.

385

- S. lesueurii*, Macq.  
*S. abbreviatus*, Zett.  
*S. americanus*, Wied.  
*S. xanthostomus*, Will.

## DIDEA, Macq.

- D. fuscipes*, Lw.  
 Collected by myself at Jamesburg.

## XANTHOGRAMMA, Schiner.

- X. felix*, O. S.  
*X. emarginata*, Say.  
*X. flavipes*, Lw.  
*X. aqualis*, Lw.

## ALLOGRAPTA, O. S.

- A. obliqua*, Say.  
 Caldwell, rare—Crane.

## MESOGRAPTA, Macq.

- M. polita*, Say.  
 Caldwell, not common—Crane.  
*M. marginata*, Say.  
 Caldwell, common—Crane. Jamesburg—Smith.  
*M. geminata*, Say.

## NEOASCOIA, Will.

- N. globosa*, Walk.  
*N. distincta*, Will.

## SPHEGINA, Meigen.

- S. keeniana*, Will.  
*S. rufiventris*, Lw.  
*S. lobata*, Lw.

## BACCHA, Fabr.

- B. tarchetius*, Walk.  
 Recorded from New Jersey.

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## 386 GEOLOGICAL SURVEY OF NEW JERSEY.

*B. lugens*, Lw.*B. fuscipennis*, Say.*B. aurinota*, Harris.*B. cognata*, Lw.**MYIOLEPTA**, Newn.*M. nigra*, Lw.**RHINGIA**, Scop.*R. nasica*, Say.**VOLUCELLA**, Geoff.*V. evecta*, Walk.*V. vesiculosa*, Fabr.**SERICOMYIA**, Meigen.*S. militaris*, Walk.*S. chrysotoxoides*, Macq.**ERISTALIS**, Latr.*E. tenax*, Linn.

I have taken this in New Jersey frequently.

*E. seneus*, Fabr.*E. dimidiatus*, Wied.

Caldwell, not common—Crane.

*E. saxorum*, Wied.

New Brunswick, Jamesburg.

*E. brousi*, Will.*E. transversus*, Wied.

Caldwell, not common—Crane. New Brunswick.

*E. vinetorum*, Fabr.**HELOPHILUS**, Meigen.*H. latifrons*, Lw.*H. similis*, Macq.

Jamesburg, not common.

*H. lætus*, Lw.*H. chrysostomus*, Wied.*H. distinctus*, Will.

## CATALOGUE OF INSECTS.

387

*H. conostomus*, Will.*H. integer*, Lw.

## PTERALLASTES, Lw.

*P. thoracicus*, Lw.

## TEUCHOCNEMIS, O. S.

*T. lituratus*, Lw.

## MALLOTA, Meigen.

*M. posticata*, Fabr.*M. barda*, Say.

Caldwell, common—Crane.

*M. cimbiciformis*, Fallen.

## TRIODONTA, Macq.

*T. curvipes*, Wied.

## TROPIDIA, Meigen.

*T. quadrata*, Say.

Caldwell, rare—Crane.

## ORIORHINA, Hoffm.

*O. verbosa*, Harris.*O. umbratilis*, Will.*O. intersistens*, Walk.

Recorded from New Jersey.

*O. analis*, Macq.*O. decora*, Macq.

## ORIOPRORA, O. S.

*O. cyanogaster*, Lw.

## BRACHYPALPUS, Macq.

*B. frontosus*, Lw.

## XYLOTA, Meigen.

*X. pigra*, Fabr.*X. bicolor*, Lw.*X. ejuncida*, Say.

## 388 GEOLOGICAL SURVEY OF NEW JERSEY.

- X. fraudulosa**, Lw.  
**X. angustiventris**, Lw.  
**X. curvipes**, Lw.  
**X. chalybea**, Wied.  
**X. elongata**, Will.  
**X. quadrimaculata**, Lw.  
Caldwell, not common—Crane.

**SENOGASTER**, Macq.

- S. comstocki**, Will.

**SYRITTA**, St. F. & Serv.

- S. pipiens**, Linn.  
Common at Jamesburg.

**SPILOMYIA**, Meigen.

- S. longicornis**, Lw.  
**S. fusca**, Lw.  
**S. hamifera**, Lw.  
**S. quadrifasciata**, Say.

**TEMNOSTOMA**, St. F. & Serv.

- T. bombylans**, Fabr.  
**T. pictulum**, Pa.  
**T. excentricum**, Harris.  
**T. alternans**, Lw.

**MILESIA**, Latr.

- M. ornata**, Fabr.  
Caldwell, not common—Crane.

**SPHECOMYIA**, Latr.

- S. vittata**, Wied.

**CERIA**, Fabr.

- C. abbreviata**, Lw.

## CATALOGUE OF INSECTS.

389

## Family CONOPIDÆ.

## CONOPS, Linn.

- C. genualis*, Lw.  
*C. obscuripennis*, Will.  
*C. sagittarius*, Say.  
     Caldwell, common—Crane.  
*C. sylvosus*, Will.  
     Caldwell, rare—Crane.  
*C. tibialis*, Say.  
     Caldwell, not common—Crane.  
*C. xanthopareus*, Will.

## STYLOGASTER, Macq.

- S. stylatus*, Fabr.

## DALMANIA, R. Desv.

- D. nigriceps*, Lw.

## MYOPA, Fabr.

- M. fulvifrons*, Say.  
*M. vesiculosa*, Say.
- 

## Family PIPUNCULIDÆ.

## PIPUNCULUS, Latr.

- 
- P. nigripes*, Lw.
- 

## Family PLATYPEZIDÆ.

## CALLOMYIA, Meigen.

- C. divergens*, Lw.  
*C. notata*, Lw.

## PLATYPEZA, Meigen.

- P. flavigornis*, Lw.  
*P. obscura*, Lw.  
*P. velutina*, Lw.

## 390 GEOLOGICAL SURVEY OF NEW JERSEY.

**Family CESTRIDÆ.****GASTROPHILUS, Leach.***G. equi*, Fabr.

Caldwell, common—Crane.

*G. haemorrhoidalis*, Linn.*G. nasalis*, Linn.

Caldwell, not common—Crane.

All of these affect the horse, and the species are common to Europe and America.

**HYPODERMA, Clark.***H. bovis*, DeG.

Bots on oxen.

*H. lineata*, Villers.

Forming bots on sheep. Both are common to Europe and North America.

**CESTRUS, Linn.***C. ovis*, Linn.

Forming bots on sheep. Common to Europe and North America.

**CUTEREbra, Clark.***C. americana*, Fabr.*C. buccata*, Fabr.*C. cuniculi*, Clark.*C. emasculator*, Fitch.*C. horripilum*, Clark.*C. scutellaris*, Lw.**Family TACHINIDÆ.****HYALOMYIA, R. Desv.***H. triangulifera*, Lw.**TRICHOPODA, Latr.***T. pennipes*, Fabr.

## CATALOGUE OF INSECTS.

391

**HYSTRICIA, Macq.***H. vivida*, Harr.

Common throughout the State. Caldwell—Crane.

**JURINIA, R. Desv.***J. algens*, Wied.*J. aterrima*, R. Desv.*J. boscii*, R. Desv.*J. hystrix*, Fabr.**GYMNOCHÄTA, R. Desv.***G. alcedo*, R. Desv.**MICROPALPUS, Macq.***M. distinctus*, R. Desv.**NEMORÆA, R. Desv.***N. leucanisæ*, Kirkp.Parasitic on the Army Worm, *L. unipuncta*.**EXORISTA, Meigen.***E. cecropiæ*, Riley.*E. doryphoræ*, Riley.*E. phycitæ*, LeB.**MASICERA, Macq.***M. archippivora*, Riley.**BELVOISIA, R. Desv.***B. bifasciata*, Fabr.**DEGEERIA, Meigen.***D. lateralis*, Macq.**SCOPOLIA, R. Desv.***S. lateralis*, Macq.**EUTHERA, Lw.***E. tentatrix*, Lw.

## 392 GEOLOGICAL SURVEY OF NEW JERSEY.

**PTILOCERA, Macq.****P. americana, Macq.**

The *Tachinid* fauna of New Jersey, will, when studied, develop many times the number of species above listed. The imperfection of the list is caused not only by the fact that few of the species are recorded from New Jersey, but also because the entire family is very incompletely worked up.

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**Family DEXIDÆ.****DEXIA, Meigen.****D. cerata, Walk.****D. harpasa, Walk.****D. punctata, R. Desv.****SERIOCERA, Macq.****S. pictipennis, Macq.****MELANOPHORA, Meigen.****M. roralis, Linn.****MICROPHTHALMA, Macq.****M. nigra, Macq.****Family SARCOPHAGIDÆ.****SARCOPHAGA, Meigen.****S. carnaria, Linn.**

Caldwell, common—Crane.

**S. consobrina, R. Desv.****S. georgina, Wied.****Family MUSCIDÆ.****STOMOXYS, Geoffr.****S. caloitrans, Linn.**

Common everywhere in the State, and a great pest to cattle.

## CATALOGUE OF INSECTS.

393

**HÆMATOBIA, R. Desv.****H. serrata**, R. Desv.

The "Horn Fly," "Buffalo Fly" or "Texas Fly." Has invaded all the southern and western counties, and is travelling east and north.

**IDIA, Meigen.****I. viridis**, Wied.**MESembrina, Meigen.****M. resplendens**, Wahlb.**CALLIPHORA, R. Desv.****C. erythrocephala**, Meigen.**C. vomitoria**, Linn.

Common all over the State. Caldwell—Crane.

**POLLENIA, R. Desv.****P. rufa**, Fabr.

Not rare in houses in September. Less common earlier in the season.

**LUCILIA, R. Desv.****L. brunnicosa**, R. Desv.**L. cæsar**, Linn.

Common throughout the State.

**L. consobrina**, Macq.**L. cornicina**, Fabr.**L. fraterna**, Macq.**L. macellaria**, Fabr.**L. philadelphica**, R. Desv.**PYRELLIA, R. Desv.****P. cadaverina**, Linn.**MUSCA, Linn.****M. domestica**, Linn.

The common House Fly, abundant everywhere.

## 394 GEOLOGICAL SURVEY OF NEW JERSEY.

**CYRTONEURA, Macq.*****C. stabulans*, Fall.****MYOSPILA, Rond.*****M. meditabunda*, Fabr.****Family ANTHOMYIDÆ.****ARICIA, R. Desv.*****A. morioides*, Zett.****SPILOGASTER, Macq.*****S. angelicæ*, Meigen.*****S. urbana*, Meigen.****HYDROTÆA, R. Desv.*****H. armipes*, Fall.*****H. dentipes*, Meigen.****OPHYRA, R. Desv.*****O. leucostoma*, Wied.****LIMNOPHORA, R. Desv.*****L. diaphana*, Wied.**

Caldwell, not common—Crane.

***L. stygia*, Meigen.****ANTHOMYIA, Meigen.*****A. brassicæ*, Bouché**

On Cabbage. Locally very common and destructive.

***A. campestris*, R. Desv.*****A. ceparum*, Meigen.**

On Onions. Locally common and injurious.

***A. raphani*, Harris.**

On Radishes. Not reported in 1889.

***A. zeas*, Riley.**

Injures Corn. Not recorded from New Jersey as yet.

## CATALOGUE OF INSECTS.

395

**HOMALOMYIA, Bouché.***H. canicularis*, Linn.*H. manicata*, Meigen.*H. scalaris*, Fabr.*H. tetracantha*, Lw.**LISPE, Latr.***L. uliginosa*, Fallen.**OENOSIA, Meigen.***C. calopyga*, Lw.*C. nivea*, Lw.*C. fuscopunctata*, Macq.**Family CORDYLURIDÆ.****CORDYLURA, Fallen.***C. adusta*, Lw.

Recorded from New Jersey.

*C. bimaculata*, Lw.*C. latifrons*, Lw.*C. pleuritica*, Lw.*C. terminalis*, Lw.**SCATOPHAGA, Meigen.***S. squalida*, Meigen.**FUCELLIA, R. Desv.***F. fuorum*, Fallen.**Family HELOMYZIDÆ.****HELOMYZA, Fallen.***H. lateritia*, Lw.*H. longipennis*, Lw.*H. plumata*, Lw.

## 396 GEOLOGICAL SURVEY OF NEW JERSEY.

**CHCOTHECA, Lw.****C. fenestralis**, Fallen.**Family SCIOMYZIDÆ.****SCIOMYZA, Fallen.**

- S. albocostata**, Fallen.  
**S. luctifera**, Lw.  
**S. nana**, Fallen.  
**S. obtusa**, Fallen.  
**S. pubera**, Lw.  
**S. tenuipes**, Lw.  
**S. vittata**, Haliday.

**TETANOCERA, Latr.**

- T. arcuata**, Say.  
**T. combinata**, Lw.  
**T. flavescens**, Lw.  
**T. pallida**, Lw.  
**T. pictipes**, Lw.  
**T. plebeja**, Lw.  
**T. plumosa**, Lw.  
**T. saratogensis**, Fitch.  
**T. sparsa**, Lw.

**DRYOMYZA, Fallen.**

- D. anilis**, Fallen.  
**D. simplex**, Lw.

**Family PSILIDÆ.****LOXOCERA, Meigen.**

- L. cylindrica**, Say.  
**L. pleuritica**, Lw.

## CATALOGUE OF INSECTS.

397

**PSILA, Meigen.***P. lateralis*, Lw.*P. sternalis*, Lw.**Family MICROPEZIDÆ.****CALOBATA, Meigen.***C. antennipennis*, Say.*C. lasciva*, Fabr.**Family ORTALIDÆ.****PYRGOTA, Wied.***P. undata*, Wied.

Caldwell, not common—Crane.

*P. valida*, Harris.**AMPHIONEPHES, Lw.***A. pertusus*, Lw.**RIVELLIA, R. Desv.***R. viridulans*, R. Desv.

Caldwell, rare—Crane.

**CAMPTONEURA, Macq.***C. picta*, Fabr.**IDANA, Lw.***I. marginata*, Say.**TEPHRONOTA, Lw.***T. humilis*, Lw.**STICTOCEPHALA, Lw.***S. cribrum*, Lw.*S. corticalis*, Fitch.*S. vau*, Say.

## 398 GEOLOGICAL SURVEY OF NEW JERSEY.

**CALLOPISTRIA, Lw.***C. annulipes*, Macq.**SEOPTERA, Kirby.***S. vibrans*, Linn.**EUXESTA, Lw.***E. notata*, Wied.**CHÆTOPIS, Lw.***C. aenea*, Wied.**Family TRYPETIDÆ.****TRYPETA, Meigen.***T. fratria*, Lw.*T. suavis*, Lw.*T. longipennis*, Wied.

Caldwell, common—Crane.

*T. obliqua*, Say.*T. polita*, Lw.*T. cingulata*, Lw.

Recorded from Long Branch, New Jersey.

*T. pomonella*, Walsh.

Locally injurious to Apple, but seems confined to very few varieties.

*T. rotundipennis*, Lw.*T. sparsa*, Wied.*T. comma*, Wied.*T. latifrons*, Lw.*T. solidaginis*, Fitch.*T. alba*, Lw.*T. albidiennis*, Lw.*T. vernoniæ*, Lw.*T. seriata*, Lw.*T. angustipennis*, Lw.

## CATALOGUE OF INSECTS.

399

*T. clathrata*, Lw.*T. geminata*, Lw.*T. bella*, Fitch.*T. festiva*, Lw.

## Family LONCHÆIDÆ.

## PALLOPTERA, Fallen.

*P. superba*, Lw.

## LONCHÆA, Fallen.

*L. polita*, Say.*L. rufitarsis*, Macq.

## Family SAPROMYZIDÆ.

## SAPROMYZA, Fallen.

*S. compedita*, Lw.*S. fraterna*, Lw.*S. lupulina*, Fabr.*S. longipennis*, Meigen.*S. philadelphica*, Lw.*S. quadrilineata*, Lw.*S. vulgaris*, Fitch.

## LAUXANIA, Latr.

*L. cylindricornis*, Fabr.*L. frontalis*, Lw.*L. gracilipes*, Lw.*L. manuleata*, Lw.*L. obscura*, Lw.

## Family PHYCODROMIDÆ.

## CŒLOPA, Meigen.

*C. frigida*, Fallen.*C. nitidula*, Zett.

Both species are common to Europe and North America.

## 400 GEOLOGICAL SURVEY OF NEW JERSEY.

**Family HETERONEURIDÆ.****HETERONEURA**, Fallen.*H. albimana*, Meigen.

Also common to Europe and North America.

**Family OPOMYZIDÆ.****OPOMYZA**, Fallen.*O. signicosta*, Walk.**SCYPHELLA**, R. Desv.*S. flava*, Linn.**Family SEPSIDÆ.****SEPSIS**, Fallen.*S. similis*, Macq.**NEMOPODA**, R. Desv.*N. cylindrica*, Fabr.*N. minuta*, Wied.**Family PIOPHILIDÆ.****PIOPHILA**, Fallen.*P. casei*, Linn.

The common "Cheese Mite."

*P. nigriceps*, Meigen.*P. petasisionis*, L. Duf.**Family DIOPSIDÆ.****SPHYRACEPHALA**, Say.*S. brevicornis*, Say.

## CATALOGUE OF INSECTS.

401

**Family EPHYDRIDÆ.****DICHAETA, Meigen.***D. brevicauda*, Lw.**NOTIPHILA, Fallen.***N. bella*, Lw.*N. carinata*, Lw.*N. scalaris*, Lw.*N. unicolor*, Lw.*N. vittata*, Lw.**PARALIMNA, Lw.***P. appendiculata*, Lw.**PSILOPA, Fallen.***P. atra*, Lw.*P. scoriacea*, Lw.**HYDRELLIA, R. Desv.***H. formosa*, Lw.*H. hypoleuca*, Lw.*H. ischiaca*, Lw.*H. obscuriceps*, Lw.*H. scapularis*, Lw.*H. valida*, Lw.**PHILYGRIA, Stenh.***P. debilis*, Lw.*P. fuscicornis*, Lw.**PARYDRA, Stenh.***P. abbreviata*, Lw.*P. bituberculata*, Lw.*P. breviceps*, Lw.*P. paullula*, Lw.*P. quadratiberculata*, Lw.

## 402 GEOLOGICAL SURVEY OF NEW JERSEY.

**EPHYDRA, Fallen.**

- E. atrovirens*, Lw.  
*E. subopacus*, Lw.  
*E. obscuripes*, Lw.

**SCATELLA, R. Desv.**

- S. favillacea*, Lw.  
*S. lugens*, Lw.  
*S. quadrata*, Fallen.

**CÆNIA, R. Desv.**

- C. spinosa*, Lw.

**ILYTHEA, Haliday.**

- I. spilota*, Curt.
- 

**Family GEOMYZIDÆ.****DIASTATA, Meigen.**

- D. pulchra*, Lw.
- 

**Family DROSOPHILIDÆ.****PHORTICA, Schiner.**

- P. leucostoma*, Lw.

**STEGANA, Meigen.**

- S. hypoleuca*, Meigen.  
*S. nigra*, Meigen.

**DROSOPHILA, Fallen.**

- D. graminum*, Fallen.  
*D. quinaria*, Lw.  
*D. transversa*, Fallen.

## CATALOGUE OF INSECTS.

403

## Family OSCINIDÆ.

## GAURAX, Lw.

*G. anchora*, Lw.*G. festivus*, Lw.

## OSCINIS, Latr.

*O. atriceps*, Lw.*O. dorsata*, Lw.*O. umbrosa*, Lw.

## MEROMYZA, Meigen.

*M. americana*, Fitch.

Common throughout the State, but not injurious.

## SIPHONELLA, Macq.

*S. obesa*, Fitch.

## CHLOROPS, Meigen.

*C. versicolor*, Lw.*C. crocota*, Lw.*C. grata*, Lw.

## Family AGROMYZIDÆ.

## LOBIOPTERA, Wahlb.

*L. arcuata*, Lw.

## AULACIGASTER, Macq.

*A. rufitarsis*, Macq.

## LEUCOPIS, Meigen.

*L. simplex*, Lw.

## DESMOMETOPA, Lw.

*D. latipes*, Meigen.

## AGROMYZA, Fallen.

*A. seneiventris*, Fallen.*A. angulata*, Lw.

## 404 GEOLOGICAL SURVEY OF NEW JERSEY.

**A. coronata**, Lw.**A. magnicornis**, Lw.**A. simplex**, Lw.**A. tritici**, Fitch.**A. virens**, Lw.**PHYLLOMYZA**, Fallen.**P. nitens**, Lw.**Family BORBORIDÆ.****BORBORUS**, Meigen.**B. equinus**, Fallen.**Family PHORIDÆ.****GYMNOPHORA**, Macq.**G. arcuata**, Meigen.**PHORA**, Latr.**P. atra**, Fabr.**P. fuscipes**, Macq.**P. rufipes**, Meigen.**Family HIPPOBOSCIDÆ.****OLFERSIA**, Wied.**O. americana**, Leach.Lives on *Bubo virginianus* and *Buteo borealis*.**O. albipennis**, Say.Lives on *Ardea herodias*.**O. ardææ**, Macq.

## CATALOGUE OF INSECTS.

405

## ORNITHOMYIA, Latr.

*O. avicularia*, Linn.*O. nebulosa*, Say.*O. pallida*, Say.*O. confluens*, Say.

## LIPOPTENA, Nitsch.

*L. depressa*, Say.

## MELOPHAGUS, Latr.

*M. ovinus*, Linn.

## HIPPOBOSCA, Linn.

*H. equina*, Linn.

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## ORDER ORTHOPTERA.

For the list in this order, I am primarily indebted to Mr. Lawrence Bruner, the Entomologist of the Nebraska Experiment Station, and an authority in the present order. He is to be credited with the list in its entirety so far as systematic arrangement and general locality are concerned. I have, however, added Mr. Crane's authority for species taken by him, and have given also some notes of species taken by myself. I have also made use of Mr. William T. Davis' list of the Orthoptera of Staten Island for dates of appearance, and sometimes for notes on habits.

## DERMAPTERA.

## Family FORFICULIDÆ.

## FORFICULA, Linn.

*F. aculeata*, Scudd.*F. auricularia*, Linn.

The European "Ear Wig." An introduced species.

## 406 GEOLOGICAL SURVEY OF NEW JERSEY.

## SPONGOPHORA, Serv.

*S. brunneipennis*, Serv.

## ANISOLABIA, Fieb.

*A. maritima*, Bon.

Common near the steamboat pier at Sandy Hook, but I found it nowhere else. This species was not on Mr. Bruner's list.

## LABIA, Leach.

*L. minor*, Linn.

Common to this country and Europe. Not rare. Caldwell, rare—Crane.

## ORTHOPTERA.

## Family BLATTIDÆ.

## PHYLLODROMIA, Serv.

*P. germanica*, Linn.

The common small cockroach, water bug or croton bug. Disgustingly common in some localities.

*P. borealis*, Sauss.

## ISCHNOPTERA, Burm.

*I. unicolor*, Scudd.

Under bark, June—Davis.

*I. pennsylvanica*, De G.

Under bark, June—Davis. Caldwell, common—Crane.

## PERIPLANETA, Burm.

*P. orientalis*, Linn.

The "Black Beetle" or "Oriental Roach." A large, black species, common in houses around kitchen sinks. Newark, not common—Crane.

*P. americana*, Linn.

Caldwell, common—Crane. New Brunswick, rare—Smith.

## CATALOGUE OF INSECTS.

407

## Family PHASMIDÆ.

## DIAPHEROMERA, Gray.

*D. femorata*, Say.

The "Walking Stick." I have taken a few specimens of this peculiar creature. Caldwell, not common—Crane.

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## Family MANTIDÆ.

## STAGMOMANTIS, Scudd.

*S. carolina*, Burm.*S. dimidiata*, Burm.

## Family GRYLLIDÆ.

## TRIDACTYLUS, Oliv.

*T. terminalis*, Scudd.*T. apicalis*, Say.

I took a specimen of one of these odd little crickets in Ocean county the present season.

## GRYLLOTALPA, Latr.

*G. borealis*, Burm.

The mole cricket. Lives in dams and along ditches, and has been recorded as injurious in potato fields. August—Davis. Caldwell, not common—Crane.

*G. columba*, Scudd.

Habits like the preceding. August—Davis.

## GRYLLUS, Linn.

*G. abbreviatus*, Serv.

Caldwell, common—Crane. Common also on cranberry bogs, where it is supposed to eat into the fruit.

## 408 GEOLOGICAL SURVEY OF NEW JERSEY.

**G. luctuosus, Serv.**

Caldwell, common—Crane.

**G. pennsylvanicus, Burm.**Newark, New Brunswick, Jamesburg, on cranberry bogs—  
Smith.**G. neglectus, Scudd.**Caldwell, common—Crane, sub nom. *niger*. Ocean county,  
on cranberry bogs—Smith.**NEMOBIUS, Serv.****N. fasciatus, De G.**

Jamesburg, on cranberry bogs—Smith.

**N. vittatus, Harris.**Omitted by Mr. Bruner. Caldwell, common—Crane. Late  
June and July—Davis.**N. exiguum, Say.**In salt meadows, on *Iva frutescens*, in August—Davis.**ANAXIPHUS, Sauss.****A. pulicarius, Sauss.**Occurs in Pennsylvania and Delaware. It can be added to  
the list with some doubt—Bruner.**HAPITHUS, Uhl.****H. agitator, Uhl.****OROCHARIS, Uhl.****O. saltator, Uhl.****COCANTHUS, Serv.****CE. niveus, Serv.**

Common all over the State. Caldwell, common—Crane.

**CE. latipennis, Riley.**

I have never taken a specimen of this.

**CE. fasciatus, Fitch.**

Newark, not rare—Smith.

**CE. angustipennis, Fitch.**

## CATALOGUE OF INSECTS.

409

**CE. bipunctatus, De G.**

Mr. Bruner does not give these three species. Mr. Davis records them all from Staten Island. I have myself taken them in New Jersey.

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**Family LOCUSTIDÆ.****CHUTOPHILUS, Scudd.****C. maculatus, Harris.**

September—Davis.

**C. lapidiculus, Scudd.**

Caldwell, common—Crane.

**C. uhleri, Scudd.****C. gracilipes, Hald.****CYRTOPHYLLUS, Burm.****C. concavus, Harr.**

The well-known katydid. It is heard in August all over the State. Caldwell, common—Crane.

**AMBLYCORYPHA, Stal.****A. oblongifolia, De G.**

Newark.

**A. rotundifolia, Scudd.**

Both of these are found on Staten Island, in August—Davis.

**A. uhleri, Bruner.****MICROCENTRUM, Scudd.****M. laurifolium, Linn.****M. retinervis, Burm.**

Common on cranberry bogs. Does considerable damage by eating into berries.

## 410 GEOLOGICAL SURVEY OF NEW JERSEY.

**SCUDDERIA, Stal.****S. furculata**, Bruner.

Caldwell, common—Crane. Jamesburg, on cranberry bogs—Smith.

**S. pistillata**, Bruner.**S. angustifolia**, Harr.**S. curvicauda**, De G.

Caldwell, common—Crane. August 6th—Davis. Jamesburg, on cranberry bogs—Smith.

**S. furcata**, Bruner.

Jamesburg, on cranberry bogs—Smith.

**CONOCEPHALUS, Thunb.****C. ensiger**, Harr.

July 9th, on Staten Island—Davis.

**C. exilicanorus**, Davis.In salt meadows, on *Spartina*—Davis.**C. robustus**, Scudd.

Staten Island, in August—Davis.

**C. retusus**, Scudd.

Caldwell, rare—Crane. This is not on Mr. Bruner's list.

**C. dissimilis**, Serv.

This is not on Mr. Bruner's list. Mr. Davis records it from Staten Island, in August, and it is very certain to occur with us.

**ORCHELIMUM, Serv.****O. vulgare**, Harr.

Staten Island, in July—Davis. Newark, Sandy Hook, Jamesburg—Smith. Common on cranberry bogs.

**O. glaberrimum**, Burm.

Caldwell, common—Crane.

**O. concinnum**, Scudd.

Staten Island, in July—Davis.

**O. agile**, De G.

## CATALOGUE OF INSECTS.

411

**XIPHIDIUM, Serv.****X. fasciatum, De G.**

Caldwell, rare—Crane. Staten Island, in August—Davis.  
Common at Jamesburg, on cranberry bogs—Smith.

**X. brevipenne, Scudd.**

Jamesburg, common on cranberry bogs—Smith.

**X. saltans, Scudd. (?)****X. strictum, Scudd. (?)****THYREONOTUS, Serv.****T. dorsalis, Burm.****T. pachymerus, Burm.****Family ACRIDIDÆ.****OPOMALA, Serv.****O. brachyptera, Scudd.****TRUXALIS, Linn.****T. brevicornis, Linn.****SYRBULA, Stal.****S. admirabilis, Uhl.**

This has been found in Delaware and in Pennsylvania, and  
will probably be found also in New Jersey—Bruner.

**CHRYSOCHRAON, Scudd.****C. viridis, Scudd.**

I have taken this in Ocean and Monmouth counties, on cran-  
berry bogs—Smith.

**STETHEOPHYMA, Fisher.****S. lineata, Scudd.****CHLOÖMALTIS, Harr.****C. conspersa, Harr.****C. punctulata, Scudd.**

## 412 GEOLOGICAL SURVEY OF NEW JERSEY.

*C. curtipennis*, Harr.

Caldwell, common—Crane.

**STENOBOTHRUS, Fischer.**

*S. maculipennis*, Scudd.

Ocean Grove, not common—Crane. I also found this on cranberry bogs.

*S. æqualis*, Scudd.

Jamesburg, on cranberry bogs. Sandy Hook—Smith.

*Var. bilineatus*, Scudd.

*S. propinquum*, Scudd.

Caldwell, not common—Crane. This species is not on Mr. Bruner's list.

**GOMPHOCERUS, Thunb.**

*G. carinatus*, Scudd.

Taken in Pennsylvania and Delaware, and will probably be found in New Jersey—Bruner.

**PAROXYA, Scudd.**

*P. atlantica*, Scudd.

Newark, Anglesea, Jamesburg, on cranberry bogs—Smith.

*P. recta*, Scudd.

Jamesburg, on cranberry bogs—Smith.

*P. floridana*, Thos.

Caldwell, not common—Crane. This is not on Mr. Bruner's list.

**PEZOTETTIX, Burm.**

*P. scudderii*, Uhl.

*P. edax*, Sauss.

Caldwell, not common—Crane. This is not on Mr. Bruner's list.

**MELANOPLUS, Stal.**

*M. femur-rubrum*, De G.

Common everywhere in the State.

## CATALOGUE OF INSECTS.

413

**M. atlantis**, Riley.**M. bivittatus**, Say.

Caldwell, common—Crane. Common also on cranberry bogs  
in Ocean and Monmouth counties.

**M. collinus**, Scudd.**M. punctulatus**, Uhl.

I have taken this on cranberry bogs in Ocean county.

**ACRIDIUM**, Burm.**A. alutaceum**, Harr.

Caldwell, common—Crane. Common on cranberry bogs.

**A. rubiginosum**, Harr.**A. obscurum**, Burm.

Newark, Caldwell—Crane.

**SCHISTOCERCA**, Stal.**S. americana**, Dru.

Mr. Davis records this from Staten Island in November.  
Newark—Angleman.

**CHORTOPHAGA**, Sauss.**C. viridifasciata**, De G.*Var. virginiana*, Fabr.*Var. radiata*, Harr.*Var. infuscata*, Harr.

Caldwell, common—Crane. This insect in all its protean  
forms was very common this spring around and on cranberry  
bogs. It occurs throughout the State.

**ENCOPTOLOPHUS**, Scudd.**E. sordidus**, Burm.

Caldwell, common—Crane. Newark, New Brunswick—  
Smith.

## 414 GEOLOGICAL SURVEY OF NEW JERSEY.

**ARPHIA, Stal.****A. sulphurea, Fabr.**

Caldwell, common—Crane. I have taken this also on cranberry bogs.

**A. xanthoptera, Burm.**

Caldwell, not common—Crane.

**HIPPISCUS, Sauss.****H. tuberculatus, Beauv.****H. rugosus, Scudd.**

Caldwell, rare—Crane.

**H. phoenicopterus, Germ.**

Caldwell, not common—Crane. New Brunswick—Smith.

**PSINIDIA, Stal.****P. feneestrata, Serv.**

Taken in August on Staten Island, by Mr. Davis.

**P. eucerata, Uhl.**

Ocean Grove, common—Crane. Also taken on cranberry bogs. This species is not on Mr. Bruner's list.

**TRIMEROTROPIS, Stal.****T. maritima, Harr.**

Ocean Grove, not common—Crane. Sandy Hook, in early August. Quite common and very shy.

**CIRCOOTETTIX, Scudd.****C. verruculatus, Kirby.****SPHARAGEMON, Scudd.****S. æquale, Scudd.**

Ocean Grove, common—Crane. I have taken it on cranberry bogs at Jamesburg, not rarely.

## CATALOGUE OF INSECTS.

415

*S. bolli*, Scudd.

Caldwell, not common—Crane.

*S. balteatum*, Scudd.

Jamesburg, on cranberry bogs.

*S. collare*, Scudd.

I have taken this on cranberry bogs at Jamesburg. It is not on Mr. Bruner's list.

## SCIRTETTICA, Bruner.

*S. marmorata*, Harr.

Ocean Grove, not rare—Crane. Jamesburg, rare—Smith.

## DISSOSTEIRA, Scudd.

*D. carolina*, Linn.

Common throughout the State.

## BATRICHIDEA, Serv.

*B. cristata*, Harr.

Caldwell, rare—Crane.

*B. carinata*, Scudd.

Taken on Staten Island in April, by Mr. Davis.

## TETTIGIDEA, Scudd.

*T. lateralis*, Say.

Taken on Staten Island in April and May, by Mr. Davis.

*T. polymorpha*, Burm.

Taken by Mr. Davis, on Staten Island, April to August.

TETTI~~X~~<sup>I</sup>, Fischer.*T. triangularis*, Scudd.*T. ornatus*, Say.

Caldwell, common—Crane. April to September—Davis.

*T. granulatus*, Kirby.

April to September, on Staten Island—Davis.

*T. cucullatus*, Scudd.

## 416 GEOLOGICAL SURVEY OF NEW JERSEY.

**ORDER HEMIPTERA.**

Any list of the species of this order must necessarily be largely tentative. There is not a single special collection of Hemiptera in the State, and few of the collectors ever pick up a specimen except where they mistake it for a beetle. The describers of species have therefore derived little of their material from this State, and seldom quote New Jersey among the localities. The result is that the list must be made up of those species known to occur on all sides of the State, and which may be therefore reasonably expected to be found with us. Mr. Crane's list and the few species taken by myself are the only positive records.

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**SUB-ORDER HETEROPTERA.**

In this sub-order Uhler's Check List (Brooklyn, New York, 1886,) has been my guide, and I have included those species which are quoted from the United States generally, from the Atlantic States, and from the Eastern States, the latter term including the Middle States, in Mr. Uhler's nomenclature.

**Family SCUTELLERIDÆ.****HOMÆMUS, Dallas.**

*H. grammicus*, Wolff.

*H. æneifrons*, Say.

**CAMIRUS, Stal.**

*C. porosus*, Germ.

**ACANTHOLOMA, Stal.**

*A. denticulata*, Stal.

**EURYGASTER, Lap.**

*E. alternatus*, Say.

## CATALOGUE OF INSECTS.

417

## Family CORIMELÆNIDÆ.

## CORIMELÆNA, White.

- C. atra*, Am. & Serv.  
*C. nitiduloides*, Wolff.  
     Caldwell, not common—Crane.  
*C. lateralis*, Fabr.  
*C. pulicaria*, Germ.  
*C. marginella*, Dall.
- 

## Family CYDNIDÆ.

## PANGÆUS, Stal.

- P. bilineatus*, Say.

## MELANÆTHUS, Uhl.

- M. robustus*, Uhl.  
*M. picinus*, Uhl.  
*M. uhleri*, Sign.

## AMNESTUS, Dall.

- A. spinifrons*, Say.  
*A. pusillus*, Uhl.

## LOBONOTUS, Uhl.

- L. anthracinus*, Uhl.

## CANTHOPHORUS, Muls. et Rey.

- C. cinctus*, Beauv.
- 

## Family PENTATOMIDÆ.

## Sub-Family ASOPINÆ.

## PERILLUS, Stal.

- P. circumcinctus*, Stal.  
*P. exaptus*, Say.

2B

## 418 GEOLOGICAL SURVEY OF NEW JERSEY.

**RHACOGNATHUS, Fieb.***R. americanus*, Stal.**ZICRONA, Am. et Serv.***Z. cuprea*, Dall.**PODISUS, H-S.***P. cynicus*, Say.*P. placidus*, Uhl.*P. serieiventris*, Uhl.*P. spinosus*, Dall.

Caldwell, common—Crane.

*P. modestus*, Dall.*P. bracteatus*, Fitch.*P. politus*, Uhl.**LIOTROPIS, Uhl.***L. humeralis*, Uhl.**Sub-Family HALYDINÆ.****PODOPS, Lap.***P. cinctipes*, Say.**BROCHYMENA, Am. et Serv.***B. arborea*, Say.

Caldwell, common—Crane.

*B. quadripustulata*, Fabr.*B. annulata*, Fabr.*B. laticornis*, Say.**Sub-Family PENTATOMINÆ.****AELIA, Fabr.***A. americana*, Dall.

## CATALOGUE OF INSECTS.

419

**NEOTTIGLOSSA, Kirby.***N. undata*, Say.*N. trilineata*, Kirby.**COSMOPEPLA, Stal.***C. carnifex*, Fabr.

Caldwell, rare—Crane.

**CEBALUS, Stal.***C. pugnax*, Fabr.**MORMIDEA, Am. et Serv.***M. lugens*, Fabr.

Caldwell, rare—Crane.

**EUCHISTUS, Dall.***E. fuscilis*, Uhl.*E. servus*, Say.*E. tristigmus*, Say.

Caldwell, rare—Crane.

*E. variolaris*, Pal. Beauv.

Caldwell, common—Crane.

*E. ictericus*, Linn.**CENUS, Dall.***C. delius*, Say.**HYMENAROYS, Am. et Serv.***H. aequalis*, Say.*H. nervosa*, Say.**MENEOLES, Stal.***M. insertus*, Say.**LIODERMA, Uhl.***L. senilis*, Say.*L. belfragii*, Stal.*L. ligata*, Say.

Caldwell, rare—Crane.

## 420 GEOLOGICAL SURVEY OF NEW JERSEY.

**TRICHOPEPLA, Stal.***T. semivittata*, Say.*T. atricornis*, Stal.**PERIBALUS, Muls.***P. limbolaris*, Stal.**THYANTA, Stal.***T. custator*, Fabr.**NEZARA, Am. et Serv.***N. pennsylvanica*, De G.

Caldwell, common—Crane.

*N. hilaris*, Say.

I have taken a few specimens of this.

**BANASA, Stal.***B. dimidiata*, Say.*B. calva*, Say.**Sub-Family ACANTHOSOMINÆ.****ACANTHOSOMA, Curt.***A. cruciata*, Say.*A. lateralis*, Say.*A. nebulosa*, Kirby.**Family COREIDÆ.****CHARIESTERUS, Lap.***C. antennator*, Fabr.**CORYNOCORIS, Mayr.***C. typhaeus*, Fabr.*C. distinctus*, Dall.**ARCHIMERUS, Burm.***A. calcarator*, Fabr.

## CATALOGUE OF INSECTS.

421

## EUTHOCTHA, Mayr.

*E. galeator*, Fabr.

## METAPODIUS, Westw.

*M. femoratus*, Fabr.

Caldwell, not common—Crane.

*M. terminalis*, Dall.

## LEPTOGLOSSUS, Guer.

*L. oppositus*, Say.*L. corculus*, Mayr.

## ANASA, Am. et Serv.

*A. tristis*, De G.The "Squash Bug." Common all over the State. Caldwell—  
Crane.

## ALYDUS, Fabr.

*A. calcaratus*, Fabr.*A. eurinus*, Say.

Caldwell, common—Crane.

*A. pilosulus*, H-S.*A. quinquespinosus*, Say.*A. rufipes*, Westw.

## PROTHENOR, Stal.

*P. belfragei*, Hagl.

## Family BERYTIDÆ.

## NEIDES, Latr.

*N. muticus*, Say.

## JALYSUS, Stal.

*J. spinosus*, Say.

Caldwell, not common—Crane.

## 422 GEOLOGICAL SURVEY OF NEW JERSEY.

**HARMOSTES, Burm.**

- H. reflexulus**, Stal.  
Caldwell, rare—Crane.  
**H. fraterculus**, Say.  
**H. obliquus**, Say.

**CORIZUS, Fall.**

- C. lateralis**, Say.  
**C. punctipennis**, Dall.  
**C. novæ-boracensis**, Sign.  
**C. nigristernum**, Sign.  
**C. sides**, Fabr.  
Caldwell, rare—Crane.
- 

**Family LYGÆIDÆ.****NYSIUS, Dall.**

- N. angustatus**, Uhl.

**ORSILLACIS, Uhl.**

- O. producta**, Uhl.

**BELONOCHILUS, Uhl.**

- B. numenius**, Say.

**ORSILLUS, Dall.**

- O. scolopax**, Say.

**ISCHNORHYNCHUS, Fieb.**

- I. didymus**, Zett.

**CYMUS, Hahn.**

- C. luridus**, Stal.  
**C. angustatus**, Stal.

**BLISSUS, Burm.**

- B. leucopterus**, Say.  
The “Chinch Bug.” Caldwell, rare—Crane.

## CATALOGUE OF INSECTS.

423

**GEOCORIS, Fall.***G. fuliginosus*, Say.

Caldwell, not common—Crane.

*G. limbatus*, Stal.*G. griseus*, Dall.*G. borealis*, Dall.**GEDANCALA, Am. et Serv.***G. dorsalis*, Say.**OROPHIUS, Stal.***C. disconotus*, Say.**LIGYROCORIS, Stal.***L. sylvestris*, Linn.*L. constrictus*, Say.**MYODOCHA, Latr.***M. serripes*, Oliv.**HERAEUS, Stal.***H. plebejus*, Stal.*H. insignis*, Uhl.**PAMERA, Say.***P. basalis*, Dall.*P. vicina*, Dall.**PTOCHIOMERA, Say.***P. nodosa*, Say.**ONEMODUS, H-S.***O. mavortius*, Say.**TRAPEZONOTUS, Fieb.***T. nebulosus*, Fall.*T. rufipes*, Stal.**EMBLETHIS, Fieb.***E. arenarius*, Linn.**PERITRECHUS, Fieb.***P. fraternus*, Uhl.

## 424 GEOLOGICAL SURVEY OF NEW JERSEY.

**GONIANOTUS, Fieb.***G. marginepunctatus*, Wolff.**EREMOCORIS, Fieb.***E. ferus*, Say.**MICROTOMA, Lap.***M. carbonaria*, Rossi.**MEGALONOTUS, Fieb.***M. unus*, Say.**THAUMASTOPUS, Fitch.***T. alacris*, Walk.**PELIOPELTA, Uhl.***P. abbreviata*, Uhl.**MELANOCORYPHUS, Stal.***M. biorucis*, Say.**LYGÆUS, Fabr.***L. kalmii*, Stal.*L. turcicus*, Fabr.

Caldwell, common—Crane.

**ONCOPELTUS, Stal.***O. fasciatus*, Dall.

Caldwell, not common—Crane.

**Family PYRRHOCORIDÆ.****LARGUS, Hahn.***L. succinctus*, Linn.

## CATALOGUE OF INSECTS.

425

## Family CAPSIDÆ.

## BRACHYTROPIS, Fieb.

*B. calcarata*, Fall.

## TRIGONOTYLUS, Fieb.

*T. ruficornis*, Fall.

## MIRIS, Fabr.

*M. affinis*, Reut.*M. dorsalis*, Say.

## LEPTOTERNA, Fieb.

*L. dolobrata*, Linn.

## RESTHENIA, Spin.

*R. insitiva*, Say.*R. nigricollis*, Reut.*R. insignis*, Say.*R. circumcincta*, Say.

## LOPIDEA, Uhl.

*L. media*, Say.*L. confluens*, Say.

## PHYTOCORIS, Fabr.

*P. eximius*, Reut.*P. puella*, Reut.*P. pallidicornis*, Reut.*P. scrupeus*, Say.*P. colon*, Say.

## NEUROCOLPUS, Reut.

*N. nubilus*, Say.*N. inops*, Say.

## COMPSOCEROCORIS, Reut.

*C. annulicornis*, Reut.

## DICHROOSCYTUS, Fieb.

*D. rufipennis*, Fall.

## 426 GEOLOGICAL SURVEY OF NEW JERSEY.

**CALOCORIS, Fieb.**

- C. rapidus*, Say.  
*C. bipunctatus*, Fabr.

**MEGACELUM, Fieb.**

- M. fasciatum*, Uhl.  
*M. grossum*, Uhl.

**ONCOGNATHUS, Fieb.**

- O. binotatus*, Fabr.

**LYGUS, Hahn.**

- L. pabulinus*, Linn.  
*L. lucorum*, Meyer.  
*L. pratensis*, Linn.  
*L. belfragii*, Reut.  
*L. invitus*, Say.  
*L. chlorionis*, Say.

**CACCOBAPHES, Uhl.**

- C. sanguinarius*, Uhl.

**TROPIDOSTEPTES, Uhl.**

- T. cardinalis*, Uhl.

**PHEOLOCYCTUS, Fieb.**

- P. bassalis*, Reut.  
*P. imbecillus*, Say.  
*P. geminus*, Say.

**PHEOLOCAPSUS, Reut.**

- P. lineatus*, Fabr.  
Common throughout the State. Caldwell, common—Crane.  
*P. goniphorus*, Say.  
*P. affinis*, Reut.  
*P. marginalis*, Reut.

**CAMPTOBROCHIS, Fieb.**

- C. nebulosus*, Uhl.  
*C. grandis*, Uhl.

## CATALOGUE OF INSECTS.

427

**DERACOCORIS, Kirsch.***D. capillaris*, Fabr.**CAPSUS, Fabr.***C. ater*, Linn.**PAMEROCORIS, Uhl.***P. anthocoroides*, Uhl.**MONALOCORIS, Dahl.***M. filicis*, Linn.**BRYOCORIS, Fall.***B. pteridis*, Fall.**HYALIODES, Reut.***H. vitripennis*, Say.**STHENAROPS, Uhl.***S. chloris*, Uhl.*S. malinus*, Uhl.**ILNACORA, Reut.***I. stalii*, Reut.**PILOPHORUS, Hahn.***P. bifasciatus*, Fabr.*P. confusus*, Kirsch.*P. walshii*, Uhl.**MALACOCORIS, Fieb.***M. irroratus*, Say.**GLOBICEPS, Latr.***G. flavomaculatus*, Fabr.**NABIDEA, Uhl.***N. coracina*, Uhl.**HUCEROCORIS, Westw.***H. guttulatus*, Uhl.**GARGANUS, Stal.***G. fusiformis*, Say.

## 428 GEOLOGICAL SURVEY OF NEW JERSEY.

**STIPHROSOMA**, Fieb.**S. stygica**, Say.**HALTICUS**, Burm.**H. bractatus**, Say.**IDOLOCORIS**, D. & Sc.**I. famelicus**, Uhl.**ORECTODERUS**, Uhl.**O. obliquus**, Uhl.**CYLAPUS**, Say.**C. tenuicornis**, Say.**ONCOTYLUS**, Fieb.**O. decolor**, Fall.**RHINACLOA**, Reut.**R. forticornis**, Reut.**PSALLUS**, Fieb.**P. delicatus**, Uhl.**EPISCOPUS**, Reut.**E. ornatus**, Reut.

Not rare in Ocean county.

**PLAGIognathus**, Fieb.**P. grandis**, Reut.**P. obscurus**, Uhl.**AGALLIASTES**, Fieb.**A. verbasci**, H-S.**Family ACANTHIIDÆ.****LYCTOCORIS**, Hahn.**L. fitchii**, Reut.**L. americanus**, Dall.

## CATALOGUE OF INSECTS.

429

## TRIPHLEPS, Fieb.

*T. insidiosus*, Say.

Common on grasses throughout the State.

## CARDIASETETHUS, Fieb.

*C. luridellus*, Fieb.*C. pergandei*, Reut.

## ANTHOCORIS, Say.

*A. musculus*, Say.*A. antevolens*, White.

## ACANTHIA, Fabr.

*A. lectularia*, Linn.The "Bed Bug." Found throughout the State. Caldwell,  
common—Crane.

## Family TINGITIDÆ.

## PIESMA, St. Farg. et Serv.

*P. cinerea*, Say.

## CORYTHUCA, Stal.

*C. ciliata*, Say.*C. juglandis*, Fitch.

## LEPTOSTYLA, Stal.

*L. oblonga*, Say.*L. tabida*, H-S.

## PHYSATOCHILA, Fieb.

*P. plexa*, Say.

## LEPTOYPHA, Stal.

*L. mutica*, Say.

## 430 GEOLOGICAL SURVEY OF NEW JERSEY.

**TINGIS, Fabr.**

- T. clavata*, Stal.  
*T. lurida*, Stal.  
*T. uniformis*, Stal.

**TELEONEMIA, Costa.**

- T. elongata*, Uhl.
- 

**Family ARADIDÆ.****ARADUS, Fabr.**

- A. sequalis*, Say.  
*A. similis*, Say.  
*A. acutus*, Say.  
*A. quadrilineatus*, Say.  
*A. rectus*, Say.  
*A. tuberculifer*, Kirby.  
*A. affinis*, Kirby.  
*A. inornatus*, Uhl.

**BRACHYRHYNCHUS, Lap.**

- B. granulatus*, Say.  
*B. simplex*, Uhl.

**ANEURUS, Curt.**

- A. inconstans*, Uhl.  
*A. simplex*, Uhl.
- 

**Family PHYMATIDÆ.****PHYMATA, Latr.**

- P. wolffii*, Stal.  
*P. erosa*, Guer.

Common throughout the State in my experience. Caldwell—  
 Crane.

**MACROOEPHALUS, Swed.**

- M. cimicoides*, Swed.

## CATALOGUE OF INSECTS.

431

**Family NABIDÆ.****NABIS, Latr.****N. fusca, Stein.****PAGASA, Stal.****P. nitida, Stal.****CORISCUS, Schrank.****C. subcoleoptratus, Kirby.****C. pallescens, Reut.****C. annulatus, Reut.****C. rufusculus, Reut.****C. ferus, Linn.**

Caldwell, common—Crane.

**C. kalmii, Reut.****C. roseipennis, Reut.****C. punctipes, Reut.****C. propinquus, Reut.****C. vicarius, Reut.****Family REDUVIIDÆ.****SINEA, Am. et Serv.****S. diadema, Fabr.**

Caldwell, common—Crane.

**ACHOLLA, Stal.****A. multispinosa, De G.****PRIONIDUS, Uhl.****P. cristatus, Linn.**

A southern species, taken at Sandy Hook, in August. Common at Jamesburg—Angleman. I have also taken it there.

## 432 GEOLOGICAL SURVEY OF NEW JERSEY.

**MILYAS, Stal.****M. cinctus, Fabr.**

Caldwell, rare—Crane.

**APIOMERUS, Hahn.****A. crassipes, Fabr.****MELANOLESTES, Stal.****M. picipes, H-S.****M. abdominalis, H-S.**

Caldwell, rare—Crane.

**OPSICETUS, Klug.****O. personatus, Linn.****PYGOLAMPIS, Germ.****P. sericea, Stal.****ONCEROTRACHELUS, Stal.****O. acuminatus, Say.****Family EMESIDÆ.****EMESA, Fabr.****E. longipes, De G.**

Caldwell, common—Crane.

**BAROE, Stal.****B. annulipes, Stal.****B. simplicipes, Uhl.****CERASCOPIUS, Heinek.****C. errabundus, Say.**

## CATALOGUE OF INSECTS.

433

## Family LIMNOBATIDÆ.

## LIMNOBATES, Burm.

*L. lineata*, Say.

## Family HYDROBATIDÆ.

## HYGROTRECHUS, Stal.

*H. remigis*, Say.*H. conformis*, Uhl.

## LIMNOTRECHUS, Stal.

*L. marginatus*, Say.

## LIMNOPORUS, Stal.

*L. rufoscutellatus*, Latr.

## STEPHANIA, White.

*S. picta*, H-S.

## METROBATES, Uhl.

*M. hesperius*, Uhl.

## Family VELIIDÆ.

## HEBRUS, Curtis.

*H. americanus*, Uhl.*H. pusillus*, Burm.

## MESOVELIA, Muls.

*M. bisignata*, Uhl.

## RHAGOVELIA, Mayr.

*R. obesa*, Uhl.

## 434. GEOLOGICAL SURVEY OF NEW JERSEY.

**Family SALDIDÆ.****SALDA, Fabr.**

- S. ligata**, Say.  
**S. confluens**, Say.  
**S. pellita**, Uhl.  
**S. sphacelata**, Uhl.  
**S. coreacea**, Uhl.  
**S. anthracina**, Uhl.  
**S. littoralis**, Linn.  
**S. lugubris**, Say.  
**S. deplanata**, Uhl.  
**S. interstitialis**, Say.  
**S. reperta**, Uhl.  
**S. orbiculata**, Uhl.  
**S. humilis**, Say.  
**S. saltatoria**, Linn.  
**S. separata**, Uhl.
- 

**Family GALGULIDÆ.****PELOGONUS, Latr.**

- P. americanus**, Uhl.

**GALGULUS, Latr.**

- G. oculatus**, Fabr.  
Caldwell, rare—Crane.
- 

**Family NAUCORIDÆ.****PELOCORIS, Stal.**

- P. femorata**, Pal. Beauv.

## CATALOGUE OF INSECTS.

435

**Family BELOSTOMATIDÆ.****ZAITHA, Am. et Serv.***Z. fluminea*, Say.*Z. aurantiacum*, Leidy.**BELOSTOMA, Auct.***B. americanum*, Leidy.

Caldwell, common—Crane.

**BENACUS, Stal.***B. griseus*, Say.**Family NEPIDÆ.****NEPA, Fabr.***N. apiculata*, Uhl.

Caldwell, common—Crane.

**RANATRA, Fabr.***R. fusca*, Pal. Beauv.

Caldwell, common—Crane.

**Family NOTONECTIDÆ.****NOTONECTA, Linn.***N. insulata*, Kirby.*N. undulata*, Say.

Caldwell, not common—Crane.

*N. irrorata*, Uhl.*N. punctata*, Fiel.

## 436 GEOLOGICAL SURVEY OF NEW JERSEY.

**ANISOPS, Spin.****A. platycnemis, Fieb.****PLEA, Leach.****P. striola, Fieb.****Family CORISIDÆ.****CORISA, Geoff.****C. calva, Say.**

Caldwell, common—Crane.

**C. tarsalis, Fieb.****C. signata, Fieb.****C. hieroglyphica, Duf.****C. verticalis, Fieb.****C. burmeisteri, Fieb.****C. interrupta, Say.****C. erichsonii, Fieb.****C. limitata, Fieb.****C. stigmatica, Fieb.****C. alternata, Say.****C. harrisii, Uhl.****C. kennicottii, Uhl.****SUB-ORDER HOMOPTERA.**

In this sub-order, Mr. W. H. Ashmead kindly furnished the material. I know of absolutely no published list that would have been useful, and Mr. Ashmead's contribution is therefore an extremely valuable one. I have made but few additions to the list, and have added only Mr. Crane's records, and some notes of my own on species taken or observed by me. Mr. Ashmead is therefore authority for the entire list except for these few comments.

## CATALOGUE OF INSECTS.

437

Mr. Ashmead suggests that the list will be very much enlarged in the *Aphididae* and *Coccoidea*, and the same is probably true of all other families in the sub-order.

## Family CICADIDÆ.

## Sub-Family CICADINÆ.

## TETTIGIA, Am. et Serv.

*T. hieroglyphica*, Say.

## TIBICEUS, Latr.

*T. septendecim*, Linn.

The "Seventeen-year Locust" or "Periodical Cicada." Occurs at intervals in all parts of the State.

## CICADA, Linn.

*C. auletus*, Germ.

*C. variegatus*, Fabr.

*C. striatipes*, Hald.

*C. pruinosa*, Say.

Caldwell, common—Crane. The "Dog-day Harvest Fly." Common throughout the State.

## Family FULGORIDÆ.

## Sub-Family ACONONINÆ.

## ACONONIA, Am. et Serv.

*A. serveillei*, Spin.

## CHLOROCHARA, Stal.

*C. vivida*, Fabr.

## 438 GEOLOGICAL SURVEY OF NEW JERSEY.

**Sub-Family FLATINÆ.****ORMENIS, Stal.***O. pruinosa*, Say.

Caldwell, rare—Crane. I have found it not uncommon near  
New Brunswick.

**FLATA, Fabr.***F. conica*, Say.**PŒCILOPTERA, Latr.***P. nova*, Say.*P. septentrionalis*, Spin.

Caldwell, common—Crane.

**AMPHISCEPA, Germ.***A. bivittata*, Say.

I have taken this, not rarely, in the sweep net.

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**Sub-Family ISSINÆ.****ISSUS, Fabr.***I. aciculatus*, Uhl.**BRUCHOMORPHA, Newn.***B. oculata*, Newn.**NASO, Fitch.***N. robertsonii*, Fitch.

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**Sub-Family CALOSCELINÆ.****PHYLLOSCELIS, Germ.***P. atra*, Germ.*P. pallescens*, Germ.

## CATALOGUE OF INSECTS.

439

## Sub-Family DITYOPHORINÆ.

## SCOLOPS, Schaum.

*S. sulcipes*, Say.

I have taken this, not frequently, in Ocean county.

## MONOPSIS, Spin.

*M. tabida*, Spin.

## Sub-Family FULGORINÆ.

## CALYPTOPROCTUS, Spin.

*C. (?) elegans*, Oliv.

## Sub-Family CIXIINÆ.

## OTIOCERUS, Kirby.

*O. coquerbertii*, Kirby.*O. degeerii*, Kirby.*O. signoretii*, Fitch.*O. stollii*, Kirby.*O. wolfii*, Kirby.

## ANOTIA, Kirby.

*A. bonnellii*, Kirby.*A. robertsonii*, Fitch.*A. westwoodii*, Fitch.

## CIXIUS, Latr.

*C. cinctifrons*, Fitch.*C. coleopenne*, Fitch.*C. albicincta*, Germ.*C. impunctatus*, Fitch.*C. pini*, Fitch.

## 440 GEOLOGICAL SURVEY OF NEW JERSEY.

- C. 5-lineatus*, Stal.  
*C. stigmatus*, Say.  
*C. vicarius*, Walk.
- 

## Sub-Family DELPHACINÆ.

**DELPHAX**, Fabr.

- D. annulata*, Fitch.  
*D. albipes*, Fitch.  
*D. arvensis*, Fitch.  
*D. bicolor*, Fitch.  
*D. dorsalis*, Fitch.  
*D. tricarinata*, Say.
- 

## Family MEMBRACIDÆ.

## Sub-Family CENTROTINÆ.

**MICROCENTRUS**, Stal.

- M. caryæ*, Fitch.
- 

## Sub-Family MEMBRACINÆ.

**ENCHENOPOA**, Am. et Serv.

- E. curvata*, Fabr.  
 Caldwell, common—Crane. Common throughout the State.  
*E. binotata*, Say.  
 Caldwell, common—Crane.
- 

## Sub-Family HOLOPHORINÆ.

**PLATYCOTIS**, Stal.

- P. quadriplagiata*, Say.  
 Caldwell, common—Crane.  
*P. vittata*, Fabr.

## CATALOGUE OF INSECTS.

441

## Sub-Family SMILIINAE.

## STICTOCEPHALA, Stal.

*S. inermis*, Fabr.*S. festina*, Say.

## CERESA, Am. et Serv.

*C. brevicornis*, Fitch.*C. bubulus*, Fabr.

Caldwell, common—Crane. Common throughout the State.

*C. diceros*, Say.

Caldwell, rare—Crane.

## EUTYLIA, Burm.

*E. sinuata*, Fabr.

## PUBLILIA, Stal.

*P. concava*, Say.

## SMILIA, Germ.

*S. camelus*, Fabr.*S. vau*, Say.*S. vittata*, Am. et Serv.

## CYRTOSIA, Fitch.

*C. fenestrata*, Fitch.*C. marmorata*, Say.

## THELIA, Am. et Serv.

*T. acuminata*, Linn.*T. belligera*, Say.*T. bimaculata*, Fabr.

Caldwell, not common—Crane.

*T. crataegi*, Fitch.*T. quercus*, Fitch.*T. univittata*, Harris.

## 442 GEOLOGICAL SURVEY OF NEW JERSEY.

**TELAMONA, Fitch.**

- T. ampelopsisidis*, Harr.  
Caldwell, rare—Crane.  
*T. concava*, Fitch.  
*T. coryli*, Fitch.  
*T. fagi*, Fitch.  
*T. querci*, Fitch.  
*T. reclinata*, Fitch.  
*T. tristis*, Fitch.  
*T. unicolor*, Fitch.

**ARCHASIA, Stal.**

- A. galeator*, Fabr.

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**Sub-Family DARNINÆ.****OPHIDERMA, Fairm.**

- O. arcuata*, Say.  
*O. mera*, Say.  
*O. salamandra*, Fairm.
- 

**Family CERCOPIDÆ.****Sub-Family CERCOPINÆ.****MONECHOPHORA, Am. et Serv.**

- M. bicincta*, Say.
- 

**Sub-Family APHROPHORINÆ.****LEPYRONIA, Am. et Serv.**

- L. quadrangularis*, Say.  
Caldwell, not common—Crane.

## CATALOGUE OF INSECTS.

443

**APHROPHORA**, Germ.**A. parallela**, Say.**A. quadrinotata**, Say.**PHILÆNUS**, Stal.**P. bilineatus**, Say.**P. lineatus**, Linn.**P. sarogotensis**, Fitch.**P. spumaria**, Germ.**CLOSTOPTERA**, Germ.**C. achatina**, Germ.**C. pini**, Fitch.**C. proteus**, Fitch.**C. obtusa**, Say.**C. testacea**, Fitch.

Caldwell, common—Crane.

**C. xanthocephala**, Germ.**Sub-Family LEDRINÆ.****LEDRA**, Fabr.**L. perdita**, Am. et Serv.**Sub-Family GLYPONINÆ.****XEROPHLŒA**, Germ.**X. viridis**, Fabr.**GLYPONA**, Germ.**G. flaviguttata**, Fitch.**G. octolineata**, Say.**G. scarlatina**, Fitch.

**444 GEOLOGICAL SURVEY OF NEW JERSEY.****PAROPHOLIS, Uhl.**

*P. peltata*, Uhl.

**PENTHIMIA, Germ.**

*P. atra*, Fabr.

*P. americana*, Fitch.

**Sub-Family TETTIGONINÆ.****PROCONIA, Serv.**

*P. costalis*, Fabr.

**ONCOMETOPIA, Stal.**

*O. obtusa*, Fabr.

*O. orbona*, Fabr.

*O. undata*, Fabr.

Of this latter I have taken a few specimens.

**HOMALODISCA, Stal.**

*H. coagulata*, Say.

**AULACIZES, Am. et Serv.**

*A. irrorata*, Fabr.

**DIEDROCEPHALA, Spin.**

*D. coccinea*, Först.

*D. flaviceps*, Riley.

*D. mollipes*, Say.

Caldwell, not common—Crane. I have found it generally distributed and quite common.

**HELOCHARA, Fitch.**

*H. communis*, Fitch.

Caldwell, common—Crane.

**EVACANTHUS, Serv.**

*E. orbitalis*, Fitch.

## CATALOGUE OF INSECTS.

445

**TETTIGONIA, Fabr.***T. bifida*, Say.*T. trifasciata*, Say.*T. tripunctata*, Fitch.**Sub-Family ACOCEPHALINÆ.****ACOCEPHALA, Germ.***A. solidaginis*, Harr.**HECALUS, Stal.***H. fenestratus*, Uhl.**PARABOLOCRATUS, Fieb.***P. viridis*, Uhl.**SELENOCEPHALUS, Germ.***S. vitillinus*, Fitch.**PLATYMETOPIUS, Burm.***P. acutus*, Say.*P. albonotatus*, Fitch.**Family BYTHOSCOPIDÆ.****PEDIOPSIS, Burm.***P. trimaculatus*, Fitch.*P. viridis*, Fitch.**BYTHOSCOPUS, Germ.***B. pallidus*, Fitch.*B. seminudus*, Say.**AGALLIA, Curt.***A. sanguinolenta*, Prov.*A. quadripunctata*, Prov.

Common on cranberry bogs in Burlington and Monmouth counties.

## 446 GEOLOGICAL SURVEY OF NEW JERSEY.

## IDIOCHERUS, Lewis.

- I. alternata*, Fitch.  
*I. lachrymalis*, Fitch.  
*I. maculipennis*, Fitch.  
*I. suturalis*, Fitch.
- 

## Family JASSIDÆ.

## Sub-Family JASSINÆ.

## OËLIDEA, Germ.

- C. olitoria*, Say.  
*C. subbifasciata*, Say.  
 Caldwell, rare—Crane.

## ATHYSANUS, Burm.

- A. fenestratus*, Fitch.  
*A. minor*, Fitch.  
*A. nigrinasi*, Fitch.  
*A. variabilis*, Fitch.  
*A. striatulus*, Fallen.  
 Common on cranberry bogs everywhere.

## JASSUS, Fabr.

- J. clitellarius*, Say.  
 Caldwell, common—Crane.  
*J. irroratus*, Say.  
 Caldwell, common—Crane.  
*J. inimicus*, Say.  
*J. unicolor*, Fitch.

## DELTOCEPHALUS, Burm.

- D. sayi*, Fitch.

## CATALOGUE OF INSECTS.

447

**ERYTHRONEURA, Fitch.***E. comes*, Say.*E. vitis*, Harris.

The common leaf hopper of the Grape.

*E. vulnerata*, Fitch.**EMPOA, Fitch.***E. querci*, Fitch.*E. rosæ*, Harris.*E. tabæ*, Harris.

—

**Sub-Family TYPHLOCIBINÆ.****TYPHLOCYBA, Germ.***T. affinis*, Fitch.*T. tricincta*, Fitch.

—

**Family PSYLLIDÆ.****Sub-Family LIVIINÆ.****LIVIA, Latr.***L. maculipennis*, Fitch.*L. vernalis*, Fitch.

—

**Sub-Family APHALARINÆ.****APHALARÆ, Forst.***A. ilicis*, Ashm.

—

**Sub-Family PSYLLINÆ.****CALOPHYA, Lw.***C. nigripennis*, Riley.On *Rhus* sp.; quite common.

## 448 GEOLOGICAL SURVEY OF NEW JERSEY.

**PSYLLA**, Geoffr.*P. annulata*, Fitch.*P. carpini*, Fitch.*P. quadrilineata*, Fitch.**PACHYPSYLLA**, Riley.*P. celtidis-mama*, Riley.*P. venusta*, O. S.**BLASTOPHYSA**, Riley.*B. c-gemma*, Riley.**Sub-Family TRIOZINÆ.****TRIOZA**, Först.*T. diospyri*, Ashm.*T. tripunctata*, Fitch.**Family APHIDIDÆ.****Sub-Family APHIDINÆ.****SIPHONOPHORA**, Koch.*S. asclepiadis*, Fitch.*S. liriodendris*, Mon.*S. pisi*, Kalt.*S. rudbeckiae*, Fitch.*S. rosæ*, Linn.*S. rubi*, Kalt.*S. sonchi*, Linn.*S. salicicola*, Thos.*S. viticola*, Thos.

## CATALOGUE OF INSECTS.

449

**PHORODON, Pass.****P. humuli**, Schrank.

The hop plant-louse. Occurs wherever Hop and Plum grow.

**RHOPALOSIPHUM, Koch.****R. berberidis**, Fitch.**MEGOURA, Buckt.****M. solani**, Thos.**MYZUS, Pass.****M. cerasi**, Fabr.**DREPANOSIPHUM, Koch.****D. quercifolii**, Walsh.**APHIS, Linn.****A. brassicæ**, Linn.

The cabbage plant-louse. Common everywhere.

**A. cornifolæ**, Fitch.**A. crataegifolæ**, Fitch.**A. diospyri**, Thos.**A. mali**, Fabr.**A. malifolæ**, Fitch.**A. maidis**, Fitch.**A. pinicolens**, Fitch.**A. pruni**, Koch.**A. prunifolæ**, Fitch.**A. rumicis**, Linn.**A. salicicola**, Thos.**A. sambuci**, Linn.**A. sambucifolæ**, Fitch.**Sub-Family CALLIPTERINÆ.****MONELLIA, Oestl.****M. caryella**, Fitch.

2D

**450 GEOLOGICAL SURVEY OF NEW JERSEY.****CALLIPTHEUS, Koch.****C. betulaeolens, Fitch.****C. castaneæ, Fitch.****Sub-Family LACHNINÆ.****LACHNUS, Burm.****L. abietis, Fitch.****L. alnifolii, Fitch.****L. laricifex, Fitch.****L. quercifolii, Fitch.****L. strobi, Fitch.****L. salicelia, Fitch.****PHYLAPHIS, Koch.****P. fagi, Linn.****Sub-Family SCHIZONEURINÆ.****SCHIZONEURA, Hart.****S. americana, Riley.****S. imbricator, Fitch.****S. lanigera, Haussm.****S. strobi, Fitch.****S. ulmi, Linn.****S. tessellata, Fitch.****GLYPHINA, Koch.****G. ulmicola, Fitch.****VACUNA, Heyd.****V. spinosus, Shimer.**

## CATALOGUE OF INSECTS.

451

## Sub-Family PEMPHIGINÆ.

## PEMPHIGUS, Hart.

- P. populicaulis*, Fitch.  
*P. populiglobuli*, Fitch.  
*P. populivense*, Fitch.  
*P. rhois*, Fitch.
- 

## Sub-Family CHERMESINÆ.

## CHERMES, Linn.

- C. laricifoliae*, Fitch.  
*C. pinifoliae*, Fitch.
- 

## Sub-Family PHYLLOXERINÆ

## PHYLLOXERA, Fonsc.

- P. caryæ-caulis*, Fitch.  
*P. caryæ-foliæ*, Fitch.  
*P. caryæ-venæ*, Fitch.  
*P. vastatrix*, Planch.
- 

## Family ALEURODIDÆ.

## ALEURODES, Am. et Serv.

- A. abutilonea*, Hald.  
*A. brassicæ*, Walk.  
*A. corni*, Hald.
- 

## Family COCCIDÆ.

## Sub-Family COCCINÆ.

## DACTYLOPIUM, Costa.

- D. adonidum*, Linn.

## PSEUDOCOCCUS, Westw.

- P. aceris*, Geoff.

## 452 GEOLOGICAL SURVEY OF NEW JERSEY.

## Sub-Family LECANINÆ.

## ORTHEZIA, Am. et Serv.

*O. americana*, Walk.

## PULVINARIA, Targ-Toz.

*P. innumarabilis*, Rathv.*P. vitis*, Linn.

## LECANIUM, Burm.

*L. cerasifex*, Fitch.*L. fitchii*, Sign.*L. hesperidum*, Linn.*L. juglandis*, Bouché.*L. persicæ*, Fabr.*L. quercicitrionis*, Fitch.

## Sub-Family DIASPINÆ.

## ASPIDIOTUS, Bouché.

*A. abietis*, Comst.*A. ancylus*, Putn.*A. betulæ*, Bärensp.*A. juglans-regiae*, Comst.

## DIASPIS, Bremer.

*D. circularis*, Fitch.*D. rosæ*, Sandb.

## LEPIDOSAPHES, Shimer.

*L. pomorum*, Bouché.

## CHIONASPIS, Sign.

*C. furfuræ*, Fitch.*C. pinifoliæ*, Fitch.*C. salicis*, Linn.

## CATALOGUE OF INSECTS.

453

## ORDER NEUROPTERA.

## Family TERMITIDÆ.

## TERMES, Linn.

*T. flavipes*, Koll.

Common throughout the State. Caldwell, common—Crane.

## Family PSOCIDÆ.

## ATROPOS, Leach.

*A. divinatorius*, Fabr.

Is common throughout the State.

## PSOCUS, Latr.

*P. signatus*, Hagen.*P. pumilis*, Hagen.*P. venosus*, Burm.*P. contaminatus*, Hagen.*P. striatus*, Walk.*P. quietus*, Hagen.*P. madidus*, Hagen.*P. salicis*, Fitch.

## Family PERLIDÆ.

## PTERONAROYS, Newn.

*P. regalis*, Newn.*P. nobilis*, Hagen.

## 454 GEOLOGICAL SURVEY OF NEW JERSEY.

**PERLA, Geoff.**

- P. abnormis*, Newn.  
*P. arida*, Hagen.  
*P. coulonii*, Pictet.  
*P. tristis*, Hagen.  
*P. capitata*, Pictet.  
*P. similis*, Hagen.  
*P. xanthenes*, Newn.  
*P. occipitalis*, Pictet.  
*P. placida*, Hagen.  
*P. ephyre*, Newn.

**ISOPTERYX, Pictet.**

- I. cydippe*, Newn.

**CAPNIA, Pictet.**

- C. pygmæa*, Burm.

**TÆNIOPTERYX, Pictet.**

- T. fasciata*, Burm.  
     Caldwell, common—Crane.  
*T. similis*, Hagen.  
     Caldwell, not common—Crane.  
*T. maura*, Pictet.

**NEMOURA, Pictet.**

- N. albidiennis*, Walk.

**LEUOTRA, Stephens.**

- L. tenuis*, Pictet.
- 

**Family EPHEMERIDÆ.****PALINGENIA, Burm.**

- P. bilineata*, Say.  
     Caldwell, common—Crane.  
*P. limbata*, Serv.

## CATALOGUE OF INSECTS.

455

**EPHEMERA**, Linn.

- E. decora**, Walk.  
Caldwell, common—Crane.

**BAETIS**, Leach.

- B. vicaria**, Walk.  
**B. obesa**, Say.  
Caldwell, not rare—Crane.  
**B. fusca**, Walk.  
Caldwell, not rare—Crane.  
**B. canadensis**, Walk.  
Caldwell, not common—Crane.  
**B. noveboracana**, Licht.

**POTAMANTHUS**, Pictet.

- P. concinnus**, Walk.  
Caldwell, common—Crane.  
**P. nebulosus**, Walk.  
Caldwell, rare—Crane.

**CLOE**, Leach.

- C. unicolor**, Hagen.  
**C. vicina**, Hagen.  
Caldwell, common—Crane.

**CENIS**, Stephens.

- C. amica**, Hagen.

**Family ODONATA.****Sub-Family CALOPTERYGINÆ.****CALOPTERYX**, Leach.

- C. apicalis**, Burni.  
**C. maculata**, Beauv.  
Caldwell, common—Crane.

## 456 GEOLOGICAL SURVEY OF NEW JERSEY.

**C. virginica**, Dru.

Caldwell, common—Crane.

**HETÆRINA, Hagen.**

**H. americana**, Fabr.

**H. tricolor**, Burm.

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**Sub-Family AGRIONINÆ.****LESTES, Leach.**

**L. rectangularis**, Say.

Recorded from New Jersey.

**L. congener**, Hagen.

**L. eurina**, Say.

**L. unguiculata**, Hagen.

Recorded from Bergen Hill, New Jersey.

**L. hamata**, Hagen.

Recorded from Bergen Hill, New Jersey.

**AGRION, Fabr.**

**A. irene**, Hagen.

Recorded from New Jersey.

**A. iners**, Hagen.

New Jersey specimens in Collection American Entomological Society.

**A. ramburii**, Selys.

Recorded from Bergen Hill, New Jersey.

**A. hastatum**, Say.

Recorded from Bergen Hill, New Jersey.

**A. saucium**, Burm.

**A. civile**, Hagen.

**A. violaceum**, Hagen.

Recorded from New Jersey.

## CATALOGUE OF INSECTS.

457

*A. apicale*, Say.*A. aspersum*, Hagen.

Recorded from Bergen Hill, New Jersey.

## Sub-Family GOMPHINÆ.

## GOMPHUS, Leach.

*G. armatus*, Selys.

Caldwell, rare—Crane.

*G. adelphus*, Selys.*G. fraternus*, Say.*G. spicatus*, Hagen.

Caldwell, common—Crane.

*G. exilis*, Selys.

## HAGENIUS, Selys.

*H. brevistylus*, Selys.

## CORDULEGASTER, Leach.

*C. maculatus*, Selys.*C. obliquus*, Say.

## PETALURA, Leach.

*P. thoreyi*, Hagen.

## Sub-Family AESCHNINA.

## ANAX, Leach.

*A. junius*, Dru.

Common in Ocean county, and generally distributed in the State. Caldwell, common—Crane.

## AESCHNA, Fabr.

*A. clepsydra*, Say.*A. verticalis*, Hagen.

## 458 GEOLOGICAL SURVEY OF NEW JERSEY.

*Æl. constricta*, Say.

Caldwell, common—Crane.

*Æl. grandis*, Linn.

Recorded from Bergen Hill, New Jersey. I have taken it in Ocean county.

*Æl. ingens*, Ramb.

*Æl. heros*, Fab.

Recorded from New Jersey. Generally distributed. Caldwell, not common—Crane.

*Æl. quadriguttata*, Burm.

Caldwell, common—Crane.

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Sub-Family CORDULINÆ.

**MACROMIA**, Ramb.

*M. tæniolata*, Ramb.

**DIDYMOPS**, Ramb.

*D. transversa*, Say.

Mount Holly, New Jersey—Collection American Entomological Society.

*D. obsoleta*, Say.

**CORDULA**, Leach.

*C. lateralis*, Burm.

---

Sub-Family LIBELLULINÆ.

**TRAMEA**, Hagen.

*T. carolina*, Linn.

Recorded from New Jersey.

*T. lacerata*, Hagen.

I took this in Ocean county during the present season (1889).

## CATALOGUE OF INSECTS.

459

**CELTITHEMIS, Hagen.****C. eponina, Dru.**

New Jersey—Collection American Entomological Society.

**PLATYTHEMIS, Hagen.****P. trimaculata, De G.**

Common throughout the State. Caldwell, common—Crane.

**LIBELLULA, Linn.****L. quadrimaculata, Linn.****L. semifasciata, Burm.**

Recorded from New Jersey.

**L. luctuosa, Burm.**

Recorded from New Jersey. Caldwell, common—Crane.

**L. pulchella, Dru.**

Recorded from New Jersey. Caldwell, common—Crane.

**L. auripennis, Burm.**

Recorded from New Jersey. Specimens in Collection American Entomological Society.

**L. incesta, Hagen.**

New Jersey—Collection American Entomological Society.

**L. lydia, Dru.**

New Jersey—Collection American Entomological Society.

**L. quadrupla, Say.**

Recorded from New Jersey.

**L. plumbea, Uhl.**

Recorded from New Jersey.

**MESOTHEMIS, Hagen.****M. simplicicollis, Say.**

Recorded from New Jersey. Ocean Grove—Crane.

**M. longipennis, Burm.**

New Jersey—Collection American Entomological Society.

## 460 GEOLOGICAL SURVEY OF NEW JERSEY.

**DIPLAX, Charp.***D. costifera*, Uhl.*D. vicina*, Hagen.

Recorded from Bergen Hill, New Jersey.

*D. semicincta*, Say.*D. rubicundula*, Say.Recorded from Bergen Hill, New Jersey. Caldwell, common  
—Crane.*D. berenice*, Dru.Recorded from Bergen Hill, New Jersey, and common else-  
where in the State.*D. intacta*, Hagen.*D. elisa*, Hagen.

Recorded from Bergen Hill, New Jersey.

*D. ornata*, Ramb.**PERITHEMIS, Hagen.***P. domitia*, Dru.

Recorded from New Jersey.

**NANNOPHYA, Ramb.***N. bella*, Uhl.

Recorded from New Jersey.

**Family SIALIDÆ.****SIALIS, Latr.***S. infumata*, Newn.*S. americana*, Ramb.**CHAULIODES, Latr.***C. pectinicornis*, Linn.

Caldwell, common—Crane.

## CATALOGUE OF INSECTS.

461

*C. serricornis*, Say.*C. maculatus*, Say.

Caldwell, common—Crane.

**CORYDALIS**, Latr.*C. cornuta*, Linn.

Common throughout the State. Caldwell—Crane.

**Family HEMEROBIDÆ.****ALEURONIA**, Fitch.*A. westwoodii*, Fitch.**MICROMUS**, Ramb.*M. insipidus*, Hagen.**HEMEROBIUS**, Linn.*H. amiculus*, Fitch.*H. alternatus*, Fitch.*H. stigmaterus*, Fitch.*H. castanea*, Fitch.*H. tutatrix*, Fitch.*H. conjunctus*, Fitch.*H. pinidumus*, Fitch.*H. hyalinatus*, Fitch.**POLYSTECHOTES**, Burm.*P. punctatus*, Fabr.*P. vittatus*, Say.

Recorded from New Jersey.

**MANTISPA**, Illig.*M. brunnea*, Say.*M. interrupta*, Say.

## 462 GEOLOGICAL SURVEY OF NEW JERSEY.

**CHrysopa, Leach.**

- C. oculata**, Say.  
**C. illepida**, Fitch.  
**C. albicornis**, Fitch.  
**C. chlorophana**, Fitch.  
**C. fulvibucca**, Fitch.  
**C. chi**, Fitch.  
**C. ypsilon**, Fitch.  
**C. latipennis**, Schneid.  
 Caldwell, common—Crane.  
**C. nigricornis**, Burm.  
**C. lineaticornis**, Fitch.  
**C. 4-punctata**, Burm.  
**C. rufilabris**, Burm.  
**C. interrupta**, Schneid.  
**C. emuncta**, Fitch.  
**C. harrisii**, Fitch.  
**C. plorabunda**, Fitch.  
**C. flava**, Scop.

**ACANTHACLISIS, Ramb.**

- A. americana**, Dru.

**MYRMELEON, Linn.**

- M. gratus**, Say.  
**M. obsoletus**, Say.  
**M. abdominalis**, Say.  
 Recorded from New Jersey.  
**M. nebulosus**, Oliv.  
**M. immaculatus**, De G.  
 Caldwell, rare—Crane.

**ASCALAPHUS, Fabr.**

- A. hyalinus**, Latr.  
**A. 4-punctatus**, Burm.

## CATALOGUE OF INSECTS.

463

## Family PANORPIDÆ.

**PANORPA**, Linn.

- P. rufescens**, Ramb.  
Caldwell, common—Crane.  
**P. venosa**, Westw.  
**P. debilis**, Westw.  
**P. nebulosa**, Westw.  
**P. maculosa**, Hagen.

**BITTACUS**, Latr.

- B. occidentis**, Walk.
- 

## Family PHRYGANIDIDÆ.

**NEURONIA**, Leach.

- N. semifasciata**, Say.  
Recorded from New Jersey. Caldwell, common—Crane.  
**N. postica**, Walk.  
Caldwell, common—Crane.

**LIMNOPHILUS**, Leach.

- L. rhombicus**, Linn.  
Caldwell, rare—Crane.  
**L. interruptus**, Say.  
Described from New Jersey. Caldwell, not common—Crane.  
**L. pudicus**, Hagen.

**ENOICYLA**, Ramb.

- E. subfasciata**, Say.  
**E. lepida**, Hagen.

**NOTODOBIA**, Steph.

- N. pyraloides**, Walk.

**SETODES**, Ramb.

- S. candida**, Hagen.

## 464 GEOLOGICAL SURVEY OF NEW JERSEY.

**MACRONEMA**, Pictet.*M. zebratum*, Hagen.**HYDROPSYCHE**, Pictet.*H. scalaris*, Hagen.*H. morosa*, Hagen.

Caldwell, common—Crane.

*H. phalerata*, Hagen.**PHILOPOTAMUS**, Leach.*P. distinctus*, Walk.

Caldwell, rare—Crane.

**POLYCENTROPUS**, Curtis.*P. validus*, Walk.*P. lucidus*, Hagen.**CHIMARRHA**, Leach.*C. aterrima*, Hagen.

## CATALOGUE OF INSECTS.

465

## CONCLUSION.

In the foregoing pages 6,098 species are listed, to which future studies will undoubtedly add at least 20 per cent. more; they are distributed as follows:

|                   | Families. | Genera. | Species. |
|-------------------|-----------|---------|----------|
| Hymenoptera ..... | 80        | 302     | 1,074    |
| Coleoptera .....  | 71        | 815     | 2,227    |
| Lepidoptera ..... | 28        | 484     | 1,140    |
| Diptera .....     | 57        | 319     | 811      |
| Orthoptera .....  | 7         | 52      | 117      |
| Hemiptera—        |           |         |          |
| Heteroptera ..... | 26        | 178     | 313      |
| Homoptera .....   | 10        | 101     | 242      |
| Neuroptera .....  | 9         | 61      | 174      |
| Total .....       | 238       | 2,307   | 6,098    |

Authors are not agreed as to the best way of making up catalogues. Some begin with the higher families, running down to the most degraded; others reverse this proceeding and begin with the least specialized forms, ending with the highest types. Of the lists followed in this catalogue, the *Hymenoptera*, *Orthoptera* and *Neuroptera* run the series from the lowest to the highest. In the *Coleoptera*, *Lepidoptera*, *Diptera* and *Hemiptera* the highest forms are placed at the head.

In adopting the Linnean orders, rather than the more numerous divisions of Brauer or Packard, I have followed convenience and not conviction, believing that a catalogue of a restricted fauna is not the place to bring forward a classification not generally accepted. In a future edition of the catalogue I should expect to make the change.

## 466 GEOLOGICAL SURVEY OF NEW JERSEY.

## ERRATA.

## THE FOLLOWING ESCAPED CORRECTION IN PROOF:

- Page 172, for **CÆNIA** read **CÆNIA**.  
Page 182, for **P. serricorne** read **L. serricorne**.  
Page 216, for **O. nsertus** read **C. insertus**.  
Page 370, for **S. palipes** read **S. pallipes**.  
Page 370, for **CÆNOMYIA** read **CÆNOMYIA**.  
Page 370, for **STRATYOMYIDÆ** read **STRATIOMYIDÆ**.  
Page 372, for **THERIOPLECTES**, Zell., read **THERIOPLECTES**,  
Zett.  
Page 388, for **T. pictulum**, Pa., read **T. pictulum**, Will.  
Page 429, for **LEPTOYPHA** read **LEPTOPHYA**.

## PRINCIPAL ABBREVIATIONS OF AUTHORS' NAMES.

**A.**

Aaron.....Aaron, S. Frank.  
 Abb .....Abbot, John.  
 Ahr .....Ahrens, August.  
 Am. et Serv...Amyot & Serville.  
 Ashm. ....Ashmead, William H.  
 Aubé .....Aubé, Charles.

**B.**

Bärensp.....Bärensprung, Felix.  
 Baly .....Baly, Joseph S.  
 Bass .....Bassett, H. F.  
 Bates .....Bates, Henry William.  
 Bdv.....Boisduval, Jean Alphonse.  
 Bd-Lec .....Boisduval & Leconte.  
 Beauv. ....Beauvois, Palisot de.  
 Beth.....Bethune, Charles J. S.  
 Billb. ....Billberg, Gustav Johann.  
 Bkh .....Borkhausen, Moriz B.  
 Blake .....Blake, Charles A.  
 Blanch .....Blanchard, E.  
 Bland.....Bland, James H. B.  
 Boh.....Boheman, Carl H.  
 Boisd .....see Bdv.  
 Bon.....Bonnelly, François André.  
 Bonv .....Bonvouloir, Henry de.  
 Borkh. .... see Bkh.  
 Bouché .....Bouché, Peter Friedrich.  
 Bourg .....Bourgeois, J.  
 Brace.....Brace, John P.  
 Brem .....Bremer, Otto.  
 Brem. & Grey,  
     Bremer & Grey.  
 Brend .....Brendel, Emil.  
 Brown .....Brown, Peter.  
 Brullé.....Brullé, Auguste.  
 Bruner .....Bruner, Lawrence.  
 Buck.....Buckley, S. B.  
 Buckt .....Buckton, George B.

Buq.....Buquet, Lucien.

Burm.....{ Burmeister, Hermann Carl  
                   C.**C.**

Cam.....Cameron, P.  
 Cand.....Candèze, E.  
 Casey.....Casey, Thomas L.  
 Chamb ... ....Chambers, Victor Toucy.  
 Chd.....{ Chaudoir, Baron Maxi-  
                   milien de.  
 Chap... ....Chapman, Thomas.  
 Charp .....Charpentier, Toussaint de.  
 Chevr. ....Chevrolat, Aug.  
 Clairv. ....Clairville, J. de.  
 Clark .....Clark, Bracy (Diptera).  
 Clark .....Clark, Hamlet (Coleoptera).  
 Clem .....Clemens, Brackenridge.  
 Comst.....Comstock, John Henry.  
 Costa .....Costa, Achille.  
 Coup.....Couper, William.  
 Cr ... ....Crotch, Geo. R.  
 Cram .....Cramer, Pieter.  
 Cress.....Cresson, Ezra T.  
 Curtis .....Curtis, John.

**D.**

Dahl.....Dahlbom, Andres Gustav.  
 Dall .....Dallas, William S.  
 Dalm .....Dalman, Johann Wilhelm.  
 Davis.....Davis, William T.  
 De G.....De Geer, Carl.  
 Dej.....{ Dejean, Comte Pierre Fran-  
                   çois Marie Auguste.  
 Desv .....Desvoidy, Robineau.  
 Doubl .....Doubleday, Edward.  
 Doubl-Hew .. Doubleday & Hewitson.  
 Drap.....Drapiez, A.  
 Dru.....Drury, Drew.

(467)

## 468 GEOLOGICAL SURVEY OF NEW JERSEY.

|               |   |                |   |
|---------------|---|----------------|---|
| Duf.....      | Dufour, Leon.                                 | Gorh.....      | Gorham, John.                                   |
| Duft.....     | Duftschmid, Caspar.                           | Gory.....      | Gory, Hippolyte Louis.                          |
| Dum.....      | { Duméril, André Marie Constant.              | Gray.....      | { Gray, George R. (Orthoptera).                 |
| Dunc.....     | Duncan, James.                                | Gray.....      | { Gray, John Edward (Coleoptera).               |
| Dup.....      | { Duponchel Philogène Auguste Joseph.         | Grav....       | { Gravenhorst, Johann Ludwig Carl.              |
| D'Urb.....    | D'Urban, William Stewart M.                   | Grt.....       | see Grote.                                      |
|               |   | Grt. & Rob...  | Grote & Robinson.                               |
|               |   | Grote .....    | Grote, Augustus Radcliffe.                      |
|               |   | Guer .....     | Guerin-Meneville, F. E.                         |
|               |   | Gyll.....      | Gyllenhal, Leonhard.                            |
|               |   |                |   |
|               |   | H.             |   |
| Edw. H.....   | Edwards, Henry.                               | Hagen .....    | Hagen, Hermann August                           |
| Edw.....      | { Edwards, W. H. (in Rhopalocera).            | Hahn .....     | Hahn, Carl Wilhelm.                             |
| Eich.....     | Eichhoff, W.                                  | Hald.....      | Haldemann, S. S.                                |
| Er .....      | { Erichson, Wilhelm Ferdinand.                | Haliday .....  | Haliday, Alexis H.                              |
| Esch.....     | { Eschscholtz, Johann Friedrich.              | Harold .....   | Harold, Edgar von.                              |
|               |   | Harr .....     | see Harris.                                     |
|               |   | Harris .....   | Harris, Thaddeus W.                             |
|               |   | Hartig .....   | Hartig, Theodore.                               |
|               |   | Harv .....     | Harvey, Leon.                                   |
| Fabr.....     | Fabricius, Johann Christ.                     | Hausm .....    | Hausman, Johann F. L.                           |
| Fairm.....    | Fairmaire, Leon.                              | Haw .....      | Haworth, Adrian Hardy.                          |
| Fall.....     | Fallen, Carl Friedrich.                       | Hbst.....      | { Herbst, Johann Friedrich Wilhelm.             |
| Feld.....     | Felder, Cajetan.                              | Heer .....     | Heer, Oswald.                                   |
| Fern .....    | Fernald, Chas. H.                             | Hein.....      | Heinemann, H. von.                              |
| Fieb.....     | Fieber, Franz Xaver.                          | Heinek... .... | Heineken, Carl.                                 |
| Fischer ..... | { Fischer, Johannes L. (Diptera).             | Hellw .....    | { Hellwig, Johann Christian Ludwig.             |
| Fischer ..... | { Fischer, Leopold H. (Orthoptera).           | Hentz .....    | Hentz, Nicholas Marcell.                        |
| Fitch .....   | Fitch, Aza.                                   | Hoffm.....     | Hoffmann, J. J.                                 |
| Först .....   | Förster, Arnold.                              | Hoffm.....     | Hoffmeister, H. (Diptera).                      |
| Forel.....    | Forel, Albert.                                | Holmgr .....   | Holmgren, August Emil.                          |
| Forst .....   | Förster, Johann Reinhold.                     | Hope.....      | Hope, Frederic William.                         |
| Foudr .....   | { Foudras, Antoine Casimir Marguerite Eugéne. | Horn .....     | Horn, George H.                                 |
| Fourcr .....  | { Fourcroy, Antoine François.                 | Howard.....    | Howard, Leland O.                               |
| Fröhl.....    | Frohlich, Jos. Aloys.                         | H-S.....       | { Herrich-Schaeffer, Gottlieb, August, Wilhelm. |
|               |   | Hüb .....      | Hübner, Jacob.                                  |
|               |   | Hulst .....    | Hulst, George D.                                |
|               |   | Hum.....       | Hummel, Arvid David.                            |
|               |   | Hy. Edw.....   | Henry Edwards.                                  |
|               |   |                |   |
|               |   | I.             |   |
| G. & H .....  | Gemminger & Harold.                           | Illig .....    | { Illiger, Johann Carl Wilhelm.                 |
| Gdt .....     | Goedart, Johann.                              |                |   |
| Geoff .....   | Geoffroy, Etienne Louis.                      |                |   |
| Germ .....    | German, Ernst Friedrich.                      |                |   |
| Gey.....      | see Geyer.                                    |                |   |
| Geyer .....   | Geyer, Carl.                                  |                |   |
| Gn .....      | Guenée, Achille.                              |                |   |
| Goetze .....  | { Goetze, Johann August Ephraim.              |                |   |

## CATALOGUE OF INSECTS.

469

**J.**

- Jaenn.....Jaennicke, F.  
Jek.....Jekel, Henry.  
Jur.....Jurine, Louis.

**K.**

- Kalt.....Kaltenbach, J. H.  
Kies.....{ Kiesenwetter, Ernst August  
          Hellmuth von.  
Kirby.....Kirby, William.  
Kirkp.....Kirkpatrick, John.  
Kirsch.....Kirsch, Th.  
Kirsch.....Kirschbaum, C. L.  
Kirtl.....Kirtland, Jared P.  
Kl.....{ Klug, Johann Christoph  
          Friedrich.  
Knoch.....Knoch, August Wilhelm.  
Koch.....Koch, C. L.  
Koll.....Kollar, Vincenz.  
Kraatz.....Kraatz, Gustav.  
Kug.....Kugelann, Johann Gottlieb.  
Kunze.....Kunze, Gustav.

**L.**

- Lac.....{ Lacordaire, Jean Theodo-  
          ra.  
Laf.....{ Marquis de la Ferté-Sen-  
          ectere.  
Lap.....Laporte, F. L. de.  
Lap. & Gory.....Laporte & Gory.  
Lasp.....Laspeyres, Jacob Heinrich.  
Latr.....Latreille, Pierre Andre.  
L. Duf.....Leon Dufour.  
Leach.....Leach, William Elford.  
Le B.....Le Baron, William.  
Lec.....Leconte, John L.  
Led.....Lederer, Julius.  
Leidy.....Leidy, Joseph.  
Lewis.....Lewis, R. H.  
Licht.....{ Lichtenstein, Anton Au-  
          gust Heinrich.  
L. or Linn....Linnaeus, Carl von.  
Lintn.....Lintner, James Albert.  
Lw.....Loew, Hermann.

**M.**

- MacL.....MacLeay, William S.  
Macq.....Macquart, Jean.

- Mann.....{ Mannerheim, Carl Gustav  
          von.  
Mars.....Marseul, S. A. de.  
Marsh.....Marsham, Thomas.  
Marsh.....Marshall, T. A.  
Math.....Matthews, A.  
Mayr.....Mayr, Gustav L.  
Megerle....{ Megerle von Muelfeld,  
          Johann Karl.  
Meigen.....Meigen, Johann Wilhelm.  
Mell.....Mellié, J.  
Mels.....{ Melsheimer, Friedrich  
          Ernst.  
Minot.....Minot, Charles S.  
Moeschl.....Moeschler, Heinrich Benno.  
Mon.....Monell, J. T.  
Moore.....Moore, Frederick.  
Morr.....Morrison, H. K.  
Morris.....{ Morris, Margaretta H.  
          (Diptera).  
Mots.....Motschulsky, Victor von.  
Müll.....{ Müller, Philipp Wilbrand  
          Jacob.  
Muls.....Mulsant, Etienne.  
Mula. et Rey.....Mulsant et Rey.

**N.**

- Nees.....{ Nees von Esenbeck, Chris-  
          tian G.  
Newn.....Newman, Edward.  
Nitsch.....Nitzsch, Christian L.  
Nord.....Nordmann, Alexander von.  
Norton.....Norton, Edward.  
Nyl.....Nylander, William.

**O.**

- Ochs.....Ochsenheimer, Ferdinand.  
Oestl.....Oestlund, O. W.  
Oliv.....Olivier, Antoine Guillaume.  
O-S.....Osten-Sacken, R. von.

**P.**

- Pack.....Packard, Alpheus Spring.  
Pal. Beauv....see Beauv.  
Pall.....Pallas, Peter Simon.  
Panz.....{ Panzer, Georg Wolfgang  
          Franz.  
Pasc.....Pascoe, Francis P.

## 470 GEOLOGICAL SURVEY OF NEW JERSEY.

|                |   |  |  |
|----------------|---|--|--|
| Pass .....     | Passerini, Carlo.                         | Schr.....                                  | Schrink, Franz von Paula.                                      |
| Patton .....   | Patton, William H.                        | Schum .....                                | Schummel, Theodore Emil.                                       |
| Payk .....     | Paykull, Gustaf von.                      | Scop .....                                 | Scopoli, Johann Anton.   |
| Peck .....     | Peck, William Dandridge.                  | Scriba .....                               | Scriba W.  |
| Perty .....    | Perty, Maximilian.                        | Scud .....                                 | Scudder, Samuel H.   |
| Phillipi ..... | Phillipi, F. H. E.                        | Seidl .....                                | Seidlitz, George.  |
| Pict .....     | Pictet, François Jules.                   | Selys.....                                 | { Selys-Longchamps, Michel<br>E.                               |
| Poey .....     | Poey, Phelipe.                            | Serv .....                                 | { Audinet-Serville, Jean<br>Guilleaume.                        |
| Prov ... ..... | Provancher, L'Abbe.                       | Shimer .....                               | Shimer, Henry.   |
| Putn ... ..... | Putnam, J. D.                             | Shuck .....                                | Shuckard, W. E.  |
| Putz.....      | Putzeys, H.                               | Sign .....                                 | Signoret, Victor.  |
| R.             |   |  |  |
| Rag .....      | Ragonot, Emile L.                         | Sm. & Abb....                              | Smith & Abbot.   |
| Ramb. ....     | Rambur, J. Pierre.                        | Smith. ....                                | { Smith, Frederick (Hymenoptera).                              |
| Rand.. ....    | Randall, John W.                          | Smith . ....                               | Smith, John B. (Col. et Lep.)                                  |
| Rathv.....     | Rathvon, J. H.                            | Sol.....                                   | { Solier, Antoine Joseph<br>Jean.                              |
| Ratz .....     | { Ratzeburg, Julius Theodor<br>Christian. | Speyer .....                               | Speyer, Adolph.  |
| R. Desv. ....  | Robineau Desvoidy.                        | Spin .....                                 | Spinola, Maximilian.   |
| Reak... ....   | Reakirt, Tryon.                           | Staeger .....                              | Staeger, C.  |
| Redt... ....   | Redtenbacher, Ludwig.                     | St. Fargeau, Amédée Louis<br>St. Farg..... | { St. Fargeau, Amédée Louis<br>Michel Le Peletier<br>Comte de. |
| Reichenb....   | Reichenbach, Anton B.                     | St. F. & Serv. Saint-Fargeau et Serville.  |  |
| Reitt... ....  | Reitter, E.                               | Stal .....                                 | Stal, Carl.  |
| Reut... ....   | Reuter, O. M.                             | Stenh.....                                 | Stenhammar, Chr.   |
| Riley . ....   | Riley, Charles Valentine.                 | Steph.....                                 | Stephens, James Francis.                                       |
| Rob .....      | Robinson, Coleman T.                      | Stretch .....                              | Stretch, Richard H.  |
| Rog.....       | Rogers, W. Frederick.                     | Strk .....                                 | Strecker, Hermann.   |
| Rond.....      | Rondani, Camille.                         | Suffr.....                                 | Suffrian, E.   |
| Rossi .. ....  | Rossi, Peter.                             | S. V.....                                  | { Schiffermüller, Verzeich-<br>niss.                           |
| Rott .....     | Rottenburg, S. A. von.                    | Swains.....                                | Swainson, William.   |
| Ruthe. ....    | Ruthe, Johann Friedrich.                  | Swed.....                                  | Swederus, Nils Samuel.   |
| S.             |   |  |  |
| S. & A .....   | see Sm. & Abb.                            | T.   |  |
| Sandb .....    | Sandberg, Karl von.                       | Targ-Toz.....                              | Targioni-Tozetti.  |
| Saund .....    | Saunders, William.                        | Tasch .....                                | Taschenberg, E. L.   |
| Sauss .....    | Saussure, Henri de.                       | Taylor .....                               | Taylor, George W.  |
| Say. ....      | Say, Thomas.                              | Thoms .....                                | Thomson, C. G.   |
| Schäff .....   | Schäffler, Jacob Christian.               | Thos.....                                  | Thomas, Cyrus.   |
| Schaum.....    | Schaum, Hermann Rudolph.                  | Thunb ... ....                             | Thunberg, Carl Peter.  |
| Schiff.....    | Schiffermüller, Ignaz.                    | Tourn .....                                | Tournier, H.   |
| Schiner .....  | Schiner, J. R.                            | Tr ... .....                               | Treitschke, Friedrich.   |
| Sehm .....     | { Schmidt, Wilhelm Ludwig<br>Ewald.       | U.   |  |
| Schm-Goeb      | { Schmidt-Goebel, Hermann<br>Max.         | Uhler.....                                 | Uhler, Philip R.   |
| Schneid.....   | { Schneider, Wilhelm Gottlieb.            | Urban .....                                | d'Urban, W. S. M.  |

## CATALOGUE OF INSECTS.

471

## W.

Wahlb..... Wahlberg, P. F.  
 Wallgr ..... Wallengren, H. D. J.  
 Waltl..... Waltl, Joseph.  
 Walsh ..... Walsh, Benjamin Dann.  
 Waterh ..... Waterhouse, George Robert.  
 Web ..... Weber, Friedrich.  
 Wesm..... Wesmael, Constantin.  
 Westw..... Westwood, John Obadiah.  
 White ..... White, Adam (Coleoptera).  
 White ..... White, B. (Hemiptera).  
 Wied ..... { Wiedemann, Christian R.  
             W.  
 Will..... Williston, S. W.

## Winnertz . . . Winnertz, Johannes.

Walk..... Walker, Francis.  
 Wlsm..... Walsingham, Thomas.  
 Wolff ..... Wolff, Johann Friedrich.  
 Woll..... Wollaston, T. Vernon.  
 W. V. .... Wiener, Verzeichniss.

## Z.

Zell. .... Zeller, Philipp, Christoph.  
 Zett..... { Zetterstedt, Johann, Wil-  
             helm.  
 Ziegl... .... Ziegler, Daniel.  
 Zimm..... Zimmermann, Christoph.  
 Zinck..... Zincken, Johann T. F.



## INDEX OF GENERA.

---

|                     |     |                                |     |                     |     |
|---------------------|-----|--------------------------------|-----|---------------------|-----|
| <b>A.</b>           |     |                                |     |                     |     |
| Abia .....          | 7   | Agenia.....                    | 51  | Anacrabro .....     | 58  |
| Abrostola .....     | 321 | Aglossa .....                  | 340 | Anedus.....         | 233 |
| Acalles.....        | 258 | Agnomonia .....                | 328 | Anagoga .....       | 333 |
| Acalloides .....    | 261 | Agonoderus.....                | 94  | Anametis .....      | 247 |
| Acanthaclisis ..... | 462 | Agraphus .....                 | 248 | Anassa.....         | 421 |
| Acanthia .....      | 429 | Agraulis .....                 | 274 | Anaspis.....        | 240 |
| Acanthocinus .....  | 210 | Agrilus .....                  | 170 | Anatis .....        | 134 |
| Acanthoderes .....  | 208 | Agrion .....                   | 456 | Anax.....           | 457 |
| Acantholoma .....   | 416 | Agriotus .....                 | 161 | Anaxiphus .....     | 408 |
| Acanthosoma .....   | 420 | Agromyza.....                  | 403 | Anchodemus .....    | 253 |
| Achatodes .....     | 315 | Agrotis .....                  | 308 | Ancyloxypha .....   | 281 |
| Acholla .....       | 431 | Alaus.....                     | 158 | Ancyronyx .....     | 156 |
| Achreos .....       | 346 | Alcathoe .....                 | 288 | Andrena .....       | 63  |
| Acidalia .....      | 335 | Alcidamea .....                | 66  | Andricus .....      | 17  |
| Acilius.....        | 104 | Aleochara .....                | 115 | Androchirus .....   | 236 |
| Acmaeodera .....    | 170 | Aletia.....                    | 320 | Aneurus .....       | 430 |
| Acmeoops .....      | 205 | Aleurodes .....                | 451 | Angerona .....      | 333 |
| Acocephala .....    | 445 | Aleuronia .....                | 461 | Anisodactylus ..... | 98  |
| Acononia .....      | 437 | Allandrus .....                | 270 | Anisolabia .....    | 406 |
| Acoptus .....       | 260 | Allantus .....                 | 12  | Anisops .....       | 436 |
| Acordulecera.....   | 7   | Allecula.....                  | 235 | Anisopteryx .....   | 338 |
| Acridium .....      | 413 | Allodius .....                 | 362 | Anisosticta .....   | 132 |
| Acrobasis .....     | 344 | Allograptia .....              | 385 | Anisota .....       | 303 |
| Acrolophus .....    | 364 | Allorhina .....                | 197 | Anisoxya .....      | 238 |
| Acronycta .....     | 308 | Allotria ( <i>Hym.</i> ) ..... | 18  | Anomala .....       | 195 |
| Astenodes .....     | 169 | Allotria ( <i>Lep.</i> ) ..... | 327 | Anomalon .....      | 25  |
| Actias.....         | 302 | Alphitobius .....              | 232 | Anomis .....        | 320 |
| Actinotia .....     | 313 | Alydus .....                   | 421 | Anomcea .....       | 215 |
| Actobius .....      | 121 | Alypia.....                    | 290 | Anomoglossus .....  | 93  |
| Acupalpus .....     | 97  | Alyson .....                   | 55  | Anopheles .....     | 364 |
| Acylophorus .....   | 116 | Amadrya .....                  | 354 | Anotia .....        | 439 |
| Adalia .....        | 133 | Amalopis .....                 | 368 | Antepline .....     | 333 |
| Adelocera .....     | 158 | Amara .....                    | 81  | Anthaxia .....      | 168 |
| Adimonia .....      | 222 | Amblycorypha .....             | 408 | Anthrophagus .....  | 142 |
| Adita .....         | 309 | Amblyopone .....               | 46  | Anthicus .....      | 243 |
| Adoneta .....       | 296 | Amblyteles .....               | 22  | Anthidium .....     | 66  |
| Adoxus .....        | 218 | Amblyscirtes .....             | 281 | Anthocharis .....   | 278 |
| Ædes.....           | 384 | Amitus .....                   | 42  | Anthocomus .....    | 177 |
| Æletes .....        | 148 | Ammophila .....                | 51  | Anthocoris .....    | 429 |
| Ælia.....           | 418 | Amnestus .....                 | 417 | Anthocicia .....    | 322 |
| Ællopus .....       | 283 | Amorbia .....                  | 349 | Anthomyia .....     | 394 |
| Æschna .....        | 457 | Ampelophaga .....              | 285 | Anthonomus .....    | 254 |
| Agabus .....        | 103 | Amphibolips .....              | 16  | Anthophora .....    | 67  |
| Agallia .....       | 445 | Amphicerus .....               | 183 | Anthrax .....       | 377 |
| Agaliatae .....     | 428 | Amphicnephæ .....              | 397 | Anthrenus .....     | 144 |
| Agapostemon .....   | 63  | Amphicoma .....                | 190 | Anthribulus .....   | 271 |
| Agathidium .....    | 112 | Amphicrossus .....             | 151 | Antispila .....     | 358 |
| Agathis.....        | 35  | Amphion .....                  | 284 | Antocha .....       | 366 |
|                     |     | Amphisa .....                  | 350 | Anytus .....        | 309 |
|                     |     | Amphiscepa .....               | 438 | Apamea .....        | 314 |

(473)

## INDEX OF GENERA.

|                    |     |                     |     |                      |     |
|--------------------|-----|---------------------|-----|----------------------|-----|
| Apanteles .....    | 34  | Atarba.....         | 366 | Blabophanes .....    | 354 |
| Apateiodes .....   | 298 | Athous.....         | 164 | Blapetus .....       | 232 |
| Apathus.....       | 68  | Athyssanus.....     | 446 | Blastophysa .....    | 448 |
| Apatura .....      | 272 | Atimia.....         | 204 | Blechrus .....       | 89  |
| Apenes.....        | 90  | Atomacera.....      | 8   | Bledius .....        | 128 |
| Aphænogaster ..... | 46  | Atomaria.....       | 142 | Blennocampa.....     | 11  |
| Aphalara .....     | 447 | Atomesia .....      | 375 | Blepharida .....     | 223 |
| Aphelinus.....     | 40  | Atranus .....       | 86  | Blepharomastix.....  | 343 |
| Aphidius.....      | 37  | Atropos .....       | 453 | Bleptina .....       | 330 |
| Aphis.....         | 449 | Atta.....           | 46  | Blethisa .....       | 73  |
| Aphodius .....     | 188 | Attacus .....       | 302 | Blissus .....        | 422 |
| Aphomia.....       | 346 | Attagenus .....     | 144 | Boletobius .....     | 127 |
| Aphonus.....       | 196 | Attalus .....       | 178 | Boletophagus .....   | 234 |
| Aphorista .....    | 136 | Attelabus .....     | 247 | Boletotherus .....   | 234 |
| Aphrastus.....     | 249 | Atylotus.....       | 373 | Bolitophila .....    | 361 |
| Aphrophora .....   | 443 | Augochlora .....    | 62  | Bombus .....         | 68  |
| Aphyucus.....      | 39  | Aulacigaster .....  | 403 | Bombylius .....      | 378 |
| Apiomerus .....    | 432 | Aulacizes .....     | 444 | Borborus .....       | 404 |
| Apion.....         | 249 | Aulacus .....       | 18  | Bostrichus .....     | 183 |
| Apis .....         | 68  | Auletes .....       | 246 | Bostrideres .....    | 139 |
| Aplodes.....       | 334 | Aulonium .....      | 139 | Botis .....          | 341 |
| Apocellus.....     | 129 | Axinopalpus .....   | 89  | Brachyacantha .....  | 134 |
| Apriastus.....     | 89  | Azelina .....       | 332 | Brachylobus .....    | 93  |
| Apseis .....       | 24  |                     |     | Brachymyrnex .....   | 45  |
| Aradus .....       | 430 |                     |     | Brachynus .....      | 90  |
| Aramigus .....     | 249 | Babia .....         | 215 | Brachypalpus .....   | 387 |
| Archasia .....     | 442 | Baccha .....        | 385 | Brachypterus .....   | 148 |
| Archimerus .....   | 420 | Bactridium .....    | 154 | Brachyrhynchus ..... | 430 |
| Arctia .....       | 292 | Badister .....      | 83  | Brachys .....        | 171 |
| Ardistomi .....    | 76  | Baëtis .....        | 455 | Brachystylus .....   | 248 |
| Arenetra .....     | 31  | Bagous .....        | 253 | Brachytarsus .....   | 271 |
| Argeus .....       | 284 | Balaninus .....     | 263 | Brachytropis .....   | 426 |
| Argynnus .....     | 274 | Balboceras .....    | 189 | Bracon .....         | 33  |
| Argyra .....       | 381 | Banasa .....        | 420 | Bradycellus .....    | 97  |
| Argyramoeba .....  | 877 | Baptria .....       | 339 | Brathinus .....      | 113 |
| Argyresthia .....  | 357 | Barce .....         | 432 | Brochymena .....     | 418 |
| Argyria .....      | 346 | Baris .....         | 262 | Brontes .....        | 141 |
| Argyrophyses ..... | 291 | Baropsis .....      | 259 | Brotolomia .....     | 314 |
| Arhopalus .....    | 203 | Barytychius .....   | 252 | Bruchomorpha .....   | 438 |
| Aricia .....       | 394 | Bassareus .....     | 215 | Bruchus .....        | 229 |
| Arotes .....       | 29  | Baessus .....       | 29  | Bryaxis .....        | 114 |
| Arphia .....       | 414 | Batrachidea .....   | 415 | Bryocoris .....      | 427 |
| Arsilonche .....   | 307 | Batrissus .....     | 114 | Bryophilus .....     | 307 |
| Artace .....       | 304 | Batyle .....        | 203 | Bryoporus .....      | 127 |
| Arthrolips .....   | 132 | Belonochilus .....  | 422 | Buprestis .....      | 167 |
| Arthromacra .....  | 236 | Belonochus .....    | 118 | Butalis .....        | 357 |
| Arzama .....       | 315 | Belostoma .....     | 435 | Byrrhus .....        | 156 |
| Asaphes .....      | 165 | Belvoisia .....     | 391 | Bythoscopus .....    | 446 |
| Ascalaphus .....   | 462 | Bembecia .....      | 288 | Byturus .....        | 143 |
| Asclera .....      | 239 | Bembex .....        | 54  |                      |     |
| Asemum .....       | 199 | Bembidium .....     | 78  | O.                   |     |
| Asilus .....       | 376 | Benacus .....       | 435 | Caberodes .....      | 331 |
| Asopia .....       | 340 | Beris .....         | 371 | Caccobaphes .....    | 426 |
| Asphondyla .....   | 360 | Berosus .....       | 108 | Cacoscia .....       | 348 |
| Aspidiotus .....   | 452 | Betarmon .....      | 162 | Cacoplia .....       | 208 |
| Aspidisca .....    | 358 | Bibio .....         | 363 | Cennia .....         | 402 |
| Aspilates .....    | 337 | Bidessus .....      | 101 | Cenuis .....         | 455 |
| Astata .....       | 53  | Biorhiza .....      | 17  | Cenocara .....       | 183 |
| Asthena .....      | 335 | Bittacomorpha ..... | 369 | Cenomyia .....       | 370 |
| Atenius .....      | 187 | Bittacus .....      | 463 | Cafius .....         | 121 |

## INDEX OF GENERA.

475

|                      |     |                      |     |                     |     |
|----------------------|-----|----------------------|-----|---------------------|-----|
| Calandra.....        | 265 | Caliptera .....      | 327 | Chloëaltis .....    | 411 |
| Calathus.....        | 83  | Calithemis .....     | 459 | Chlorion .....      | 52  |
| Calephelis .....     | 275 | Cemonus .....        | 56  | Chlorochara .....   | 437 |
| Caliroa .....        | 11  | Cenopsis.....        | 349 | Chloromyia .....    | 371 |
| Calledapteryx .....  | 335 | Centeterus .....     | 23  | Chlorops .....      | 403 |
| Callida .....        | 89  | Centrinus .....      | 262 | Chœridium .....     | 186 |
| Callidium .....      | 200 | Centrodera .....     | 205 | Chœrocampa .....    | 284 |
| Callidryas .....     | 278 | Centronopus .....    | 281 | Chœrodes .....      | 331 |
| Callimorpha .....    | 292 | Cephaloon .....      | 239 | Choleva .....       | 111 |
| Calliopsis .....     | 63  | Cephus .....         | 15  | Choreutes.....      | 354 |
| Calliphora .....     | 393 | Ceraphron .....      | 41  | Chortophaga .....   | 413 |
| Callipterus .....    | 450 | Cerascopus .....     | 432 | Chramesus .....     | 268 |
| Calloides .....      | 203 | Ceratina.....        | 67  | Chrysia.....        | 43  |
| Callomyia .....      | 389 | Ceratonia .....      | 287 | Chrysobothris ..... | 189 |
| Calopistria .....    | 398 | Ceratopogon .....    | 365 | Chrysocraon .....   | 411 |
| Calobata .....       | 397 | Ceratosoma .....     | 27  | Chrysocnus .....    | 219 |
| Calocampa.....       | 319 | Ceraturgus .....     | 374 | Chrysodina .....    | 219 |
| Calochromus .....    | 173 | Cerceris.....        | 55  | Chrysogaster .....  | 384 |
| Calocoris .....      | 426 | Cercopeus .....      | 248 | Chrysomela .....    | 220 |
| Calopha .....        | 447 | Cercus .....         | 149 | Chrysopa .....      | 462 |
| Calopteron .....     | 172 | Cercyon .....        | 109 | Chrysophanus .....  | 277 |
| Calopteryx .....     | 455 | Ceresa .....         | 441 | Chrysopila .....    | 373 |
| Calosoma .....       | 72  | Ceria .....          | 388 | Chrysops .....      | 372 |
| Calothysanis .....   | 335 | Ceropales.....       | 51  | Chrysotimus .....   | 382 |
| Calpe .....          | 320 | Ceroptrix .....      | 17  | Chrysotoxum .....   | 383 |
| Calymnia .....       | 317 | Cerotainia .....     | 375 | Chrysotus .....     | 382 |
| Calyptoproctus ..... | 439 | Cerotoma .....       | 221 | Chytolita .....     | 329 |
| Calyptus .....       | 36  | Ceruchus .....       | 186 | Chytonix .....      | 308 |
| Camirus .....        | 416 | Cerura.....          | 301 | Cicada .....        | 437 |
| Camponotus .....     | 44  | Ceylon.....          | 139 | Cicindela .....     | 69  |
| Campoplex .....      | 26  | Ceutorhynchus .....  | 409 | Cilissa .....       | 63  |
| Campsicnemus .....   | 382 | Chætocnema .....     | 261 | Cimbex .....        | 7   |
| Camptobrochis .....  | 426 | Chætopis .....       | 398 | Cindaphia .....     | 343 |
| Camptoneura .....    | 397 | Chalcis .....        | 38  | Cinyra .....        | 168 |
| Canifa .....         | 238 | Chalcoderma .....    | 258 | Circotettix .....   | 414 |
| Canthon .....        | 186 | Chalcolepidius ..... | 158 | Cirrhophanus .....  | 323 |
| Canthophorus .....   | 417 | Chalcophora .....    | 166 | Cis .....           | 184 |
| Canthydrus .....     | 100 | Chalepus .....       | 196 | Cistela .....       | 286 |
| Capnia .....         | 454 | Chalybion .....      | 52  | Citheronia .....    | 308 |
| Capnochroa .....     | 236 | Chammyris .....      | 323 | Cixius .....        | 439 |
| Capseus .....        | 427 | Charadra .....       | 306 | Cladius .....       | 8   |
| Capua .....          | 350 | Charissa .....       | 180 | Cladura .....       | 368 |
| Carabus .....        | 72  | Charisteus .....     | 420 | Clemencia .....     | 291 |
| Caradrina .....      | 316 | Charistena .....     | 228 | Cleora .....        | 337 |
| Cardiastethus .....  | 429 | Chauliodes .....     | 460 | Clerus .....        | 178 |
| Cardiophorus .....   | 158 | Chauliognathus ..... | 175 | Clinidium .....     | 140 |
| Caripeta .....       | 337 | Chelonus .....       | 34  | Clinocera .....     | 380 |
| Carphoborus .....    | 269 | Chelymorpha .....    | 229 | Cliniocampa .....   | 304 |
| Carpocapsa .....     | 353 | Cherme .....         | 451 | Clivina .....       | 75  |
| Carpophilus .....    | 149 | Chilocorus .....     | 134 | Cloë .....          | 455 |
| Casmonia .....       | 86  | Chiloneurus .....    | 39  | Clostoptera .....   | 443 |
| Cassida .....        | 229 | Chilosia .....       | 384 | Clytanthus .....    | 204 |
| Cataclysta .....     | 343 | Chimarra .....       | 464 | Cnemidotus .....    | 99  |
| Caterva .....        | 337 | Chion .....          | 200 | Cnemodus .....      | 423 |
| Catocala .....       | 324 | Chionaspis .....     | 452 | Coccidula .....     | 135 |
| Catogenus .....      | 141 | Chironomus .....     | 364 | Coccinella .....    | 183 |
| Cebrio .....         | 166 | Chlænius .....       | 91  | Coccophagus .....   | 40  |
| Cecidomyia .....     | 360 | Chlænogramma .....   | 287 | Cæambus .....       | 101 |
| Cedius .....         | 113 | Chlamys .....        | 215 | Cœlidea .....       | 446 |
| Celetes .....        | 172 |                      |     | Caloides .....      | 260 |

## INDEX OF GENERA.

|                       |     |                      |     |                      |     |
|-----------------------|-----|----------------------|-----|----------------------|-----|
| Caelioxys.....        | 64  | Cratacanthus .....   | 94  | Dasyicerca .....     | 357 |
| Caelodasyx.....       | 300 | Cratoparis .....     | 271 | Dasyllis.....        | 375 |
| Caelogaster.....      | 261 | Cregya .....         | 180 | Dasylophia.....      | 300 |
| Celopa.....           | 399 | Cremastochilus ..... | 197 | Datana.....          | 298 |
| Cenia.....            | 172 | Cremastogaster ..... | 47  | Debis .....          | 272 |
| Cenobia.....          | 395 | Creophilus .....     | 117 | Decarthron .....     | 114 |
| Cenous .....          | 419 | Crepidoderas .....   | 225 | Decatoma.....        | 38  |
| Colastus.....         | 149 | Cressonia .....      | 288 | Decetes.....         | 209 |
| Colaspis.....         | 220 | Criocephalus.....    | 199 | Degerria .....       | 391 |
| Coleophora.....       | 358 | Crioceris .....      | 214 | Deidamia .....       | 284 |
| Colias .....          | 278 | Crioprora .....      | 387 | Deilephila.....      | 284 |
| Colletes .....        | 62  | Criorhina .....      | 387 | Deilines .....       | 335 |
| Collops .....         | 177 | Crocidophora .....   | 342 | Delphax.....         | 440 |
| Colpognathus.....     | 23  | Crociographa .....   | 317 | Deltotcephalus ..... | 446 |
| Colydium .....        | 139 | Crocota .....        | 292 | Deltotemopus .....   | 158 |
| Colymbetes.....       | 103 | Crophius .....       | 423 | Demas .....          | 306 |
| Compsocerocoris ..... | 425 | Cryptarcha .....     | 152 | Deadroctonus .....   | 269 |
| Conchylis .....       | 360 | Cryptobium.....      | 123 | Dendroides .....     | 244 |
| Conchyloides.....     | 343 | Cryptocephalus.....  | 216 | Depressaria .....    | 355 |
| Conocephalus .....    | 410 | Cryptohypnus.....    | 159 | Dereocoris.....      | 427 |
| Conopa .....          | 389 | Cryptolechia .....   | 355 | Dermestes .....      | 143 |
| Conosoma .....        | 128 | Cryptorhopalum ..... | 144 | Deromyia .....       | 375 |
| Conotelus.....        | 149 | Cryptorhynchus ..... | 258 | Deronectes.....      | 101 |
| Conotrachelus.....    | 257 | Crypturgus.....      | 269 | Derrima .....        | 322 |
| Copeiatus.....        | 102 | Cryptus .....        | 24  | Desmia.....          | 343 |
| Copidosoma .....      | 39  | Cteniscus .....      | 29  | Desmocerus .....     | 205 |
| Copris.....           | 186 | Ctenistes .....      | 113 | Desmometopas .....   | 403 |
| Coptera.....          | 42  | Ctenucha .....       | 290 | Desmopachria .....   | 100 |
| Coptocycla.....       | 229 | Cucujus .....        | 141 | Dexia .....          | 392 |
| Coptodera .....       | 88  | Cucullia .....       | 319 | Diabrotica .....     | 222 |
| Coptotomus .....      | 102 | Culex.....           | 364 | Diachus .....        | 218 |
| Copturus .....        | 269 | Cupes .....          | 184 | Diaperis .....       | 233 |
| Cordula .....         | 458 | Cuterebra .....      | 390 | Diapheromera .....   | 407 |
| Cordulegaster.....    | 457 | Cybister .....       | 105 | Diaphorus .....      | 382 |
| Cordylura.....        | 395 | Cyclocephala .....   | 196 | Diapria .....        | 42  |
| Corethra.....         | 364 | Cychramus .....      | 152 | Diaspis .....        | 452 |
| Corimelaena.....      | 417 | Cydrus .....         | 71  | Diastata .....       | 402 |
| Corisa.....           | 436 | Cylapus .....        | 428 | Diastrophus .....    | 16  |
| Coriscus .....        | 431 | Cylene .....         | 203 | Dibolia .....        | 227 |
| Corizus .....         | 422 | Cylloceria .....     | 31  | Diceslus .....       | 82  |
| Gorphyra .....        | 242 | Cymatoderas .....    | 178 | Dicerca .....        | 167 |
| Corticaria .....      | 153 | Cymatophora .....    | 337 | Dichæta .....        | 401 |
| Corycia .....         | 336 | Cymindis .....       | 90  | Dichelilia .....     | 350 |
| Corydalis .....       | 461 | Cymus .....          | 422 | Dichelonycha .....   | 191 |
| Corylophus.....       | 132 | Cynips .....         | 17  | Dichrooscytus .....  | 425 |
| Corymbites.....       | 164 | Cyphomimus .....     | 249 | Dichrorampha .....   | 353 |
| Corynocoris .....     | 420 | Cyphon .....         | 157 | Dicopis .....        | 305 |
| Corythuca.....        | 429 | Cyrtinus .....       | 207 | Dicranomyia .....    | 365 |
| Coccinoptera.....     | 215 | Cyrtoma .....        | 380 | Didymops .....       | 458 |
| Coemopepla.....       | 419 | Cytoneura .....      | 394 | Didea .....          | 385 |
| Coenopteryx .....     | 358 | Cyrtophorus .....    | 204 | Diedrocephala .....  | 444 |
| Cessonus .....        | 265 | Cyrtophyllus .....   | 409 | Dilophonota .....    | 285 |
| Cessus .....          | 304 | Cyrtosia .....       | 441 | Dilophus .....       | 363 |
| Cotalpa .....         | 195 | Cytillus .....       | 154 | Dineutes .....       | 106 |
| Corelus .....         | 139 | D.                   |     | Dinoderus .....      | 184 |
| Crabro.....           | 57  | Dacne .....          | 138 | Diochus .....        | 122 |
| Cressus .....         | 9   | Dactylopium .....    | 451 | Diectria .....       | 374 |
| Crambodes.....        | 319 | Dalmania .....       | 389 | Diomorus .....       | 39  |
| Crambus .....         | 346 | Danais .....         | 275 | Dioryctria .....     | 344 |
| Craponius .....       | 260 |                      |     | Diphthera .....      | 306 |

## INDEX OF GENERA.

477

|                     |     |                     |     |                     |     |
|---------------------|-----|---------------------|-----|---------------------|-----|
| Diplax.....         | 460 | Elater .....        | 159 | Erioptera.....      | 367 |
| Diplochila.....     | 82  | Elephantomyia.....  | 368 | Eristalis.....      | 386 |
| Diplosis.....       | 360 | Elis .....          | 49  | Ernobiuss.....      | 181 |
| Diplotaxis.....     | 192 | Ellema .....        | 287 | Eros .....          | 172 |
| Dipterygia.....     | 313 | Elleschus .....     | 266 | Erromenus .....     | 28  |
| Dircessa.....       | 237 | Ellychnia .....     | 173 | Erycas .....        | 262 |
| Discoderus.....     | 94  | Elmis .....         | 156 | Erythroneura.....   | 447 |
| Discothyrea.....    | 46  | Emblethis.....      | 423 | Eusasthetus.....    | 123 |
| Disonycha.....      | 224 | Emesa .....         | 432 | Eubadison.....      | 36  |
| Dissosteira.....    | 415 | Emmessa.....        | 237 | Eubyja .....        | 338 |
| Distenia.....       | 204 | Emphor .....        | 67  | Eucalyptera.....    | 315 |
| Ditemnus .....      | 177 | Emphytus .....      | 10  | Euceroris .....     | 55  |
| Ditoma.....         | 139 | Empis .....         | 379 | Eucerocoris .....   | 427 |
| Ditomyia.....       | 361 | Empoas .....        | 447 | Euceros .....       | 28  |
| Dolba .....         | 286 | Empretia .....      | 296 | Euchates .....      | 294 |
| Dolerus .....       | 10  | Enchenopa .....     | 440 | Euchistus .....     | 419 |
| Dolichoderus .....  | 45  | Enchodes .....      | 237 | Eucinetus .....     | 157 |
| Dolichopeza .....   | 370 | Encoptolophus ..... | 413 | Eucirroedia.....    | 318 |
| Dolichopus .....    | 380 | Encyclops.....      | 206 | Euclea.....         | 295 |
| Dolopius .....      | 161 | Encyrtus .....      | 89  | Euclidia .....      | 324 |
| Donacia .....       | 213 | Endalus .....       | 253 | Eucoila .....       | 18  |
| Dorcaschema.....    | 207 | Endecatomus .....   | 183 | Eucrada .....       | 181 |
| Dorcatoma .....     | 183 | Endomychus .....    | 137 | Eucrostis .....     | 334 |
| Dorcus.....         | 185 | Endropis .....      | 332 | Eudalmia .....      | 332 |
| Dorymyrmex .....    | 45  | Enneapteron .....   | 185 | Eudamus .....       | 279 |
| Doryodes .....      | 316 | Ennomos .....       | 332 | Eudeilinea .....    | 335 |
| Doryphora.....      | 220 | Ennoicyla .....     | 463 | Eudemis .....       | 360 |
| Dorytomus .....     | 252 | Entechnia .....     | 67  | Euderces .....      | 204 |
| Drapetes .....      | 166 | Enayo .....         | 283 | Eudicrana .....     | 361 |
| Drasteria .....     | 324 | Epeorus .....       | 64  | Eudioptrus .....    | 343 |
| Drastrarius .....   | 161 | Ephalus .....       | 232 | Eudocimus .....     | 262 |
| Drepanodes .....    | 831 | Ephemera .....      | 455 | Eudryas .....       | 290 |
| Drepanosiphum ..... | 449 | Ephesia .....       | 345 | Eufitchia .....     | 386 |
| Dromius.....        | 89  | Ephialtes .....     | 30  | Eugnamptus .....    | 246 |
| Drosophila .....    | 402 | Ephydria .....      | 402 | Eulophus .....      | 41  |
| Dryobota .....      | 313 | Ephyra .....        | 334 | Eumenes .....       | 59  |
| Dryocampa .....     | 303 | Epicerus .....      | 247 | Eupactus .....      | 182 |
| Dryocetes .....     | 268 | Epicauta .....      | 245 | Eupelmus .....      | 39  |
| Dryomyza .....      | 396 | Epicypnia .....     | 362 | Eupethocia .....    | 340 |
| Dryophanta .....    | 17  | Epiurus .....       | 147 | Euphanessa .....    | 291 |
| Dryophthorus .....  | 265 | Epigaea .....       | 318 | Euphoria .....      | 197 |
| Dryops .....        | 156 | Epigraphia .....    | 355 | Euphorus .....      | 35  |
| Dryopteris .....    | 301 | Epilachna .....     | 136 | Euplectrus .....    | 41  |
| Dyschirius .....    | 74  | Epimecis .....      | 337 | Euplexia .....      | 313 |
| Dysphaga .....      | 213 | Epipaschia .....    | 344 | Eupogonius .....    | 211 |
| Dyspteris .....     | 334 | Epiphagma .....     | 368 | Eupristocerus ..... | 170 |
| Dytiscus.....       | 104 | Epipocus .....      | 137 | Eupsalis .....      | 263 |
| H.                  |     | Epippianthis .....  | 333 | Euptoieta .....     | 274 |
| Eacles .....        | 303 | Epirrita .....      | 340 | Eurycreon .....     | 342 |
| Earinus .....       | 35  | Episopus .....      | 428 | Eurygaster .....    | 416 |
| Eburia .....        | 201 | Epitragus .....     | 230 | Eurylabus .....     | 23  |
| Eccopsis .....      | 351 | Epitrix .....       | 226 | Eurymycter .....    | 270 |
| Echthopoda .....    | 374 | Epizeuxis .....     | 329 | Eurypon .....       | 156 |
| Ecantharia .....    | 294 | Epuraea .....       | 150 | Eurytoma .....      | 38  |
| Ectopria .....      | 157 | Erax .....          | 376 | Eusphyrus .....     | 270 |
| Ecyrus .....        | 211 | Erchomus .....      | 126 | Euspongus .....     | 56  |
| Edema .....         | 299 | Erebus .....        | 328 | Eustrophus .....    | 238 |
| Elaphidion .....    | 201 | Eremocoris .....    | 424 | Eustrotia .....     | 323 |
| Elaphrus .....      | 73  | Eretmocerus .....   | 42  | Euthera .....       | 391 |
|                     |     | Eriocampa .....     | 11  | Euthisanotia .....  | 315 |

## INDEX OF GENERA.

|                 |     |                    |     |                    |     |
|-----------------|-----|--------------------|-----|--------------------|-----|
| Euthoetia.....  | 421 | Glyphonyx.....     | 162 | Hecalus.....       | 445 |
| Eutochia.....   | 233 | Glypona.....       | 443 | Hedyobridium.....  | 43  |
| Eutylia.....    | 441 | Glypta.....        | 31  | Hedychrum.....     | 43  |
| Ecura.....      | 8   | Glyptina.....      | 227 | Halcon.....        | 36  |
| Euxesta.....    | 398 | Glyptoma.....      | 130 | Heliomata.....     | 339 |
| Euxoridae.....  | 32  | Glyptoscelis.....  | 218 | Heliothis.....     | 322 |
| Euzophora.....  | 345 | Gnathocerus.....   | 232 | Helluomorpha.....  | 90  |
| Evacanthus..... | 444 | Gnophomyia.....    | 367 | Heochara.....      | 444 |
| Evania.....     | 18  | Gnorimus.....      | 198 | Helodes.....       | 157 |
| Evarthrus.....  | 81  | Goes.....          | 208 | Helomyza.....      | 395 |
| Exema.....      | 215 | Gomphocerus.....   | 412 | Helophilus.....    | 386 |
| Exetastes.....  | 27  | Gomphus.....       | 457 | Helophorus.....    | 106 |
| Exochilum.....  | 25  | Gonianotus.....    | 424 | Helops.....        | 235 |
| Exochoides..... | 29  | Gonomyia.....      | 367 | Helotropha.....    | 314 |
| Exochomus.....  | 134 | Gortyna.....       | 314 | Hemaris.....       | 283 |
| Exochus.....    | 29  | Gorytes.....       | 54  | Hemerobius.....    | 461 |
| Exoprosopa..... | 377 | Gracilaria.....    | 357 | Hemerodromia.....  | 380 |
| Exorista.....   | 391 | Graphisurus.....   | 210 | Hemerophila.....   | 337 |
| Exyra.....      | 324 | Graphoderus.....   | 105 | Hemileuca.....     | 303 |
| Exyston.....    | 29  | Grapholita.....    | 353 | Hemiptychus.....   | 183 |
|                 |     | Graphops.....      | 219 | Hemiteles.....     | 24  |
|                 |     | Grapta.....        | 273 | Hepialus.....      | 305 |
|                 |     | Grotes.....        | 33  | Heraeus.....       | 423 |
| Falagria.....   | 114 | Gryllotalpa.....   | 407 | Heriades.....      | 65  |
| Fatua.....      | 288 | Gryllus.....       | 407 | Herrichia.....     | 323 |
| Feniseca.....   | 277 | Gryptocentrus..... | 28  | Hetererina.....    | 456 |
| Fenusa.....     | 9   | Gueaeria.....      | 335 | Hetererius.....    | 147 |
| Feralia.....    | 306 | Gymnetron.....     | 256 | Heterachthes.....  | 202 |
| Fidia.....      | 218 | Gymnocheta.....    | 391 | Heterocampa.....   | 300 |
| Fidonia.....    | 337 | Gymnophora.....    | 404 | Heterocerus.....   | 166 |
| Figites.....    | 18  | Gymnopternus.....  | 381 | Heterographia..... | 345 |
| Flata.....      | 438 | Gymnoscelus.....   | 36  | Heteromyia.....    | 365 |
| Fenus.....      | 18  | Gynandropus.....   | 95  | Heteroneura.....   | 400 |
| Forficula.....  | 405 | Gyrophana.....     | 116 | Heteropalma.....   | 25  |
| Formica.....    | 44  | Gyrinus.....       | 105 | Heterophleps.....  | 339 |
| Fucellia.....   | 395 |                    |     | Heterothops.....   | 116 |
|                 |     |                    |     | Hetcemis.....      | 208 |
|                 |     |                    |     | Hilara.....        | 380 |
|                 |     |                    |     | Hippiscus.....     | 414 |
|                 |     |                    |     | Hippobosca.....    | 405 |
|                 |     |                    |     | Hippodamia.....    | 133 |
|                 |     |                    |     | Hippopsis.....     | 211 |
|                 |     |                    |     | Hister.....        | 145 |
|                 |     |                    |     | Holcaspis.....     | 17  |
|                 |     |                    |     | Holcocephala.....  | 375 |
|                 |     |                    |     | Holepta.....       | 145 |
|                 |     |                    |     | Holopogon.....     | 374 |
|                 |     |                    |     | Homesmus.....      | 416 |
|                 |     |                    |     | Homalium.....      | 129 |
|                 |     |                    |     | Homalodisca.....   | 444 |
|                 |     |                    |     | Homalomyia.....    | 395 |
|                 |     |                    |     | Homolota.....      | 115 |
|                 |     |                    |     | Homophysa.....     | 344 |
|                 |     |                    |     | Homoptera.....     | 328 |
|                 |     |                    |     | Homopyralis.....   | 329 |
|                 |     |                    |     | Hoplia.....        | 191 |
|                 |     |                    |     | Hopliamenus.....   | 22  |
|                 |     |                    |     | Hoplitus.....      | 54  |
|                 |     |                    |     | Hoplocampa.....    | 11  |
|                 |     |                    |     | Hoplocephala.....  | 233 |

## INDEX OF GENERA.

479

|                    |     |                     |     |                     |     |
|--------------------|-----|---------------------|-----|---------------------|-----|
| Horistonotus ..... | 159 | Idiopista.....      | 369 | Leptacinus .....    | 122 |
| Hormisca .....     | 270 | Idiocoris .....     | 428 | Leptina.....        | 305 |
| Hormorus.....      | 247 | Ilnacora.....       | 427 | Leptis .....        | 374 |
| Hyaliodes.....     | 427 | Ilybius .....       | 102 | Leptogaster .....   | 374 |
| Hyalomyia.....     | 390 | Ilythea .....       | 402 | Leptoglossus .....  | 421 |
| Hybernia.....      | 338 | Ingura .....        | 320 | Leptophya .....     | 429 |
| Hydaticus .....    | 104 | Ipimorpha .....     | 317 | Leptostyla.....     | 429 |
| Hydnocera .....    | 179 | Ips .....           | 152 | Leptoterna .....    | 425 |
| Hydræna .....      | 107 | Ischnoptera.....    | 406 | Leptostylus .....   | 208 |
| Hydrellia .....    | 401 | Ischnorhynchus..... | 422 | Leptotrichelus..... | 86  |
| Hydria.....        | 389 | Ischyrua.....       | 188 | Leptura .....       | 206 |
| Hydrobius.....     | 109 | Isodontia .....     | 52  | Lepturges .....     | 209 |
| Hydrocampa.....    | 343 | Isomira .....       | 236 | Lepyronia .....     | 442 |
| Hydrocanthus ..... | 100 | Isopteryx .....     | 454 | Lestes.....         | 456 |
| Hydrocharis .....  | 107 | Isosoma .....       | 38  | Leucania.....       | 316 |
| Hydrochus .....    | 106 | Iaus .....          | 488 | Leucanthiza .....   | 359 |
| Hydrocombus .....  | 109 | Ithycerus .....     | 249 | Leucartcia .....    | 293 |
| Hydrophilus .....  | 107 | J.                  |     | Leucopis .....      | 403 |
| Hydrophorus .....  | 382 | Jalysus .....       | 421 | Leucoceps.....      | 37  |
| Hydroporus .....   | 101 | Jassus.....         | 446 | Leuctra.....        | 454 |
| Hydropsyche .....  | 484 | Jodua .....         | 318 | Liancalus .....     | 382 |
| Hydroctea .....    | 394 | Junonia .....       | 273 | Libellula .....     | 459 |
| Hydrovatus.....    | 100 | Jurinia.....        | 391 | Libythea.....       | 275 |
| Hygrotrechus.....  | 433 | L.                  |     | Ligyrocoris .....   | 423 |
| Hylastes .....     | 289 | Labena .....        | 33  | Ligyrus.....        | 196 |
| Hylesinus .....    | 289 | Labia .....         | 406 | Limacodes .....     | 296 |
| Hylobius .....     | 251 | Labidia .....       | 12  | Limenitis .....     | 272 |
| Hylotoma .....     | 8   | Laccobius .....     | 108 | Limneris .....      | 26  |
| Hylotrupes.....    | 200 | Laccophilus .....   | 100 | Limnobates .....    | 433 |
| Hylurgops .....    | 270 | Lachnacrepis .....  | 93  | Limnobia .....      | 366 |
| Hymenarcys .....   | 419 | Lachnosterna .....  | 192 | Limnephila .....    | 368 |
| Hymenorus .....    | 235 | Lachnus .....       | 450 | Limnophilus .....   | 463 |
| Hyparpax .....     | 298 | Leodra .....        | 443 | Limnophora .....    | 394 |
| Hypenula .....     | 330 | Languria .....      | 137 | Limnoporus .....    | 433 |
| Hyperaspis .....   | 135 | Lanataphe .....     | 344 | Limnotrechus .....  | 433 |
| Hyperchia .....    | 302 | Lemosacus .....     | 257 | Limonius .....      | 163 |
| Hyperechia .....   | 375 | Laphria .....       | 376 | Lina .....          | 221 |
| Hyperetus .....    | 334 | Laphygma .....      | 313 | Lioderma .....      | 419 |
| Hyperplatys .....  | 210 | Laphystia .....     | 374 | Liedes .....        | 112 |
| Hyphantria .....   | 294 | Largus .....        | 424 | Liopus .....        | 209 |
| Hypoderma .....    | 390 | Larva .....         | 53  | Liotropis .....     | 418 |
| Hypolampeis .....  | 223 | Lasioderma .....    | 182 | Lipocosma .....     | 344 |
| Hyponeumenta ..... | 354 | Lasioptera .....    | 361 | Lipoptena .....     | 406 |
| Hypophlebus .....  | 234 | Lasiosoma .....     | 361 | Lispe .....         | 395 |
| Hypoprepia .....   | 291 | Lassius .....       | 45  | Lissomorphus .....  | 253 |
| Hypothenemus ..... | 287 | Lathrobium .....    | 124 | Listotrophus .....  | 117 |
| Hyppa .....        | 313 | Lathropus .....     | 141 | Listronotus .....   | 250 |
| Hypsorophra .....  | 321 | Lauxania .....      | 399 | Litargus .....      | 143 |
| Hyptia .....       | 18  | Laverna .....       | 358 | Lithacodia .....    | 323 |
| Hypulus .....      | 237 | Lebia .....         | 87  | Lithocolletis ..... | 358 |
| Hystricia .....    | 391 | Lecanium .....      | 452 | Litocharis .....    | 124 |
| I.                 |     | Leja .....          | 362 | Litochrus .....     | 131 |
| Ianassa .....      | 300 | Lema .....          | 214 | Litognatha .....    | 329 |
| Ibalia .....       | 16  | Lepidostaphes ..... | 452 | Livia .....         | 447 |
| Ichneumon .....    | 19  |                     |     | Lixus .....         | 252 |
| Ichthyura.....     | 297 |                     |     | Loberus .....       | 142 |
| Idana.....         | 397 |                     |     | Loboptera .....     | 403 |
| Idia .....         | 393 |                     |     | Lobonotus .....     | 417 |
| Idiocerus.....     | 445 |                     |     | Lobophora .....     | 389 |
|                    |     |                     |     | Lomatia .....       | 377 |

## INDEX OF GENERA.

|                     |     |                                  |     |                     |     |
|---------------------|-----|----------------------------------|-----|---------------------|-----|
| Lomechusa .....     | 115 | Medeterns.....                   | 382 | Microcentrus .....  | 440 |
| Lonchessa .....     | 399 | Megachile.....                   | 66  | Microccolia .....   | 307 |
| Lonchoptera .....   | 383 | Megachyta.....                   | 329 | Microdon .....      | 383 |
| Longitarsus .....   | 227 | Megacolum .....                  | 428 | Microdus.....       | 35  |
| Lopheros .....      | 172 | Megalodacne .....                | 138 | Microgaster .....   | 35  |
| Lophoderus .....    | 349 | Megalonotus.....                 | 424 | Micromus .....      | 481 |
| Lophodonta .....    | 299 | Megapenthes .....                | 161 | Micropalpus .....   | 391 |
| Lophyrus .....      | 14  | Megastilicus .....               | 124 | Microphthalma.....  | 392 |
| Lopidea .....       | 425 | Megilla .....                    | 132 | Microplitis.....    | 35  |
| Loxaulus .....      | 17  | Megischus.....                   | 33  | Microrrhagus .....  | 158 |
| Loxocera .....      | 396 | Megoura.....                     | 449 | Microrhopala .....  | 228 |
| Lozogramma .....    | 336 | Melanactes .....                 | 165 | Microtoma.....      | 424 |
| Loxotenia .....     | 348 | Melanæthus .....                 | 417 | Microtonus .....    | 239 |
| Lucanus .....       | 185 | Melandrya .....                  | 237 | Midas .....         | 377 |
| Luceria .....       | 311 | Melanocoryphus .....             | 424 | Milesia.....        | 388 |
| Lucidota .....      | 173 | Melanoleates .....               | 432 | Miliyas .....       | 432 |
| Lucilia .....       | 383 | Melanomma .....                  | 341 | Mimeaa .....        | 56  |
| Ludius .....        | 161 | Melanophila .....                | 168 | Miris .....         | 425 |
| Luperus .....       | 221 | Melanophora .....                | 392 | Molorchus .....     | 202 |
| Lycana .....        | 277 | Melanoplus .....                 | 412 | Monachus.....       | 218 |
| Lycomorpha .....    | 290 | Melanostoma .....                | 384 | Monalocoris .....   | 427 |
| Lycoperdina .....   | 136 | Melanotus .....                  | 162 | Monarthrum .....    | 286 |
| Lyctocoris .....    | 428 | Melasis .....                    | 157 | Monecphora .....    | 442 |
| Lyctus .....        | 184 | Melisodes .....                  | 67  | Monedula .....      | 54  |
| Lyda .....          | 14  | Meliitea .....                   | 275 | Monellia .....      | 449 |
| Lygæus .....        | 424 | Melittia .....                   | 288 | Monobia .....       | 59  |
| Lygus .....         | 426 | Meloe .....                      | 244 | Monocrepidius ..... | 159 |
| Lymexylon .....     | 184 | Melophagus .....                 | 405 | Monohammus .....    | 207 |
| Lyroda .....        | 53  | Meneclæs .....                   | 419 | Monomorium .....    | 47  |
| M.                  |     |                                  |     |                     |     |
| Macratria .....     | 242 | Meracantha .....                 | 235 | Monophaenus .....   | 11  |
| Macrobasis .....    | 244 | Merinus .....                    | 230 | Monopsis .....      | 439 |
| Macrocentrus .....  | 37  | Merinus .....                    | 40  | Monostegia .....    | 11  |
| Macrocephalus ..... | 430 | Meromyza .....                   | 403 | Monotoma .....      | 154 |
| Macroceras .....    | 361 | Meroptera .....                  | 345 | Mordella .....      | 240 |
| Macroductylus ..... | 191 | Mesembrina .....                 | 393 | Mordellistena ..... | 240 |
| Macroglenee .....   | 40  | Mesites .....                    | 266 | Mormidea .....      | 419 |
| Macromia .....      | 468 | Mesochorus .....                 | 27  | Morrisonia .....    | 317 |
| Macronema .....     | 484 | Mesographe .....                 | 342 | Musca .....         | 393 |
| Macronoctua .....   | 315 | Mesograpta .....                 | 385 | Mutilla .....       | 48  |
| Macronychus .....   | 155 | Mesoleius .....                  | 28  | Myas .....          | 79  |
| Macrophya .....     | 12  | Mesoleptus .....                 | 27  | Mycetina .....      | 136 |
| Macrops .....       | 251 | Mesostenus .....                 | 24  | Mycetobia .....     | 361 |
| Madarus .....       | 282 | Mesothemis .....                 | 459 | Mycetochares .....  | 236 |
| Magdalais .....     | 254 | Mesovelia .....                  | 433 | Mycetophagus .....  | 142 |
| Malacocoris .....   | 427 | Messa .....                      | 9   | Mycetophila .....   | 362 |
| Mallophora .....    | 376 | Metabletus .....                 | 89  | Mycetoporus .....   | 127 |
| Mallotus .....      | 387 | Metachroma .....                 | 219 | Mycothera .....     | 362 |
| Malthinus .....     | 177 | Metanema .....                   | 331 | Mycotretus .....    | 138 |
| Malthodes .....     | 177 | Metapodius .....                 | 421 | Mycterus .....      | 238 |
| Mamestra .....      | 310 | Meteorus .....                   | 38  | Myiolepta .....     | 386 |
| Mantispa .....      | 461 | Metopinus .....                  | 29  | Myllæna .....       | 116 |
| Mantura .....       | 226 | Metoponia ( <i>Lep.</i> ) .....  | 324 | Myodocha .....      | 423 |
| Marasmalus .....    | 320 | Metoponia ( <i>Dipt.</i> ) ..... | 370 | Myopa .....         | 389 |
| Marmopteryx .....   | 336 | Metrobates .....                 | 433 | Myospila .....      | 394 |
| Masicera .....      | 391 | Metrocampa .....                 | 333 | Myrmecina .....     | 47  |
| Mastogenius .....   | 170 | Miarus .....                     | 266 | Myrmecleon .....    | 462 |
| Matus .....         | 102 | Micracis .....                   | 268 | Myrmica .....       | 46  |
| Mecynotarsus .....  | 243 | Microbembex .....                | 54  | Myrmiosa .....      | 48  |
|                     |     | Microcentrum .....               | 409 | Mysia .....         | 184 |

## INDEX OF GENERA.

481

|                      |     |                       |     |                     |     |
|----------------------|-----|-----------------------|-----|---------------------|-----|
| Myzine.....          | 49  | O.                    |     | Orgyia.....         | 294 |
| Myzus .....          | 449 | Obera .....           | 212 | Ormenis.....        | 438 |
|                      |     | Obrium .....          | 202 | Ornithomyia .....   | 405 |
| N.                   |     | Ochria.....           | 339 | Orocharis .....     | 408 |
| Nabidea .....        | 427 | Ochthebius .....      | 107 | Orphilus .....      | 145 |
| Nabis.....           | 431 | Ocyurus .....         | 118 | Orphnephila.....    | 365 |
| Nacerdes .....       | 239 | Odontes .....         | 189 | Orsillacus .....    | 422 |
| Nadata .....         | 298 | Odontomerus .....     | 32  | Orsillus .....      | 422 |
| Nannophysa .....     | 460 | Odontomyia .....      | 371 | Orsodachna .....    | 214 |
| Naso.....            | 438 | Odontonyx.....        | 156 | Orthaltica.....     | 225 |
| Nausibius .....      | 140 | Odontota .....        | 228 | Orthexia.....       | 452 |
| Nebria.....          | 74  | Odynerus .....        | 59  | Orthodes .....      | 317 |
| Necrobia .....       | 180 | Ebalus .....          | 419 | Orthoperus .....    | 132 |
| Necrophorus .....    | 110 | Ecanthus .....        | 408 | Orthopleura .....   | 180 |
| Neides .....         | 421 | Ecophora.....         | 357 | Orthosia.....       | 317 |
| Nematocampa .....    | 333 | Ecotheca.....         | 396 | Orthosoma.....      | 199 |
| Nematus .....        | 9   | Edancala .....        | 423 | Oryssus .....       | 15  |
| Nemobius.....        | 408 | Edemasia .....        | 299 | Oscinis .....       | 403 |
| Nemopoda .....       | 400 | Edionychis .....      | 223 | Osmia.....          | 65  |
| Nemoraea.....        | 391 | Eme .....             | 200 | Osmoderma .....     | 198 |
| Nemoria.....         | 334 | Enectra .....         | 349 | Otidocephalus ..... | 253 |
| Nemosoma .....       | 153 | Estodes .....         | 164 | Otiocerus .....     | 439 |
| Nemotelus .....      | 371 | Estrus .....          | 390 | Otiorynchus .....   | 248 |
| Nemoura.....         | 454 | Olfersia .....        | 404 | Oxacis .....        | 239 |
| Neoascia .....       | 285 | Olibrus .....         | 131 | Oxybelus .....      | 68  |
| Neoclytus .....      | 204 | Oligia .....          | 312 | Oxycers .....       | 371 |
| Neoglyaphyoptera.... | 362 | Oligomerus .....      | 181 | Oxycnemus .....     | 151 |
| Neonympha .....      | 272 | Oligostigma .....     | 343 | Oxypoda .....       | 116 |
| Neottiglossa .....   | 419 | Olisthopus .....      | 86  | Oxyporus .....      | 127 |
| Nepa .....           | 435 | Olophrum.....         | 129 | Oxyptilus .....     | 359 |
| Nephelodes .....     | 314 | Omalus .....          | 43  | Oxytelus .....      | 128 |
| Nephopteryx.....     | 345 | Omethus .....         | 175 | Ozognathus .....    | 181 |
| Nerice .....         | 290 | Ommatostola .....     | 318 |                     |     |
| Neurocolpus .....    | 425 | Omophron .....        | 71  | P.                  |     |
| Neuronia .....       | 463 | Ommatostola .....     | 318 | Pachybrachys .....  | 217 |
| Neuroterus .....     | 17  | Omosita .....         | 151 | Pachylobius .....   | 251 |
| Nezara .....         | 420 | Oncerotrachelus ..... | 432 | Pachyprotasis ..... | 13  |
| Nicagus .....        | 188 | Oncideres .....       | 211 | Pachyphylla .....   | 448 |
| Nicocles .....       | 375 | Oncodes .....         | 379 | Pachyrhina .....    | 369 |
| Nisoniades .....     | 280 | Oncognathus .....     | 428 | Pachyscelus .....   | 171 |
| Nitidula .....       | 150 | Oncometopia .....     | 444 | Packardia .....     | 296 |
| Nola .....           | 291 | Oncopeltus .....      | 424 | Pæderus .....       | 125 |
| Nolophana .....      | 319 | Oncotylus .....       | 428 | Pædisca .....       | 351 |
| Nomada .....         | 63  | Onthophagus .....     | 187 | Pagasa .....        | 431 |
| Nomius .....         | 76  | Onychobaris .....     | 262 | Palaminus .....     | 125 |
| Nomophila .....      | 342 | Oodes .....           | 93  | Palingenia .....    | 454 |
| Nortonia .....       | 59  | Opatriinus .....      | 232 | Pallodes .....      | 152 |
| Nosodendron.....     | 154 | Operophtera .....     | 339 | Palloptera .....    | 399 |
| Notidobia .....      | 463 | Opheltes .....        | 26  | Palthis .....       | 330 |
| Notiophilus .....    | 73  | Ophiderma .....       | 442 | Pamer .....         | 423 |
| Notiphila.....       | 401 | Ophion .....          | 25  | Pamerocoris .....   | 427 |
| Notodonts .....      | 299 | Ophyra .....          | 394 | Pamphila .....      | 281 |
| Notonecta .....      | 435 | Opomala .....         | 411 | Panagesus .....     | 76  |
| Nototrichys .....    | 25  | Opomyza .....         | 400 | Pandeletejus .....  | 248 |
| Notoxus.....         | 242 | Opsebius .....        | 379 | Pandemicia .....    | 348 |
| Notosus .....        | 43  | Opacicetus .....      | 432 | Pangaeus .....      | 417 |
| Nyctobates .....     | 230 | Orchelimum .....      | 410 | Pangonia .....      | 371 |
| Nymphælla.....       | 343 | Orcheania .....       | 238 | Pangrapta .....     | 329 |
| Nysius.....          | 422 | Orchestes .....       | 205 | Panicus .....       | 26  |
| Nysson.....          | 55  | Orectoderus .....     | 428 |                     |     |

## INDEX OF GENERA.

|                     |     |                      |     |                      |     |
|---------------------|-----|----------------------|-----|----------------------|-----|
| Panopoda .....      | 328 | Pezomachus.....      | 24  | Phymatocera.....     | 11  |
| Panorpa .....       | 463 | Pezotettix .....     | 412 | Phymatodes .....     | 200 |
| Panscopus.....      | 248 | Phæcasiphora.....    | 351 | Phymophora .....     | 136 |
| Pantographa .....   | 342 | Phædromus .....      | 223 | Phyrdenus.....       | 258 |
| Paonias .....       | 287 | Phæogenes.....       | 23  | Physatochila.....    | 429 |
| Papilio .....       | 277 | Phalacrus .....      | 131 | Physocnemum .....    | 200 |
| Parabolocratus..... | 445 | Phalænophana.....    | 330 | Phytalus.....        | 194 |
| Paragus .....       | 383 | Phaleria.....        | 233 | Phytocoris.....      | 425 |
| Paralimna .....     | 401 | Phanæus .....        | 187 | Phytodietus.....     | 32  |
| Parallelia .....    | 327 | Phanerotoma .....    | 34  | Phyon .....          | 202 |
| Parandra .....      | 198 | Phasgonophora.....   | 38  | Phytonomus .....     | 250 |
| Paraphia.....       | 338 | Phasiane .....       | 336 | Phyzelis .....       | 248 |
| Parasa .....        | 295 | Pheidole .....       | 47  | Piazorhinus .....    | 256 |
| Paratenetus .....   | 233 | Phellopis .....      | 230 | Piazurus.....        | 259 |
| Paria .....         | 219 | Phenolia .....       | 151 | Pieris .....         | 279 |
| Paromalus .....     | 147 | Phœcyma.....         | 328 | Piesma .....         | 429 |
| Paropholis .....    | 444 | Phœcisia .....       | 299 | Piezocorynus .....   | 270 |
| Parorgyia .....     | 295 | Phibalaapteryx ..... | 339 | Pilophorus .....     | 427 |
| Paroxya .....       | 412 | Phigalia .....       | 338 | Pimpla .....         | 30  |
| Parthenes .....     | 327 | Philænus.....        | 443 | Pinacodera .....     | 90  |
| Parydra .....       | 401 | Philampelus .....    | 285 | Piophilà .....       | 400 |
| Pasmimachus .....   | 74  | Philanthus .....     | 65  | Pipiza .....         | 383 |
| Passaloecus .....   | 57  | Phileurus .....      | 197 | Pipunculus .....     | 389 |
| Passalus .....      | 186 | Philhydrus .....     | 108 | Pissodes .....       | 251 |
| Patrobus .....      | 79  | Philonthus .....     | 118 | Pityobius .....      | 164 |
| Pediopesis .....    | 445 | Philopotamus .....   | 464 | Pityophthorus .....  | 266 |
| Pelastoneurus ..... | 381 | Philothermus .....   | 140 | Plagioderà .....     | 221 |
| Pelecinus .....     | 42  | Philygria .....      | 401 | Plagiognathus .....  | 428 |
| Pelidnota .....     | 195 | Phiprosopus .....    | 321 | Plagiomimicus .....  | 322 |
| Peliopelta .....    | 424 | Phlecocephagus ..... | 266 | Plagionotus .....    | 203 |
| Pelocoris .....     | 434 | Phileænus .....      | 269 | Plagodis .....       | 333 |
| Pelogonus .....     | 434 | Philectribus .....   | 268 | Planiceps .....      | 51  |
| Pelonomus .....     | 281 | Phoberia .....       | 327 | Plateros .....       | 173 |
| Pelopœas .....      | 51  | Phobetron .....      | 286 | Platycerus .....     | 185 |
| Pempfigus .....     | 451 | Phœnonotum .....     | 110 | Platychirus .....    | 384 |
| Pemphredon .....    | 57  | Pholisora .....      | 280 | Platycotis .....     | 440 |
| Pentaria .....      | 240 | Phora .....          | 404 | Platydema .....      | 234 |
| Penthe .....        | 237 | Phorodon .....       | 449 | Platygaster .....    | 42  |
| Penthelispa .....   | 139 | Phortica .....       | 402 | Platylabus .....     | 23  |
| Penthimia .....     | 444 | Photinus .....       | 174 | Platymetopius .....  | 445 |
| Penthina .....      | 351 | Photuris .....       | 174 | Platynota .....      | 350 |
| Penthoptera .....   | 368 | Phoxopteris .....    | 353 | Platynus .....       | 83  |
| Pentilia .....      | 134 | Phragmatobia .....   | 293 | Platypeza .....      | 389 |
| Peoria .....        | 345 | Phthinia .....       | 361 | Platypteryx .....    | 301 |
| Pepsis .....        | 51  | Phthiria .....       | 378 | Platyptilus .....    | 359 |
| Perdita .....       | 63  | Phyciodes .....      | 274 | Platysenta .....     | 316 |
| Peribalus .....     | 420 | Phygadeun .....      | 23  | Platystethus .....   | 128 |
| Periclistus .....   | 17  | Phyletus .....       | 234 | Platythemis .....    | 459 |
| Perigea .....       | 312 | Phyllaphis .....     | 450 | Platyura .....       | 361 |
| Perilampus .....    | 38  | Phyllobænus .....    | 180 | Plea .....           | 436 |
| Perillus .....      | 417 | Phyllobrotica .....  | 222 | Plecia .....         | 363 |
| Periplaneta .....   | 406 | Phyllocnistis .....  | 359 | Plegaderus .....     | 148 |
| Perithemis .....    | 480 | Phyllocopta .....    | 221 | Plemyria .....       | 340 |
| Peritrechus .....   | 423 | Phyllocladus .....   | 406 | Pleonectyptera ..... | 328 |
| Perla .....         | 454 | Phylloomyza .....    | 404 | Plesiastina .....    | 361 |
| Perophora .....     | 297 | Phylloecelis .....   | 438 | Plocetes .....       | 256 |
| Perothopæ .....     | 188 | Phyllotreta .....    | 227 | Plochionus .....     | 89  |
| Petalium .....      | 182 | Phyllotrox .....     | 253 | Plodia .....         | 345 |
| Petalura .....      | 457 | Phylloxera .....     | 451 | Plusia .....         | 321 |
| Petrophora .....    | 339 | Phymata .....        | 430 | Plusiodonta .....    | 420 |

## INDEX OF GENERA.

483

|                            |     |                              |     |                                |
|----------------------------|-----|------------------------------|-----|--------------------------------|
| <i>Plutella</i> .....      | 355 | <i>Pseudanophora</i> .....   | 354 | <b>R.</b>                      |
| <i>Posphila</i> .....      | 328 | <i>Pseudanthocodia</i> ..... | 329 | <i>Ranatra</i> ..... 435       |
| <i>Pocadius</i> .....      | 151 | <i>Pseudobaeus</i> .....     | 177 | <i>Raphia</i> ..... 306        |
| <i>Podabrus</i> .....      | 175 | <i>Pseudobaris</i> .....     | 262 | <i>Raphidolabis</i> ..... 368  |
| <i>Podisus</i> .....       | 418 | <i>Pseudococcus</i> .....    | 451 | <i>Remigia</i> ..... 328       |
| <i>Podops</i> .....        | 418 | <i>Pseudolimacodes</i> ..... | 327 | <i>Renia</i> ..... 330         |
| <i>Podosesia</i> .....     | 289 | <i>Pseudothyatira</i> .....  | 305 | <i>Resthenia</i> ..... 425     |
| <i>Pæcilocapeus</i> .....  | 428 | <i>Psila</i> .....           | 397 | <i>Retinia</i> ..... 350       |
| <i>Pæcilonota</i> .....    | 187 | <i>Psilocephala</i> .....    | 378 | <i>Rhacognathus</i> ..... 418  |
| <i>Pæcilioptera</i> .....  | 438 | <i>Psilopa</i> .....         | 401 | <i>Rhagium</i> ..... 205       |
| <i>Pæciloscytus</i> .....  | 426 | <i>Psilopus</i> .....        | 382 | <i>Rhagovelia</i> ..... 433    |
| <i>Pogonoherus</i> .....   | 210 | <i>Psiolata</i> .....        | 384 | <i>Rhamphidia</i> ..... 366    |
| <i>Pogonomyrmex</i> .....  | 46  | <i>Psinidia</i> .....        | 414 | <i>Rhamphomyia</i> ..... 379   |
| <i>Pogonus</i> .....       | 79  | <i>Psocus</i> .....          | 453 | <i>Rhanis</i> ..... 136        |
| <i>Polistes</i> .....      | 60  | <i>Psorosa</i> .....         | 345 | <i>Rhantus</i> ..... 103       |
| <i>Pollenia</i> .....      | 393 | <i>Psyche</i> .....          | 297 | <i>Rhinacloa</i> ..... 428     |
| <i>Polyblastus</i> .....   | 28  | <i>Psychoda</i> .....        | 365 | <i>Rhingia</i> ..... 386       |
| <i>Polycentropus</i> ..... | 464 | <i>Psychomorpha</i> .....    | 290 | <i>Rhinomacer</i> ..... 246    |
| <i>Polyergus</i> .....     | 44  | <i>Pyalla</i> .....          | 448 | <i>Rhinoncus</i> ..... 261     |
| <i>Polypleta</i> .....     | 361 | <i>Pyalliodes</i> .....      | 227 | <i>Rhinopsis</i> ..... 53      |
| <i>Polyphylla</i> .....    | 194 | <i>Psyllobora</i> .....      | 134 | <i>Rhipidia</i> ..... 366      |
| <i>Polyphincta</i> .....   | 31  | <i>Ptenidium</i> .....       | 180 | <i>Rhipiphorus</i> ..... 245   |
| <i>Polystachotes</i> ..... | 461 | <i>Pterocolus</i> .....      | 247 | <i>Rhizophagus</i> ..... 152   |
| <i>Polystoma</i> .....     | 115 | <i>Pteromalus</i> .....      | 40  | <i>Rhodites</i> ..... 16       |
| <i>Pomphopœa</i> .....     | 245 | <i>Pteronarcys</i> .....     | 453 | <i>Rhodobaeus</i> ..... 264    |
| <i>Pompilus</i> .....      | 49  | <i>Pterophoras</i> .....     | 359 | <i>Rhodophora</i> ..... 322    |
| <i>Ponera</i> .....        | 46  | <i>Pterostichus</i> .....    | 79  | <i>Rhogas</i> ..... 33         |
| <i>Porphyrops</i> .....    | 382 | <i>Pterrablastes</i> .....   | 387 | <i>Rhopalophora</i> ..... 202  |
| <i>Potamanthus</i> .....   | 455 | <i>Ptilinus</i> .....        | 183 | <i>Rhopalosiphum</i> ..... 449 |
| <i>Praon</i> .....         | 37  | <i>Ptilium</i> .....         | 130 | <i>Rhopalum</i> ..... 57       |
| <i>Prasocuris</i> .....    | 220 | <i>Ptilocera</i> .....       | 392 | <i>Rhopobota</i> ..... 352     |
| <i>Prenolepis</i> .....    | 45  | <i>Ptilodactyla</i> .....    | 156 | <i>Rhoptobaris</i> ..... 261   |
| <i>Prionemis</i> .....     | 50  | <i>Ptinus</i> .....          | 181 | <i>Rhopus</i> ..... 39         |
| <i>Pronia</i> .....        | 301 | <i>Ptochiomera</i> .....     | 423 | <i>Rhynchites</i> ..... 246    |
| <i>Prionidus</i> .....     | 431 | <i>Ptomophagus</i> .....     | 112 | <i>Rhyncholus</i> ..... 266    |
| <i>Prionochaeta</i> .....  | 112 | <i>Ptoeima</i> .....         | 170 | <i>Rhypholophus</i> ..... 367  |
| <i>Prionomerus</i> .....   | 256 | <i>Ptycholoma</i> .....      | 348 | <i>Rhyphus</i> ..... 370       |
| <i>Prionenyx</i> .....     | 53  | <i>Ptychoptera</i> .....     | 369 | <i>Rhypobius</i> ..... 132     |
| <i>Prionoxystus</i> .....  | 304 | <i>Pubilia</i> .....         | 441 | <i>Rhyssa</i> ..... 29         |
| <i>Prionus</i> .....       | 199 | <i>Pulvinaria</i> .....      | 452 | <i>Rhyssematus</i> ..... 258   |
| <i>Priophorus</i> .....    | 8   | <i>Purpuricenus</i> .....    | 202 | <i>Rhyssenus</i> ..... 187     |
| <i>Pristiphora</i> .....   | 8   | <i>Pygolampis</i> .....      | 432 | <i>Rivellia</i> ..... 397      |
| <i>Proconia</i> .....      | 444 | <i>Pyractomena</i> .....     | 174 | <i>Rivula</i> ..... 330        |
| <i>Proctacanthus</i> ..... | 376 | <i>Pyrameis</i> .....        | 273 | <i>Romaleum</i> ..... 201      |
| <i>Prodenia</i> .....      | 313 | <i>Pyrellia</i> .....        | 393 |                                |
| <i>Promachus</i> .....     | 376 | <i>Pyrgota</i> .....         | 397 |                                |
| <i>Prometopia</i> .....    | 150 | <i>Pyrgus</i> .....          | 280 |                                |
| <i>Pronuba</i> .....       | 355 | <i>Pyrochros</i> .....       | 244 |                                |
| <i>Prosopis</i> .....      | 62  | <i>Pyromorpha</i> .....      | 291 |                                |
| <i>Protenor</i> .....      | 421 | <i>Pyrophæna</i> .....       | 384 |                                |
| <i>Proteopteryx</i> .....  | 352 | <i>Pyrophila</i> .....       | 316 |                                |
| <i>Protheca</i> .....      | 183 | <i>Pyropyga</i> .....        | 173 |                                |
| <i>Prothymia</i> .....     | 324 | <i>Pyrrharctia</i> .....     | 293 |                                |
| <i>Protoparce</i> .....    | 285 | <i>Pyrrhia</i> .....         | 312 |                                |
| <i>Psallus</i> .....       | 428 | <i>Pytho</i> .....           | 239 |                                |
| <i>Pselaphus</i> .....     | 113 |                              |     |                                |
| <i>Psen</i> .....          | 56  |                              |     |                                |
| <i>Pseenocerus</i> .....   | 207 |                              |     |                                |
| <i>Psephenus</i> .....     | 155 |                              |     |                                |
| <i>Pseudaglossa</i> .....  | 329 | <i>Quedius</i> .....         | 116 |                                |

**Q.**

|                         |     |
|-------------------------|-----|
| <i>Sacium</i> .....     | 131 |
| <i>Salda</i> .....      | 434 |
| <i>Salebria</i> .....   | 345 |
| <i>Saluda</i> .....     | 344 |
| <i>Samia</i> .....      | 302 |
| <i>Sandalus</i> .....   | 157 |
| <i>Sannina</i> .....    | 289 |
| <i>Saperda</i> .....    | 211 |
| <i>Saprinus</i> .....   | 147 |
| <i>Sapromyza</i> .....  | 399 |
| <i>Sarcophaga</i> ..... | 392 |
| <i>Sargus</i> .....     | 371 |

## INDEX OF GENERA.

|                      |     |                       |     |                                  |     |
|----------------------|-----|-----------------------|-----|----------------------------------|-----|
| Satyrus .....        | 271 | Silvanus.....         | 140 | Stethobaris .....                | 262 |
| Saucropus .....      | 382 | Sinea .....           | 431 | Sthenarope .....                 | 427 |
| Saxinis .....        | 215 | Sinoxylon.....        | 183 | Stichopogon .....                | 375 |
| Scaphidium .....     | 130 | Siobla.....           | 12  | Stictocephala ( <i>Dipt.</i> ).. | 397 |
| Scaphisoma .....     | 130 | Siparocera .....      | 341 | Stictocephala ( <i>Hemip.</i> )  | 441 |
| Scarites .....       | 74  | Siphonella .....      | 403 | Stigmus.....                     | 56  |
| Scatella.....        | 402 | Siphonophora .....    | 448 | Stilbus.....                     | 131 |
| Scatopha .....       | 395 | Sizyrosea .....       | 296 | Stilicua.....                    | 124 |
| Scatopse .....       | 363 | Sitodrepa .....       | 182 | Stilpnus.....                    | 23  |
| Scellus.....         | 382 | Sitones .....         | 249 | Stilpon .....                    | 380 |
| Scenopinus .....     | 379 | Sitotroga.....        | 356 | Stiphrosoma .....                | 428 |
| Scepeis.....         | 290 | Smerinthus.....       | 287 | Stizus.....                      | 54  |
| Schinia.....         | 322 | Smicra .....          | 37  | Stomoxys.....                    | 392 |
| Schiastocerca.....   | 413 | Smicronyx.....        | 252 | Strangalia.....                  | 206 |
| Schizocerus .....    | 7   | Smilia .....          | 441 | Strategus .....                  | 197 |
| Schizogenius .....   | 75  | Smodicum.....         | 189 | Stratiomyia .....                | 371 |
| Schizoneura .....    | 450 | Solenopeis.....       | 47  | Strigoderma .....                | 195 |
| Schenobius.....      | 347 | Sorronia.....         | 151 | Strobisia .....                  | 357 |
| Sciara .....         | 362 | Spalangia .....       | 40  | Strongylium .....                | 235 |
| Sciomyza.....        | 396 | Spargoloma .....      | 329 | Strongylogaster .....            | 13  |
| Sciophilida.....     | 361 | Sparnopolius .....    | 378 | Strophisoma .....                | 251 |
| Scirtes .....        | 157 | Spharagemon .....     | 414 | Stylogaster .....                | 389 |
| Scirtetica .....     | 415 | Sphaerophthalma ..... | 48  | Subula.....                      | 370 |
| Sclerochroa.....     | 41  | Sphaeropyx .....      | 34  | Sunius .....                     | 125 |
| Scolecocampa .....   | 315 | Sphecius .....        | 54  | Symplocta .....                  | 367 |
| Scolia .....         | 49  | Sphecodes .....       | 62  | Sympycnus .....                  | 382 |
| Scoliopteryx .....   | 318 | Sphecomyia .....      | 388 | Synarthrus .....                 | 381 |
| Scolope .....        | 439 | Sphegina .....        | 385 | Synchita .....                   | 139 |
| Scolytus.....        | 268 | Sphenophorus .....    | 264 | Synohlora .....                  | 334 |
| Scoparia .....       | 341 | Sphenostethus .....   | 199 | Synchroa .....                   | 237 |
| Scopelosoma .....    | 318 | Sphecodes .....       | 52  | Syneches .....                   | 379 |
| Scopolia .....       | 391 | Sphindus .....        | 185 | Syneda .....                     | 324 |
| Sootobates .....     | 231 | Sphingicampa .....    | 303 | Synergos .....                   | 18  |
| Scriptia .....       | 238 | Sphinx .....          | 288 | Syneta .....                     | 214 |
| Scudderia .....      | 410 | Sphyraecephala .....  | 400 | Syntemna .....                   | 361 |
| Scydmaenus .....     | 112 | Spilogaster .....     | 394 | Syrbula .....                    | 411 |
| Scymnus .....        | 185 | Spilomena .....       | 56  | Syritta .....                    | 388 |
| Scyphella .....      | 400 | Spilomyia .....       | 388 | Syrphus .....                    | 384 |
| Seirodonta .....     | 289 | Spilosoma .....       | 293 | Systema .....                    | 226 |
| Selandria .....      | 12  | Spongophora .....     | 406 | Systropus .....                  | 378 |
| Selenis .....        | 332 | Spragueia .....       | 324 |                                  | T.  |
| Selenocephalus ..... | 445 | Stagmomantis .....    | 407 | Tabanus .....                    | 372 |
| Selenophorina .....  | 96  | Staphylinus .....     | 117 | Tabuda .....                     | 379 |
| Semasia .....        | 352 | Statira .....         | 236 | Tachinus .....                   | 125 |
| Semiotellus .....    | 40  | Stegana .....         | 402 | Tachydromia .....                | 380 |
| Semiothisa .....     | 336 | Stegania .....        | 335 | Tachygonus .....                 | 260 |
| Senogaster .....     | 388 | Steganoptyla .....    | 352 | Tachypesa .....                  | 380 |
| Seoptera .....       | 398 | Stelidota .....       | 150 | Tachyporus .....                 | 126 |
| Sepais .....         | 400 | Stenamma .....        | 47  | Tachys .....                     | 78  |
| Serica .....         | 191 | Stenelmis .....       | 155 | Tachytess .....                  | 54  |
| Sericocera .....     | 382 | Stenispa .....        | 228 | Tachyusa .....                   | 115 |
| Sericomyia .....     | 386 | Stenobothrus .....    | 412 | Tæniocampa .....                 | 317 |
| Sericosomus .....    | 164 | Stenolophus .....     | 97  | Tæniopteryx .....                | 454 |
| Serricoris .....     | 351 | Stenoscelis .....     | 266 | Tanymecus .....                  | 248 |
| Sesia .....          | 289 | Stenosphenus .....    | 203 | Tanypterus .....                 | 365 |
| Setodes .....        | 463 | Stenotarsus .....     | 137 | Tanysphyrus .....                | 253 |
| Sialis .....         | 460 | Stenus .....          | 122 | Taphrocerus .....                | 171 |
| Sicya .....          | 333 | Stephania .....       | 433 | Tapinoma .....                   | 45  |
| Sigalphus .....      | 34  | Stephostethus .....   | 153 |                                  |     |
| Silpha .....         | 111 | Steitheophyema .....  | 411 |                                  |     |

## INDEX OF GENERA.

485

|                      |     |                      |     |                      |     |
|----------------------|-----|----------------------|-----|----------------------|-----|
| Tarache.....         | 323 | Thyris .....         | 289 | Trognus.....         | 23  |
| Taracticus.....      | 375 | Thysanoecnemis ..... | 256 | Tropidères .....     | 270 |
| Taxonus.....         | 13  | Tibiceus .....       | 437 | Tropidias.....       | 387 |
| Telamona .....       | 442 | Tinea.....           | 354 | Tropidosteptes ..... | 426 |
| Telea .....          | 302 | Tingis.....          | 430 | Trox .....           | 190 |
| Telenomus .....      | 42  | Tiphia .....         | 49  | Truxalis .....       | 411 |
| Teleonemia .....     | 430 | Tipula .....         | 369 | Trypetæ .....        | 398 |
| Telephanus .....     | 142 | Tischeria .....      | 358 | Trypherus .....      | 177 |
| Telephorus .....     | 176 | Tmetocera .....      | 352 | Tryphon .....        | 28  |
| Telesilla .....      | 321 | Tolmerus .....       | 376 | Trypopitys .....     | 182 |
| Teimatophilus .....  | 142 | Tolype .....         | 304 | Trypoxyton .....     | 57  |
| Temnostoma .....     | 388 | Tomarus .....        | 142 | Tychius.....         | 256 |
| Tenebrio .....       | 231 | Tomicus .....        | 268 | Tyloderma .....      | 258 |
| Tenebrioides .....   | 153 | Tomoxia .....        | 240 | Tylonotus .....      | 201 |
| Tenthredo .....      | 13  | Tornos .....         | 337 | Tymnes.....          | 219 |
| Tenthredopsis .....  | 14  | Tortrix .....        | 349 | Typhlocyba .....     | 447 |
| Tephronota .....     | 397 | Torymus .....        | 39  | Typhosa .....        | 143 |
| Tephrosia .....      | 338 | Toxares .....        | 37  | Tyrus .....          | 113 |
| Teras .....          | 347 | Toxoneura .....      | 36  | Tytthonyx.....       | 174 |
| Terias .....         | 279 | Toxophora .....      | 378 |                      |     |
| Termes .....         | 453 | Toxorhina .....      | 366 |                      |     |
| Tetanocera .....     | 396 | Toxotus .....        | 206 |                      |     |
| Tetracis .....       | 331 | Tragidion .....      | 202 |                      |     |
| Tetragonoderus ..... | 87  | Tragosoma .....      | 199 |                      |     |
| Tetramorium .....    | 47  | Trama .....          | 328 |                      |     |
| Tetraopes .....      | 213 | Tramea .....         | 458 |                      |     |
| Tetrops .....        | 213 | Trapezonotus .....   | 423 |                      |     |
| Tetratoma .....      | 237 | Tremex .....         | 16  |                      |     |
| Tettigia .....       | 437 | Triachus .....       | 218 |                      |     |
| Tettigidea .....     | 415 | Tribolium .....      | 232 |                      |     |
| Tettigonia .....     | 445 | Trichiosoma .....    | 7   |                      |     |
| Tettix .....         | 415 | Trichius .....       | 198 |                      |     |
| Teuchocnemis .....   | 387 | Trichocera .....     | 368 |                      |     |
| Teucholabis .....    | 366 | Trichodes .....      | 178 |                      |     |
| Thalessa .....       | 30  | Trichodesma .....    | 182 |                      |     |
| Thalpocharis .....   | 323 | Trichogramma .....   | 41  |                      |     |
| Thamnonoma .....     | 336 | Tricholita .....     | 314 |                      |     |
| Thanasimus .....     | 179 | Trichonta .....      | 362 |                      |     |
| Thaneroclerus .....  | 179 | Trichopepla .....    | 420 |                      |     |
| Tharops .....        | 158 | Trichopoda .....     | 390 |                      |     |
| Thaumastopus .....   | 424 | Trichopteryx .....   | 130 |                      |     |
| Thecla .....         | 275 | Trichosia .....      | 363 |                      |     |
| Thelicteria .....    | 341 | Tridactylus .....    | 407 |                      |     |
| Thelia .....         | 441 | Trigoma .....        | 368 |                      |     |
| Themus .....         | 8   | Trigonophora .....   | 313 |                      |     |
| Thereva .....        | 378 | Trigonotylus .....   | 425 |                      |     |
| Therina .....        | 333 | Trimerotropis .....  | 414 |                      |     |
| Therioplectes .....  | 372 | Trimium .....        | 114 | Xanthochroa .....    | 239 |
| Thermenectes .....   | 104 | Triodonts .....      | 387 | Xanthogramma .....   | 385 |
| Theronia .....       | 30  | Trioxys .....        | 37  | Xantholinus .....    | 121 |
| Thersilochus .....   | 27  | Trirhabda .....      | 222 | Xanthonia .....      | 218 |
| Throscus .....       | 166 | Tritoma .....        | 138 | Xanthoptera .....    | 324 |
| Thyanta .....        | 420 | Triphleps .....      | 429 | Xenoglossa .....     | 67  |
| Thyatira .....       | 305 | Tripteronotata ..... | 373 | Xenos .....          | 245 |
| Thymalus .....       | 154 | Tritylida .....      | 222 | Xerophlœa .....      | 443 |
| Thyreodon .....      | 25  | Tritoma .....        | 138 | Xiphidiinn .....     | 411 |
| Thyreontus .....     | 411 | Trochilium .....     | 288 | Xiphydria .....      | 15  |
| Thyreopus .....      | 58  | Trogoderma .....     | 144 | Xyela .....          | 15  |
| Thyreus .....        | 284 | Trogophloeus .....   | 129 | Xyleborus .....      | 267 |
| Thyridopteryx .....  | 297 | Trogosita .....      | 153 | Xyletinus .....      | 132 |

## INDEX OF GENERA.

|                  |     |                 |                    |     |
|------------------|-----|-----------------|--------------------|-----|
| Xyliña .....     | 319 | Y.              | Zanclognatha ..... | 330 |
| Xylocopa .....   | 67  | Ypsia.....      | Zaræa .....        | 7   |
| Xylonomus.....   | 32  | Ypsolophus..... | Zethus .....       | 59  |
| Xylophagus ..... | 370 |                 | Zeugophora .....   | 214 |
| Xylopinus.....   | 231 |                 | Zeuzera .....      | 304 |
| Xyloryctes.....  | 196 | Z.              | Zicrona .....      | 418 |
| Xyloterus .....  | 287 |                 | Zophodia .....     | 345 |
| Xylota.....      | 387 | Zaitha .....    | Zygobaria .....    | 263 |
| Xylotrechus..... | 203 | Zale .....      | Zygomyia .....     | 362 |