

List of North American Eupterotidae, Ptilodontae, Thyatiridae, Apatelidae and Agrotidae.

By
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Preface.

The family name Agrotidae is proposed instead of the usual term Noctuidae, since the generic title *Noctua* is preoccupied. The subfamilies Catocalinae and Deltoidinae are not given. No thorough rearrangement has been possible from want of material, above all in the absence of a knowledge of the earlier stages. The present List aims to give the proper application of the oldest generic names and to fix the exact types. It also corrects Mr. J. B. Smith's Catalogue of 1893 in detail and rejects the incorrect names „*Feltia subgothica*“, and „*Mamestra cristifera*“ proposed by this writer. The name „*Feltia*“ was improperly described and is in any event a synonym, while the species itself is not identical with the European *Agrotis subgothica* of Haworth; our species should be known as *Agrotis (Agronomia) jaculifera* Guenée. Mr. Smith's compilation chiefly differs from my earlier works in the restitution of additional names irrecognisably founded by Mr. Walker, based on a comparison of „types“ in the collection of the British Museum after the material had been rearranged by Mr. Butler. I have shown, Can. Ent. XXVI, 143, the absolute proof, that the specimen originally described by Walker as „*Acronycta cristifera*“ is not the specimen now shown as Walker's type. Not only does Walker's text positively contradict the reference, but my notes, written while the original specimen was in place, cover Walker's text as far as they go. The specimen now shown as Walker's „type“, is, on the other hand, to a certainty, the „type“ of Mr. Walker's „*Mamestra brassicae*“, a species not occurring in North America, but formerly taken into our lists on the strength of this erroneous identification of our *Mamestra lubens* with the European form, to which it bears a casual resemblance. Since a considerable number of Walker's „types“ had been originally examined by me and his names so far restored, my references having been generally confirmed by Mr. Smith,

I have here adopted as correct almost all the fresh references. For what is needed is agreement and a clear synonymy, although the application of any of Mr. Walker's names to our species is very rarely warranted by the description published. Where the text, however, distinctly contradicts the "types" now exhibited, the latter should be rejected as spurious, since a specific title is founded in literature, not, as Mr. Smith would have us believe, in a labelled specimen. There is room for error occasioned by the shifting of the original material by Mr. Butler; consult also Mr. Tutt's observations, Can. Ent. XXVI, 228. When I commenced work in 1862, not a dozen species of Owlet Moths were named in any collection, public or private, in North America. Twenty years later, in 1882, I issued a list of over 1400 names, most of which had been identified by me, many figured and nearly half originally described. For the present arrangement of the Ptilodontidae I am indebted to the able work of Neumoegen and Dyar. I add this note to my finished manuscript February 7th, 1895, expressing at the same time my thanks to Mr. D. Alfken of the Bremen Museum for his kind assistance. I am indebted to the kindness of Mr. Harrison G. Dyar for notes on two species of which my original descriptions were lost. For the superfamily Noctuina of Dyar I propose the term Agrotina.

Fam. Eupterotidae.

= *Eupterotae* Hübn. 1818.

Subfam. *Apatelodinae* N. & D. 1894.

Gen. *Apateodes* Pack. 1864.

Type: *A torrefacta*.

1. *torrefacta* Abb. & Sm. Canada to Gulf States.
var. *floridana* Hy. Ed.
2. *angelica* Grt. Canada to Gulf States.
hyalinopuncta Pack.
var. *indistincta* Hy. Ed.

Fam. Ptilodontidae.

= *Ptilodontes* Hübn. 1806.

= *Notodontidae* Auct.

Family type: *Ptilodon camelina* L.

Subfam. *Ptilodontinae*.

= *Notodontinae* N. & D. 1894.

Gen. *Notodonta* Ochs. 1810.

= *Peridea* Steph. 1828.

1. *elegans* Streck. Canada; Northern States; Rocky Mts.
var. *grisea* Streck.
notaria Hy. Ed.
2. *strigula* Grt. Atlantic States to Rocky Mts.; California.
var. *manitou* N. & D.
var. *pacifica* Behr.

3. *georgica* H.-Sch. Atlantic States to Rocky Mts.
var. *tortuosa* Tepp.
Gen. **Nadata** Walk 1855.
= || Alastor Bd. 1869.
Type: *N. gibbosa*.
4. *gibbosa* Abb. & Sm. Canada to Gulf; Rocky Mts.; California.
var. *doubledayi* Pack.
var. *rubripennis* N. & D.
var. *oregonensis* Butl.
var. *behrensi* Hy. Ed.
Gen. **Hyparpax** Hübn. 1824.
Type: *H. aurora*.
5. *aurora* Abb. & Sm. Middle States to Gulf.
rosea Walk. (Sangata).
venusta Walk. (Dryocampa).
6. *venus* Neum. Colorado.
7. *perophoroides* Streck. (Cosmia.) Florida.
aurostriata Graef.
var. *tyria* Sloss.
an ♀ *aurora* A. & S.?
Gen. **Symmerista** Hübn. 1818.
= Edema Walk. 1855.
8. *albifrons* Abb. & Sm. Canada, southward.
9. *albicosta* Hübn. Canada, southward.
10. *packardii* Morr. Texas.
Gen. **Nerice** Walk. 1855.
Type: *N. bidentata*.
11. *bidentata* Walk. Eastern to Middle States.
Gen. **Cerura** Schrank 1802.
= Andria Hübn. 1806.
= Harpyia Ochs. 1810.
= Pania Dalm. 1823.
= Dicranura Bd. 1829.
12. *multiscripta* Riley. Middle and Western States.
13. *scitiscripta* Walk. Western and Southern States.
candida Lintn.
14. *occidentalis* Lintn. Canada, southward.
15. *scolopendrina* Bd. Canada, southward.
aquilonaris Lintn.
var. *albicoma* Streck.
16. *modesta* Hudson. Eastern and Middle States.
17. *borealis* Guerin. Canada, southward.
18. *cinerea* Walk. Canada to California.
var. *cinereoides* Dyar.
var. *placida* Dyar.
var. *nivea* Neum.
paradoxa Dyar.
meridionalis Dyar.

Gen. **Melalopha** Hübn. 1806.Type: *M. curtula*.= *Ichthyura* Hübn. 1818.= *Closteria* Steph. 1828.

19. *albosigma* Fitch. Canada; Atlantic States to Rocky Mts.
var. *specifica* Dyar.

20. *alethe* Neum. & Dyar. California.

21. *brucei* Hy. Ed. Northern Atlantic States to Rocky Mts.

22. *multnoma* Dyar. Pacific Northwest.

23. *apicalis* Walk. Canada to California.

vau Fitch.

indentata Pack.

ornata G. & R.

incarcerata Bdv.

var. *astoriae* Hy. Ed.var. *bifiria* Hy. Ed.

24. *inclusa* Hübn. Canada to Florida.

americana Harris.

var. inversa Pack.

palla French.

var. *jocosa* Hy. Ed.

25. *strigosa* Grote. Eastern States.

26. *luculenta* Hy. Ed. Western States.

27. *inornata* Neum. Southwestern States to Mexico.

Gen. **Gnophisia** Bdv. 1829.Type: *G. crenata*.

28. *septentrionalis* Walk. Canada to Pacific Northwest.

clandestina Walk.

trilineata Pack.

var. *ridenda* Hy. Ed.var. *quinquelineata* Dyar.

29. *formosa* Hy. Ed. Middle States to Mexico.

30. *albofascia* Hy. Ed. Utah to Southern California.

wrightii Hy. Ed.

var. *rupta* Hy. Ed.Gen. **Eumelia** Neum. 1893.Type: *E. danbyi*.

31. *lintneri* Grote. Northern States.

32. *severa* Hy. Ed. Eastern States to California.

var. *danbyi* Neum.var. *avimacula* Huds.var. *slossonii* Pack.Gen. **Pheosia** Hübn. 1818.Type: *P. dictaea*.= *Leiocampa* Steph. 1828.

33. *dimidiata* H.-S. Canada south and west to California.

rimosa Pack.

californica Stretch.

34. *portlandia* Hy. Ed. Pacific Northwest.
descherei Neum.
 Gen. ***Chatfieldia*** Grt. 1895.
 Type: C. basitriens.
35. *simplaria* Graef. Northern States.
 36. *basitriens* Walk. Northern States.
 Gen. ***Lophodonta*** Pack. 1864.
 Type; L. ferruginea.
37. *ferruginea* Pack. Northern States
 38. *angulosa* Abb. & Sm. Middle and Southern States.
 Gen. ***Ptilodon*** Hübn. 1806.
 Type: P. camelina.
 = *Lophopteryx* Steph. 1828.
39. *capucina* Linn. Europe; Atlantic States.
camelina L.
americana Harvey.
 Gen. ***Datana*** Walk. 1855.
 Type: D. ministra.
40. *angusii* G. & R. Atlantic States westward.
 41. *ministra* Drury. Atlantic States westward.
 42. *californica* Riley. California.
 43. *drexelii* Hy. Ed. Northern States.
 44. *major* G. & R. Middle and Southern States.
 45. *palmii* Beutn. Atlantic States westward.
 46. *floridana* Graef. Middle and Southern States.
 47. *modesta* Beutn. Florida.
 48. *perspicua* G. & R. Atlantic States west to Montana.
 49. *robusta* Streck. Texas.
 50. *integerrima* G. & R. Atlantic States westward.
 51. *contracta* Walk. Atlantic States westward.
 Gen. ***Eunystalea*** Grt. 1895.
 Type: E. *indiana*.
52. *indiana* Grote. Florida.
 Subfam. ***Heterocampinae*** N. & D. 1894.
 Gen. ***Iamassa*** Walk. 1855.
 Type: I. *lignicolor*.
 = *Xylinodes* Pack. 1864.
 = *Phya* Druce 1887.
53. *lignicolor* Walk. Atlantic States.
virgata Pack.
lignigera Walk.
54. *coloradensis* Hy. Ed. Colorado.
 Gen. ***Dasylophia*** Pack. 1864.
 Type: D. *anguina*.
55. *anguina* Abb. & Sm. Eastern States to Florida.
cucullifera H.-S.
punctata Walk.
cana Walk.
 var. *puntagorda* Sloss.

56. *thyatiroides* Walk. Canada; Northern States.
 interna Pack.
 tripartita Walk.
 signata Walk.
 Gen. **Schizura** Doubl. 1841.
 Type: *S. ipomoeae*.
 = *Oedemasia* Pack 1864.
 = *Coelodasys* Pack. 1864.
 = *Hatima* Walk. 1865.
57. *concinna* Abb. & Sm. Canada; Atlantic States to California.
 semirufescens Walk. (Edema.)
 salicis Hy. Ed. (Heterocampa.)
 riversii Behr. (Dryocampa.)
58. *nitida* Pack. Atlantic States.
 badia Pack. (Oedemasia.)
 significata Walk. (Heterocampa.)
59. *eximia* Grt. Northern States; Pacific Northwest.
 var. *perangulata* Hy. Ed. Colorado; Utah.
60. *leptinoides* Grt. Eastern and Middle States.
 mustelina Pack. (Cecrita.)
61. *unicornis* Abb. & Sm. Canada; Atlantic States to California.
 edmandsii Pack. (Coelodasys.)
 humilis Walk. (Edema.)
 conspecta Hy. Ed. (Heterocampa.)
62. *ipomoeae* Doubl. Atlantic States; Pacific Northwest.
 biguttatus Pack. (Coelodasys.)
 confusa Walk. (Drymonia.)
 ducens Walk. (Heterocampa.)
 corticea Walk. (Heterocampa.)
 compta Walk. (Heterocampa.)
 nigrosignata Walk. (Heterocampa.)
 var. *cinereofrons* Pack. (Coelodasys.)
 ustipennis Walk.
63. *telfer* Grt. Southern States.
 var. *praec.* ?
64. *apicalis* G. & R. Northern States.
 Gen. **Euhyparpax** Beutn. 1893.
 Type: *E. rosea*.
65. *rosea* Beutn. Colorado.
 Gen. **Heterocampa** Doubl. 1841.
 Type: *H. astarte*.
66. *astarte* Doubl. Florida.
 varia Walk.
 menas Harris. (*Stauropus*.)
67. *umbrata* Walk. Atlantic States.
 semiplaga Walk.
 pulverea G. & R. (Heterocampa.)
 athereo Harris. (*Stauropus*.)

68. *chapmani* Grt. Florida.
69. *lunata* Hy. Ed. Colorado to Mexico.
 plumosa Hy. Ed. (*Lophodonta.*)
 dardania Druce. (*Heterocampa.*)
70. *obliqua* Pack. Atlantic States.
 var. *trouvelotii* Pack.
 brunnea G. & R.
71. *subrotata* Harvey. Southern States.
 celtiphaga Harv.
72. *belfragei* Grt. Texas.
 Gen. **Lochmaeus** Doubl. 1841.
 Type: *L. manteo*.
 = *Tadana* Walk. 1855.
73. *manteo* Doubl. Atlantic States.
 cinerascens Walk. (*Tadana.*)
 subalbicans Grt. (*Heterocampa.*)
 Gen. **Cecrita** Walk. 1855.
 Type: *C. guttivitta*.
74. *guttivitta* Walk. Atlantic States.
 albiplaga Walk.
 mucorea H.-S. (*Drymonia.*)
 harrisii Pack. (*Coelodasys.*)
 indeterminata Walk. (*Drymonia.*)
75. *biundata* Walk. Atlantic States.
 olivatus Pack. (*Lochmaeus.*)
 viridescens Walk. (*Stauropus.*)
 mollis Walk. (*Heterocampa.*)
 Gen. **Seirodonta** G. & R. 1868.
 Type: *S. bilineata*.
76. *bilineata* Pack. Atlantic States.
 turbida Walk. (*Heterocampa.*)
 associata Walk. (*Edema.*)
 ulmi Harris. (*Notodonta.*)
 Gen. **Misogada** Walk. 1865.
 Type: *M. sobria*.
77. *cinerea* Pack. Atlantic States.
 unicolor Pack. (*Lochmaeus.*)
 marina Pack. (*Lochmaeus.*)
 sobria Walk. (*Misogada.*)
 Gen. **Litodonta** Harvey 1876.
 Type: *L. hydromeli*.
78. *hydromeli* Harvey. Texas.
 var. *fusca* Harvey.
 Gen. **Macrurocampa** Dyar 1893.
 Type: *M. marthesia*.
79. *marthesia* Cram. Atlantic States.
 tessella Pack. (*Lochmaeus.*)
 turbida Walk. (*Cerura.*)
 elongata G. & R. (*Heterocampa.*)

Gen. **Ellida** Grote 1876.

Type: *E. gelida*.

80. *caniplaga* Walk. *) Canada; Northern States.
transversata Walk. (Edema.)
gelida Grt. (Ellida.)

Fam. **Thyatiridae**.

Grote, Proc. Am. Phil. Soc., XXI, 1883.

Family type: *Thyatira batis* L.

= || *Cymatophorina* H.-S.

Gen. **Habrosyne** Hübn. 1818.

Type: *H. derasa*.

= *Gonophora* Bruand.

1. *scripta* Gosse. Canada; Atlantic States west to Colorado.
abrasa Gn.
2. *chatfieldii* Grt. Alaska; Pacific Coast.
derasa + Hy. Ed.

Gen. **Pseudothyatira** Grt. 1864.

Type: *P. cymatophoroides*.

3. *cymatophoroides* Gn. Canada; Atlantic States to New Mexico.
var. *expultrix* Grt.

Gen. **Euthyatira** Sm. 1891.

Type: *E. pudens*.

4. *pudens* Gn. Canada; Labrador; Atlantic States.
var. *anticostiensis* Grt.

Gen. **Persiscota** Grt. 1895.

Type: *P. lorata*.

5. *lorata* Grt. Washington.

6. *semicircularis* Grt. Washington.

7. *candida* Sm. „Florida“.

Gen. **Bombycia** Hübn. 1818.

Type: *B. or.*

= || *Cymatophora* Auct.

8. *improvisa* Hy. Ed. Washington.

9. *tearlei* Hy. Ed. „California“.

*) The species described by Hy. Edwards as *Stretchia plusiiformis*, I have originally referred to the Agrotid genus *Perigrapha*. In their synonymous revision of bombycine Moths, Neumoegen & Dyar credit Hy. Edwards, exclusive of varieties, with 33 species against 38 synonyms; Walker with 35 species against 54 synonyms; Packard with 34 species against 32 synonyms; Grote (incl. G. & R.) with 72 species against 29 synonyms. The Americans had a more ideal motive for their work, since, according to Smith, Walker received a shilling a piece for his descriptions, the Latin thrown in, but the synonyms paid for in specie as good species. For a list of the North American *Platypterygidae*, *Saturniidae*, *Hemileucidae*, *Citheroniidae*, *Cossidae* and *Hepialidae* consult also Grote, Proc. Am. Phil. Soc. Phil. 1874.

Fam. Apatelidae.

Family type: *Apatela aceris* L.

 = *Bombycoidae* Bd v.

 = *Aeronyctidae* Bd v.

 = *Apatelidae* Harris.

Gen. **Leptina** Gn. 1857.

Type: *L. dormitans*.

1. *ophthalmica* Gn. Eastern States southwardly.

2. *australis* Grt. Southern States.

3. *dormitans* Gn. Canada southwardly.
 var. *latebricola* Grt.

4. *doubledayi* Gn. Canada southwardly.

Gn. **Raphia** Hbn. 1818.

Type: *R. hybris*.

5. *abrupta* Grt. Canada to Texas; Colorado.

6. *frater* Grt. Canada to Texas; Colorado.

personata Walk. (*Saligena*)

 var. *coloradensis* Put. Cr.

pallula Hy. Ed.

Gen. **Demas** Steph. 1829.

Type: *D. coryli*.

7. *propinquilinea* Grt. Canada southwardly.

flavicornis Sm.

Gen. **Panthea** Hbn. 1818.

Type: *P. coenobita*.

 = *Audela* Walk. 1861.

 = *Platycerura* Pack. 1864.

8. *acronyctoides* Walk. Canada southwardly.

leucomelana Morr.

9. *furcilla* Pack. Canada southwardly.

10. *gigantea* French. Colorado; Texas.

11. *palata* Grt. Colorado; Arizona.

Gen. **Charadra** Walk. 1865.

Type: *C. contigua*.

12. *deridens* Gn. Canada to Texas.

circulifera Walk. (*Aeronycta*)

contigua Walk. (*Charadra*)

13. *dispulsa* Morr. Texas.

Gen. **Feralia** Grt. 1874.

Type: *F. jocosa*.

14. *jocosa* Gn. Canada southwardly.

15. *major* Sm. Eastern and Middle States.

Gen. **Arthrochlora** Grt. 1875.

Type: *A. februalis*.

16. *februalis* Grt. California.

Gen. **Momaphana** Grt. 1874.

Type: *M. comstocki*.

17. comstocki Grt. Canada southwardly.
Gen. **Diphthera** Hbn. 1806.
Type: *D. orion* (= *aprilina* + Hbn.).
18. fallax H.-S. Canada to Texas.
Gen. **Arsilonche** Led. 1857.
Type: *A. albovenosa*.
= *Ablepharon* Grt. 1873.
19. henrici Grt. Canada to California.
albovenosa + Morr.
var. *evanidum* Grt.
aberr. *fumosum* Morr.
an spec. europ.?
Gen. **Meronlonche** Grt. 1882.
Type: *M. spinea*.
20. *spinea* Grt. California.
21. *lupini* Grt. California.
Gen. **Apatela** Hb. 1806.*)
= *Acronycta* Auct.
Type: *N. aceris* L.
Subgen. *Triaena* Hübn. 1818.
Type: *A. psi*.
22. *occidentalis* G. & R. Can. to Southern States.
psi + Gn.
23. *morula* G. & R. Can. to Southern States.
ulmi Harr. Corr.
24. *lobeliae* Gn. Can. to Texas.
25. *hasta* Gn. Can. to Middle States.
26. *telum* Gn. „Am. Sept.“
27. *furcifera* Gn. Middle to Southern States.
28. *thoracica* Grt. Colorado; New Mexico.
29. *dentata* Grt. Can.; Eastern and Northern States.
30. *grisea* Wlk. Can. to Southern States.
pudorata Morr.
31. *tritona* Hbn. Canada to Fla.; west to Colorado.
32. *betulae* Riley. Middle States.

* I have shown that *Apatela* Hb. Tent. 1806, is the oldest generic title for any member of the present group, Buffalo Check List, 36, 1876. I also show that the term *Acronicta* must be credited to Ochsenheimer 4, 62, 1816, and that it is restricted by Hübner, Verz., 1816 (1818) to two European species of which I selected *leporina* as type, List Noct. N. Am. Bull. Buffalo Soc. 7, 1874. In various papers on the North American Dagger Moths (consult in particular Can. Ent. XVII, 94) I have given the various generic titles, with their types, to be employed in a breaking up of the group, for which the collective term *Apatela* must be used. There remains to be studied the application of generic titles recently proposed by Dr. Chapman in England.

33. *innotata* Guen. Can. to Middle States.
var. *graefii* Grt.
34. *falcata* Grt. Illinois.
35. *parallela* Grt. Colorado; Texas.
36. *albarufa* Grt. Can. to Southern States; New Mexico.
walkeri And.
37. *paupercula* Grt. Texas.
38. *viunula* Grt. Canada to Texas.
39. *quadrata* Grt. Kansas; Missouri.
40. *harveyana* Grt. Eastern and Middle States.
41. *radcliffei* Harvey. Eastern and Middle States.
Subgen. *Acronicta* Ochs. 1816.
Type: *A. leporina*.
42. *spinigera* Gn. „New York“.
43. *tota* Grt. Texas.
44. *felina* Grt. California.
45. *lepusculina* Gn. Hudson's Bay to Middle States; Mo.
populi Riley.
var. *sancta* Hy. Ed.
46. *vulpina* Grt. Eastern and Middle States.
47. *acericola* Gn. „Georgia“.
- aceris⁺₊ Ab. & Sm.
48. *hastulifera* Ab. & Sm. „Georgia“.
49. *americana* Harr. Can. to Southern States.
hastulifera⁺₊ Gn.
var. *obscura* Hy. Ed.
50. *dactylina* Grt. Can. south to Va., west to Colorado.
51. *insita* Wlk. Can. to Middle States.
Subgen. *Apatela* Hübn. 1806.
Type: *A. auricoma*.
52. *impressa* Wlk. Can. to Fla.; H. Bay; Colorado.
fasciata Wlk.
brumosa⁺₊ Morr.
- verrillii G. & R.
53. *distans* Grt. Canada.
54. *rubricoma* Gn. Can. to Southern States.
55. *luteicoma* G. & R. Can. to Middle States; Minn.; Oregon.
56. *subochrea* Grt. Can. to Middle States.
? *impleta* Wlk.
57. *perdita* Grt. California.
58. *afficta* Grt. Canada to Texas.
59. *noctivaga* Grt. Can. to So. States; New. Mexico; Oregon.
60. *brumosa* Gn.
longa Gn.
persuasa Harv. Southern States.
61. *superans* Gn. Can. to Middle States.

62. *connecta* Grt. Can. to Middle States.
Subgen. *Jocheaera* Hübn. 1818.
Type: *A. alni*.
63. *funeralis* G. & R. Eastern and Middle States.
americana⁺₊ Harr. larva (1869).
Subgen. *Lepitoreuma* Grt. 1873.
Type: *A. ovata*.
64. *ovata* Grt. New York to Texas.
65. *modica* Wlk.
var. *exilis* Grt.*)
66. *increta* Morr. Middle States; New Mexico.
67. *hamamelis* Gn. Can. to Texas.
var. *clarescens* Gn.
68. *haesitata* Grt. Canada to Texas.
69. *pruni* Harris. Can. to Southern States.
clarescens⁺₊ Grt. in coll.
70. *retardata* Wlk. Can. to Middle States.
dissecta G. & R.
Subgen. *Arctomyces* Hubn. 1818.
Type: *A. euphrasiae*.
71. *sperata* Grt. Eastern and Middle States, west to Colorado.
Subgen. *Mastiphanes* Grt. 1882.
Type: *A. xyliniformis*.
72. *edolata* Grt. Arizona; Colorado.
73. *extricata* Grt. Texas.
74. *pallidicoma* Grt. Can., southwardly; Kansas.
75. *xyliniformis* Gn. New York to Texas; Missouri.
76. *lithospila* Grt. Eastern and Middle States.
77. *salicis* Harris,**) (larva only) „Massachusetts“.

*) Butler says, Ent. Am. III., 36: „I am very doubtful about the identity of *exilis* and *modica*: it is possible they are distinct and, in any case, they represent two well marked types of one species“. Reason enough for Smith to make *exilis* a simple synonym of *modica*! The type of the latter escaped my notice in the B. Mus. coll. I believe the synonymy here adopted from Butler and Smith for *brumosa* Gn. to be quite doubtful.

**) American lepidopterists have come to no final identification of the two species of *Apatela* figured by Abbot. The figures of the moths seem too vague for positive identification, but those of the larvae should be positively recognizable. Harris, apparently from the larva, considers Abbot's *aceris* to be *americana*. Guenée, who does not know Harris, describes imagos of *americana* as Abbot's *hastulifera*. I have suggested that, since the figure of the larva of *aceris* resembles the larva of *americana*, and the moth of *hastulifera* rather resembles the moth of *americana*, Abbot's figures of the larvae may have been transposed. See Bull. B. S. N. S. II., 154. Smith's citations I do not quite understand, since Guenée's and Walker's *hastulifera* is *americana*; he makes the two distinct and gives habitats for both. Until Southern larvae are positively identified from Abbot's figures and the imagos reared from them, we shall have no certainty as to the relation of the Southern forms with each other and with Harris's *americana*. As to Walker's so-called descriptions of *Acronyctae*, all gray Noctuids

Gen. **Eulonche** Grt. *) 1873.Type: *E. oblinita*.

78. *oblinita* A. & S. Canada to Floida.
 79. *lanceolaria* Grt. Eastern States.
 80. *insolita* Grt. Middle States.

Fam. **Agrotidae**.Family type: *Agrotis segetum* L.= || *Noctuidae* Auct,
Trib. *Jaspidiini*.Gen. **Harrissimemna** Grt. 1873.Type: *H. sexguttata*.

1. *trisignata* Wlk. Canada to Texas.
sexguttata Harr. Corr.

Gen. **Cerma** Hb. 1818.Type: *C. cora*.

2. *cora* Hb. Canada to Georgia.
festa Gn.

3. *olivacea* Sm. Colorado; California.

Gen. **Polygrammate** Hb. 1818.Type: *P. hebraicum* Hb.

4. *hebraicum* Hb. Eastern States to Texas.

Gen. **Microcoelia** Gn.Type: *M. fragilis* Gn.

5. *fragilis* Gn. Canada, southwardly.
spectans Wlk.

6. *diphteroides* Gn. Canada, southwardly.
 var. *obliterata* Grt.

Gen. **Jaspidia** Hüb.**) 1806.*Bryophila* Tr. 1825; *Euthales* Hb. Verz. 1816—1818.Type: *J. spoliatricula*.

were as likely to be referred here by him as not. All cats were grey to him in the dark entresol of the British Museum where he did his work. So we find *Charadra deridens*, *Agrotis speciosa*, *Mamestra adjuncta*, *Xylomyges crucialis*, *Polia contacta* and *Polia (?) eristifera* among his species of *Acronycta!* According to Butler and Smith Walker had also dragged *Mamestra lubens* in the meshes of his *Acronycta* net, but here I have proven Butler and Smith to be in error; consult Can. Ent. XXVI, 141. Also in this connection Tutt, id. 226. Finally *interrupta* Gn., based on a figure, is to be totally rejected as it cannot ever be identified with certainty and beyond cavil. *Harrissimemna* probably belongs to the *Apitelidae*.

*) See Grt. Bull. B. S. N. S. I, 81. Whatever fate classifiers finally accord to the other divisions of the genus *Apatela* proposed by me, I believe the present group, characterized by the elongate and pointed wings and sunken head of the imago and which is without European representative, will be finally held of generic value.

**) The following is the generic synonymy:

1806. Hb. Tent.: *Spoliatricula (algae)* only species and therefore type.
 1816. Ochs. 4, 63: Adopts *Poecilia* Schr. for *glandifera* and eight other species including Hübner's type and cites Hübner's name as synonymous.

7. *lepidula* Grt. Can. southwardly, west to Colorado.
 8. *corticosa* Gn. „Am. Sept.“
 9. *viridata* Harvey. California.
 10. *teratophora* H.-S. Canada to Texas.
 inscripta Wlk.
 11. *nana* Hb. „Georgia“
 Gen. **Cyathissa** Grt. 1881.
 Type C. *percara*.
 12. *percara* Morr. Florida; Texas; Colorado.
 Gen. **Chytonix** Grt. 1874.
 Type: C. *iaspis*.
 13. *palliaticula* Gn. Canada, southwardly.
 iaspis Gn.
 14. *sensilis* Grt. Eastern and Middle States.
 Trib. *Agrotini*.
 Gen. **Agrotis** *) Hbn. 1806 (in sensu Led.).
 Type: A. *segetum*.
 = *Georyx* Hbn. 1818.
 Subgen. *Lampra* Hbn. 1818.
 Type: A. *fimbria*.
 = *Rhynchagrotis* Sm. 1890.

1874. Grote 6th Peab. Rep., 24, states, on Treitschke's authority, that *Poecilia* is preoccupied (Tr. 5, 1, 57) for a genus of fishes and adopts *Jaspidea* over the later *Bryophila* Tr., proposed in consequence.

The name „*Jaspidea*“ is afterwards misapplied by Boisduval to the European *celsia*, which latter is the sole species and therefore type of *Diacope* Hbn. Verz. 204. See Grote, Check List, II., 36, 1876.

*) The following is the bibliography of *Agrotis*:

1806. Hüb., Tent.: *segetum* (*segetis*) only species and therefore type.

1816. Ochs., 4, 66: *rectangula* and 42 other species, among them Hübner's type. The name is afterwards erroneously credited to Ochsenheimer or to Treitschke and even Boisduval.

1874. Grote, List Noct. 9: takes *segetum* as type and credits the name, as Ochsenheimer does, to Hübner.

In the Verzeichniss Hübner divides the species under a variety of generic titles, some of which are here used for the subgenera. I do not admit the generic value of Smith's divisions for the reason that the characters are too slight, the European species are not compared, while little attention is paid by this author to the generic terms already existing. I keep Lederer's classification as it is most important that our species should be compared with the European. I do not agree with all of Smith's arrangement, but, in recognition of his valuable work in the Revision, I retain generally his generic names and the sequence of the species, which latter is, in part, that indicated in my former Lists. In a paper on the genus *Agrotis* Can. Ent. XV., 51 et seq., 1883, I say: „The genus *Agrotis* should first be divided by the separation of the forms with non spinose fore tibiae, then the other characters here discussed should be used“. Smith says, Revision, p. 8: „Primarily the species divide into two series upon the armature of the anterior tibiae. In the first series the member is not at all spinose, in the second the member is spinose, the armature is variable.“ This is only a $\frac{1}{2}$ restatement of my original recommendation. As a matter of fact, throughout, Smith merely applies rigorously the structural characters pointed out by me long before,

15. *gilvipennis* Grt. Labr.; Anticosti; Eastern States to North. N. Y.
chardinyi⁺ Morr.
16. *rufipectus* Morr. Eastern and Middle States to Colorado.
 17. *brunneicollis* Grt. Can.; Eastern and Middle States to Colorado.
 18. *minimalis* Grt. Eastern States west to Colorado.
 19. *cupida* Grt. Canada; Atlantic States to New Mexico.
velata Wlk.
anehocelioides⁺ Sm.
- var. *brunneipennis* Grt.
 20. *placida* Grt. Canada; Atlantic States to New Mexico.
 21. *variata* Grt. Col.; Arizona; Nev.; California.
 varix Grt.
 var. *orbis* Grt.
 22. *alternata* Grt. Can. south to Va.; west to Colorado.
 23. *belfragei* Sm. Texas.
 24. *trigona* Sm. California; Colorado; Kansas.
enpidissima⁺ Sm.
25. *bimarginalis* Grt. New Mexico.
 26. *vittifrons* Grt. Colorado.
 27. *inelegans* Sm. California.
 28. *mirabilis* Grt. Col.; New Mexico; Arizona.
 29. *carissimall Harvey*. California.
 30. *observabilis* Grt. California.
 exsertistigma Morr. in part? coll. Tepper.
exsertistigma⁺ Sm.
31. *formalis* Grt. Oregon; California; Brit. Col.
 var. *faenla* Grt.
 var. *insularis* Grt.
 var. *emarginata* Grt.
32. *costata* Grt. California; Vancouver.
 binominalis Sm.
33. *laetula* Grt. Washington; Oregon; California.
 distraeta Sm.
34. *discoidalis* Grt. Nevada; Oregon.

and which I lacked time and material to ascertain in the case of each species. In this same paper I say: "Subdivisions of the genus can be undertaken when the form of the genitalia is studied. This character, taken in connection with the antennal structure, will give us subgenera and assist in the identification of our numerous species." This is precisely what Smith gives us after a lapse of seven years and without making proper mention of my initiatory work. He follows my lead as if I had not pointed out the way. With regard to *Rhynchagrotis* it is apparently synonymous with *Lampra*, covering Speyer's first section of *Triphaena*. We have but one yellow winged species, *gilvipennis*; whereas in Europe are two or three others besides the type, which is *fimbria*, the sole species cited in the *Verzeichniss*.

35. *cupidissima* Grt. California.
 36. *crenulata* Sm. California; Utah; Oregon.
 37. *confusa* Sm.* Washington.
 S. g. *Aplecta* Gn. 1852.
 = *Adelphagrotis* Sm. 1890.
 Type: *N. prasina* Fab.
 38. *stellaris* Grt. Nevada; Washington.
 39. *indeterminata* Wlk. California; Washington.
 innotabilis Grt.
 var. *washingtonensis* Grt.
 40. *quarta* Grt. California.
 41. *prasina* Fabr. Canada to Colorado; Europe.
 herbida Hüb.
 herbacea Gn.
 Subgen. *Platagrotis* Sm. 1890.
 Type: *A. speciosa*.
 42. *speciosa* Hb. Can.; White Mts.; North. New York;
 Labr.; Europe.

*) The mistakes made by Mr. Smith in this section of the genus are gross and unparalleled. Of *A. costata* he remarks: The type is a very poor specimen without a head. Mr. Smith omits to cite my Plate 4, fig. 5 upon which I photograph the type with a head. In the course of years it may have fallen off. Had Smith examined this Plate he never would have redescribed the species one might think. In his Revision p. 38, Smith also overlooks my Plate. These Plates are very good and cost me much trouble, time and money, and were issued with the entire original edition of the Bulletin. He next unites three of my species *cupidissima*, *laetula* and *orbis*, and in order to give colour to his action, invents the story that I had confounded distinct species in my characterizations — one with open the other with closed orbicular. Any one will find that I always described the same three species, using the same specimens and never altering my determinations of my types. That I had misidentified, (?) some specimens in coll. Neumoegen gave Smith the excuse for his mistakes, but not for the statement made by him, Rev. p. 25. These misidentifications should not have been brought into literature, the determinations being tentative and made without my having been able to compare my types. Under the name *exsertistigma* Morrison returned me specimens, my figure 12, Pl. 4 Bull. Buff. Soc., V. 3, belonging to a different species from the specimen in coll. Tepper (my *observabilis*) declared to be the „type“ on insufficient grounds by Smith. Morrison received all his material of *exsertistigma* from me and credits me; this material should have been all returned to me. His so-called preliminary descriptions in Bost. Proc. should have no standing, because absolutely insufficient for the purpose of identifying the species, all of which except *exsertistigma* and *tenuicula* have been subsequently recognisably described by Morrison or myself. Consequently the specimen in coll. Tepper cannot be held the true „type“ and is probably a subsequent „type“ of Morrison's who, in other cases (e. g. *scropulana* etc.), made apparently false or subsequent „types“. If it was a true „type“ it should have been returned to me with the rest of my material and as it is clear in any case, that Morrison mixed two species under this name, *observabilis* must hold for one of them; *exsertistigma* should be wholly rejected but, if it is to be kept, it belongs to the insect figured by me Plate IV, fig. 12 loc. cit., described on page 70. As I am not sure that this species is = *confusa* Sm., unknown to me, I do not restore the name. See Smith Cat. p. 55, where he says my specimens labeled *exsertistigma* are = *formalis*. See also Smith cat 86 with regard to Morrison's „liberal“ manner in marking types.

- perquiritata* Morr. (*Polia*)
baileyana Grt. (*Agrotis*)
mixta Wlk. (*Aeronycta*)
 var. *arctica* Zett.
 43. *pressa* Grt. Can.; Eastern and Middle States.
 44. *condita* Gn. Can.; Eastern and Middle States.
trabalalis Grt.
 45. *sincera* H.-S. „Labrador.“
 46. *imperita* Hb. Labr.; mountains of Eastern and
Middle States.
comparata Moeschl.
saxigena Morr.
discitineta Wlk (*Bryophila*)
 Subgen. *Euretagrotis* Sm. 1890.
 Type: *N. signoides* Gn.
 47. *sigmoidea* Gn. Can.; Eastern and Middle States.
 48. *perattenta* Grt. Can.; Maine to Texas.
 49. *attenta* Grt. Can., to Middle States.
 Subgen. *Abagrotis* Sm. 1890.
 50. *erratica* Sm. California.
 Subgen. *Matuta* Grt. 1874.
 Type: *M. catherina*.
 51. *elimata* Gn. Can. to Southern States.
dilucida Morr.
 52. *badicollis* Grt. Canada to Southern States.
 53. *janualis* Grt. Middle and Southern States.
 54. *opacifrons* Grt. Can. to Middle States.
 55. *tenebrifera* Wlk.*)
catherina Grt. (*Matuta*).
manifestolabes Morr. (*Agrotis*)
 Subgen. *Pachnobia* Gn.**) 1852.
 Type: *P. carneae*.
 56. *monochromatea* Morr. Massachusetts.
 57. *manifesta* Morr. Middle States.
 58. *littoralis* Pack. Labrador; Col.; Montana.
 var. *peccinata* Grt.
ferruginooides Sm.
 59. *haesitans* Wlk. Rocky Mountains.
 60. *salicarum* Wlk. Hudson's Bay; Can.; Eastern States.
orilliana Grt. (*Pachnobia*)
claviformis Morr. (*Agrotis*)
 61. *okakensis* Pack. Labrador; Mt. Washington.

*) Wlk., 33, 727; Smith's reference is incorrect. Norman's type of *catherina* is in B. Mus.; I saw it there.

**) In my Buffalo Check List, 1875, p. 7, I referred *Pachnobia* as a subgenus to the *Agrotis* series. This reference, rather than that to the *Orthosia* group, is followed by Smith. I had but very small material to examine. Fishii seems very distinct from the *carnea* group and I did not recognize the relationship.

62. *carnea* Thunb. Labr.; Mt. Washington; Europe.
scropulana Morr. (in part.)
 var. *cineraea* Stgr.
63. *wockei* Moeschl. Labrador; Mt. Washington.
scropulana Morr. (in coll Tepper).
64. *cinerascens* Sm. California.
65. *elevata* Sm. Colorado.
66. *fishii* Grt. Maine.
 s. g. *Setagrotis* Sm. 1890.
67. *planifrons* Sm. N. W. British Columbia.
68. *congrua* Sm. Oregon.
69. *vernalis* Grt. Col.; Nevada; California.
70. *infimatis* Grt. Washington; California.
 Subgen. *Agrotis* Hubn. 1806.
 Type: *A. segetum*.
71. *bardinodis* Grt. Canada to Texas.
72. *violaris* G. & R. Middle States.
73. *dapsilis* Grt. Florida.
74. *aurulenta* Sm. Col.; Arizona; Nebraska.
75. *ypsilont* Rott.
suffusa S. V.
telifera Harr.
76. *geniculata* G. & R. Canada to Middle States.
77. *ingeniculata* Sm. Colorado.
78. *bollii* Grt. Texas.
79. *hero* Morr. „Massachusetts“.
 Subgen. *Eurois* Hübn.* 1818.
 Type: *E. occulta* L.
80. *occulta* L. Can.; Middle States; Colorado.
81. *praefixa* Morr. Rocky Mountains.
82. *astricta* Morr. Can.; Middle States; Colorado.
 Subgen. *Peridroma* Hübn. 1818.
 Type: *P. saucia* Hb.
 = *Anicia* Grt. 1874.
 Type: *A. incivis* Gn.
83. *grandipennis* Grt. New Mexico.
84. *saucia* Hbn. Can.; to So. Am.; Europe.
inermis Harr.
ortonii Pack.
 var. *margaritosa* Haw.
85. *rudens* Harvey. Texas.
86. *pellucidulis* Grt. Texas; Colorado.
87. *incivis* Gn.
alabamae Grt.
88. *tenuescens* Sm. Nebraska.

* In my List, Bull. B. S. N. S., May, 1874, p. 12, I took *occulta* as the type of *Eurois* Hübn. Verz. I consider *occulta* and *saucia* to represent distinct structural or subgeneric sections of *Agrotis*. Mr. Tutt, British Noctuae, II., 8, says that *saucia* is the type of *Peridroma* Hb.

89. *simplaria* Morr. Texas.
simplicius Morr.
90. *digna*. Morr. Texas.
nigrovittata Grt.
Subgen. *Amathes* *) Hb. 1818.
= *Ochropleura* Hb. 1818.
= *Chersotis* Boisd.
Type: *N. baja* Fabr.
91. *baja* Fabr. Can.; United States; Europe.
92. *normaniana* Grt. Can.: Middle States.
triangulum + Auct.
- obtusa* Spey.
93. *bicarnea* Gn. Can.; U. S. east of Rocky Mts.
plagiata Wlk.
94. *treatii* Grt. Massachusetts.
95. *conchis* Grt. Colorado; New Mexico.
96. *c-nigrum* L. North America; Europe.
97. *hospitalis* Grt. Northern New York.
98. *jucunda* Wlk. Can.; Eastern and Middle States.
conflua + Grt.
- perconflua* Grt.
99. *esurialis* Grt. Washington.
100. *phylophora* Grt. Can. to Middle States.
dahlii + Beth. et Morr. i. l.; id Gn.?
101. *rubifera* Grt. Can. to Middle States.
rubi + Grt.
102. *rosaria* Grt. Col.; Brit. Col.; California.
103. *oblata* Morr. Anticosti; N. New York; Nevada; Cal.
hilliana Harvey.
104. *rava* H.-S. Labrador; Nova Scotia.
dissona + Pack.
- umbbrata* Pack.
105. *fennica* Tausch. Alaska; Can.; Northern N. Y.; Siberia;
Amur.
intractata Wlk. (Hadena.)
106. *plecta* L. North America; Europe.
107. *collaris* G. & R. Can.; Eastern and Middle States.
108. *juneta* Grt. Nova Scotia.

*) The term *Noctua*, used by Authors for this section, is, as I understand the matter, preoccupied in the Birds and, according to the rules cannot be used a second time in zoology. *Amathes* contains *liturra* and *baja*; the former is an *Orthosia*. It has priority by a page over *Ochropleura*, which contains *plecta* and *musiva*, two European species apparently agreeing in structure with *baja*.

109. *haruspica* Grt.* Can.; U. S. east of Rocky Mts.
augur⁺ Gn.
unimacula || Morr.
grandis Spey.
110. *sierrae* Harvey. Colorado; California.
111. *clemens* Sm. California.
112. *clandestina* Harv. Can.; Northern States.
unicolor Wlk. (Mamestra.)
nigriceps Wlk. (Mamestra.)
113. *havilae* Grt. Colorado; California.
114. *subporphyrea* Wlk. „Georgia“.
115. *piscipellis* Grt. Colorado; Nevada; Arizona.
116. *atrifrons* Grt. Colorado; Arizona; New Mexico.
117. *tepperi* Sm. Montana.
118. *lubricans* Gn. Canada to Texas; New Mexico.
associans Wlk. (Mamestra.)
illapsa Wlk. (Graphiphora.)
var. *beata* Grt.
119. *vocalis* Grt. Colorado; Nevada; New Mexico.
var. *invenusta* Grt.
120. *pallidicollis* Grt. California.
cinereocollis || Grt.
121. *pyrophiloides* Harvey. California.
s. g. *Chorizagrotis* Sm. 1890.
Type: *C. auxiliaris*.
122. *auxiliaris* Grt. Colorado; Texas; Utah; California;
Nebraska.
123. *introferens* Grt. Col.; Texas; Arizona; California;
Kansas.
124. *sorror* Sm. Montana; Texas.
125. *agrestis* Grt. Colorado; Texas; Nebraska; New
Mexico; Cal.
mercenaria Grt.
126. *inconcinna* Harvey. Col.; Texas; Arizona.
127. *immixta* Grt. Texas.
128. *balinitis* Grt. Colorado; British Columbia.
129. *terrealis* Grt. New Mexico.
- Subgen. *Ogygia* **) Hbn. 1818.

*) Mr. Smith finds a sole decisive character to separate this from the European *augur* in the shape of the genitalia. I am afraid this character may prove illusive when sufficient material is examined. The immature stages must be also compared. Whether the American form (separated from the Old World form according to my theory by the Glacial Epoch) has acquired constant and special characters is not ascertained beyond all doubt.

**) Hbn. Verz. 225. A mixed genus, but including *signifera* and another European species, apparently certainly congeneric with our American forms; the others belong to named genera. I take therefore *signifera* as type. *Ogygia* must therefore replace *Rhizagrotis*, though perhaps not so appropriate and certainly not so well described.

Type: *A. signifera*.

= *Rhizagrotis* Sm. 1890.

130. *abnormis* Sm. California.
 131. *proclivis* Sm. Arizona.
 132. *acelvis* Morr. Colorado; Texas; Arizona.
 opaca Harv.
 133. *nanalis* Grt. Nevada.
 134. *albicosta* Sm. Colorado; New Mexico.
 135. *apicalis* Grt. Colorado; New Mexico.
 136. *lagena* Grt. Arizona; Utah; Nevada; California.
 137. *albalis* Grt. Nevada; Colorado.
 138. *cloanthoides* Grt.*⁾ Colorado.
 Subgen. *Agronomia* Hb.**) 1818.
 Type: *A. valligera* (*vestigialis*).
 = *Feltia* Wlk. Sm. 1890.

139. *olivia* Morr. Utah.
 140. *longidens* Sm. New Mexico.

*) Judging from figures, my *cloanthoides* resembles the European *signifera*. Smith in the Revision unites *albalis* and *cloanthoides*; in the Synonymic Catalogue he considers them good varieties "at least". I should think so. The two are distinct species. *Albalis* has a white bloom over the primaries; *cloanthoides* is smooth, sordid white, with brownish cloantha like markings, the type and sole specimen I saw is in coll. Graef from Colorado. If the "shabby specimen in coll. Bailey" is wrongly labelled *albalis* and is really *cloanthoides* (which I am doubtful about) then somebody ought to take the label off and ticket the specimen correctly. My memory is that there were two good types of *albalis* in coll. British Museum from my collection.

**) If any one had mentioned to Mr. Walker at the time that, in describing his *Feltia ducens*, he was simply redescribing *Agrotis jaculifera* Gn., he would most probably have been thankful for the information and dropped his Ms. into the waste paper basket where it properly belonged. Reason enough for Mr. Smith to adopt this name without a word of censure in the Revision. Walker's diagnosis gives no characteristic marks and if there ever was a genus "founded in ignorance" then it is *Feltia*. But Mr. Smith keeps this censure for my genus *Carneades*, for which I give the essential character, the elypeal tubercle, which I am the first to discover in *Agrotis*, and this merely because I did not refer to it all the species with this character, but only *moerens* and *citricolor*. When he was writing his Revision, Smith knew that, when I found the tubercle, I had no longer my collection and had no time to carry out my observations. The European type of *Agronomia* seems certainly to be *vestigialis*. I kept the American forms together in my Lists. Smith erroneously cites *jaculifera* var. Gn., to his *subgothica*, which is really *jaculifera* type, presumably to establish his incorrect synonymy. As a result of Smith's efforts Mr. Slingerland is now calling our common *Agrotis jaculifera*, "*Feltia subgothica*"! (a specific name which, according to Mr. Tutt, belongs to the English *tritici*) and our common *Agrotis tricosa*, "*Feltia jaculifera*"! And this confusion is carried into economic literature and is the result of that action I have always deplored, the use of new names of disputable correctness in popular literature designed for the practical or farming interest. I advise Mr. Slingerland to use the names here adopted and which have only been changed by me in the rejection of *subgothica* and the substitution of its synonym *jaculifera* as given in my Lists.

141. *jaculifera* Gn. (type and fig.) North America.
subgothica Auct. nec Haw.
ducens Wlk. (*Feltia.*)
142. *tricosa* Lint. North America.
jaculifera + Sm.
jaculifera var. A., Gn.
143. *herilis* Grt. North America.
jaculifera var. B. Gn.
herelis Sm.
144. *pectinicornis* Sm. Texas.
145. *evanidalis* Grt. California.
146. *circumdata* Grt. New Mexico.
147. *gladiaria* Morr. United States; east of Rocky Mts;
 Canada.
morrisoniana Riley.
148. *venerabilis* Wlk. Can.; United States.
149. *gravis* Grt. California.
 var. *vapularis* Grt.
150. *vancouverensis* Grt. Vancouver; California; Oregon.
hortulana Morr.
agilis Grt.
151. *semiclarata* Grt. Washington.
152. *aeneipennis* Grt. California.
153. *clodiana* Grt. Washington.
 var. *praec.*?
154. *volubilis* Harvey. Can.; California; Northern U. S.
 var. *stigmosa* Morr.
155. *annexa* Treits. Eastern States to Texas; California.
decernens Wlk.
156. *malefida* Gn. Middle States to Texas; California.
 Subgen. *Porosagrotis* Sm. 1890.
157. *muraenula* G. & R. Can.; U. S. generally.
vetusta || Wlk.
158. *catenula* Grt. Montana; Colorado.
159. *satiens* Sm. B. Columbia; Colorado.
160. *mimallonis* Grt. Can.; Montana; Col.; Middle and
 Eastern States.
rufipennis Grt.
161. *fusca* Bdv. Labrador; Rocky Mts.
septentrionalis Moeschl.
patula Wlk.
162. *tripars* Wlk. Middle States.
worthingtoni Grt.
163. *rileyana* Morr. Middle to Southern States; New Mexico;
 Colorado.

164. *texana* Grt.*) Texas.
 165. *orthogonia* Morr. Col.; N. Mex.; Arizona; Utah.
 166. *daedalus* Sm. Colorado.
 167. *dollii* Grt. Arizona.
 168. *milleri* Grt. Sierra Nevada, California.
 169. *pluralis* Grt. Nevada; Colorado.
- Subgen. *Carneades* Grt.**)
- Type: *C. moerens*.
170. *wilsoni* Grt. California; Colorado.
 var. *specialis* Grt. (red form.)
 var. *aequalis* Harv. (olive fuscous form.)
 171. *lacunosa* Grt. California.
 172. *recula* Harvey. Colorado; Oregon.
 173. *cicatricosa* G. & R. Colorado.
 174. *neomexicana* Sm. New Mexico.
 175. *quadridentata* G. & R. Colorado; Oregon.
 176. *niveilinea* G. & R. Arizona; N. Mex.; Col.; Texas.
 177. *insertana* Sm. Brit. Columbia.
 178. *brevipennis* Sm. California; Nevada; Colorado.
 179. *oblongostigma* Sm. Montana; Colorado.
 180. *plagigera* Morr. New York, west to Nevada.
 181. *olivalis* Grt. Colorado; Utah.
 182. *ridingsiana* Grt. Colorado; N. Mexico; Arizona.
 183. *flavidens* Sm. Col.; N. Mexico; Arizona.
 184. *flavicollis* Sm. Col.; Montana; Arizona.
 185. *bicularis* Grt. California; Nevada; Arizona.
 186. *brocha* Morr. Colorado to Nebraska.
 bochus Morr.
 ? furcifera Wlk.
 ? transversa Wlk.
 187. *sponsa* Sm. Washington.
 188. *cogitans* Sm. California; Colorado.
 189. *hollemani* Grt. California; Arizona; Colorado.
 190. *atristrigata* Sm. British Columbia.
 191. *biplavis* Grt. Arizona.
 192. *perpolita* Morr. New York to Colorado.
 193. *fumalis* Grt. Eastern and Middle States; Canada.
 permunda Morr.
 194. *perfusca* Grt. California; Colorado; Arizona.
 195. *punctigera* Wlk. Vancouver; Nevada; Arizona.
 pastoralis Grt.
 196. *finis* Sm. Montana.
 197. *velleripennis* Grt. Can.; Middle States to Colorado.

* The Arizona material in coll. Neumoegen, referred by me in "Papilio" with some doubt to this species, does not belong here according to Smith, who found my types of *texana* in Philadelphia. The latter were collected I believe by Cresson in Texas with the type of *Ciris Wilsoni* Grote.

**) This section is characterized by the mucronate clypeus and probably several European species belong here when the material is fully compared.

198. *atomaris* Sm. California; Colorado.
 199. *gagates* Grt. California; Colorado.
 200. *citricolor* Grt. Col.; Utah; New Mexico; Arizona.
 201. *misturata* Sm. Colorado.
 202. *moerens* Grt. Arizona.
 203. *dolis* Grt.* Colorado.
 204. *scandens* Riley.**) Can.; U. S. east of Rocky Mts.
 var. *fulminans* Grt.
 205. *detesta* Sm. Colorado.
 choris + Sm.
 206. *remota* Sm. California; Colorado.
 207. *pitychrous* Grt. New York westward; Canada.
 personata Morr.
 ? *detersa* Wlk.
 208. *infracta* Morr. Colorado; Texas.
 209. *luteola* Sm. Arizona.
 210. *serricornis* Sm. So. California.
 211. *tetrica* Sm. Texas; Nevada.
 212. *bostoniensis* Grt. Can.; Middle & Eastern States.
 213. *caenis* Grt.
 muscosa Grt.
 214. *medialis* Sm. Texas; Colorado.
 215. *feniseca* Harvey. California.
 216. *extranea* Sm. Montana.
 217. *trifasciata* Sm. Oregon.
 218. *bifasciata* Sm. Arizona.
 219. *comosa* Morr.**) Colorado.
 220. *sculptilis* Harvey. Texas; New Mexico.
 xyliniformis Sm.
 221. *messoria* Harris. United States and Canada.
 ~ *spissa* Gn.
 repentis G. & R. Gn. Ms.
 cochrani Riley.
 222. *pleuritica* Grt. Canada; Northern States.
 223. *drewseni* Staud. Greenland.
 224. *choris* Harvey. Nevada.
 225. *perturbata* Sm. Colorado.

*) Said by Butler and Smith to resemble greatly the European *birivia*. Smith's amiable suggestion as to *Chera* shows that he never looked up the genus in the *Verzeichniss*.

**) I never saw any resemblance between *scandens* and either *muraenula* or *messoria*. I originally determined *scandens* for Riley as new. I simply say that Harris' description of *messoria* agrees better with *scandens* than with the species we call *messoria* on the faith of a specimen in Boston Mus. Harr. coll. The reference to *muraenula* was caused by an error in a label in Buff. Mus. as I explained at the time. The var. *fulminans* Grt., occurred on *Asclepias* flowers near Buffalo and has the fore wings shot with a pretty shade of red. See *Papilio*, I., 126.

***) The determination of the specimen in my coll. came from Morrison, as I recollect.

226. *rubefactalis* Grt. Washington; Colorado.
 227. *fauna* Morr. California.
 228. *brunneigera* Grt. California; Col.; Louisiana.
 229. *conjuncta* Sm. New Mexico; Colorado.
 230. *incallida* Sm. California.
 231. *lutulenta* Sm. California; Colorado.
 232. *annulipes* Sm. Oregon.
 233. *pedalis* Sm. Colorado.
 234. *lineifrons* Sm. Colorado.
 235. *teleboa* Sm. New Mexico; Colorado.
 236. *murdocki* Sm. Utah; Oregon; Colorado.
 237. *quinquelinea* Sm. California.
 238. *friabilis* Grt. Can.; Northern States to California.
 239. *fuseigera* Grt. California; Colorado.
 240. *orbicularis* Sm. Nevada.
 241. *micronyx* Grt. California.
 242. *intrita* Morr. Cal.; Vancouver; Arizona.
 243. *mollis* Wlk. Northern States; Colorado.
 fernaldi Morr.
 244. *opipara* Morr.*⁾ Labrador; Mt. Washington.
 islandica + Moeschl.
 +
 labradoriensis Staud.
 245. *tristicula* Morr. Maine.
 246. *munis* Grt. Colorado; New Mexico, Nevada.
 sublatis Grt.
 247. *dissona* Moeschl. Labrador.
 rava + Pack.
 +
 248. *vetusta* Wlk. California; Washington; Vancouver.
 eurooides Grt.
 perpura Morr.
 249. *alticola* Sm. California; Colorado.
 250. *infausta* Wlk. Vancouver; New Mexico.
 rufula Sm.
 251. *basiflava* Sm. Colorado; B. Columbia.
 252. *satis* Harvey.**) California; Montana.
 253. *rena* Sm. California.
 254. *insulsa* Wlk. Can.; west to California.
 insignata Wlk. (*Agrotis*.)
 expulsa Wlk. (*Mamestra*.)
 declarata Wlk. (*Mamestra*.)

^{*)} The earliest recognition of this species as distinct from *islandica*, with which Moeschler had confounded it, and since Moeschler, is in my Check List, 1882, 25. See also late papers in Canadian Entomologist, 16, 82.

^{**) The species here following belong probably all to my subgenus *Pleonectopoda* of which *Lewisii* is type. They must be compared with the European species. It is probable that they will show some common structural modification which would authorize the retention of this or an earlier term.}

- var. *decolor* Morr.
 var. *campestris* Grt.
 255. *verticalis* Grt. Colorado; Montana.
 256. *tessellata* Harris. Can.; United States generally.
 ? *perlentans* Wlk.
 var. *atropurpurea* Grt.
 257. *albibennis* Grt. Can.; United States west to New Mexico.
 ♀ *nigripennis* Grt.
 258. *spectanda* Sm. California.
 259. *pallipennis* Sm. Colorado; B. Columbia.
 260. *basalis* Grt. Colorado.
 261. *solitaria* Sm. Labrador.
 262. *nostra* Sm. California.
 263. *ochrogaster* Guen. Can.; U. S. west to Colorado.
 var. *illata* Wlk.
 cinereomacula Morr.
 turris Grt.
 var. *gularis* Grt.
 264. *idahoensis* Grt. Idaho; Colorado; Nevada.
 265. *furtiva* Sm. California; Colorado.
 furtivus Sm.
 266. *westermannii* Staud. Labrador; Greenland.
 267. *obeliscoides* Guen. U. S.; west to Colorado.
 268. *sexatilis* Grt.*
 U. S.; west to Colorado.
 269. *pere excellens* Grt. Colorado; California; Vancouver.
 excellens || Grt.
 infelix Sm.
 270. *islandica* Staud. Iceland.
 271. *lewisi* Grt. Colorado.
 272. *colata* Grt. Oregon; California.
 273. *versipellis* Grt. Can.; west to California.
 ? *divergens* Wlk.
 274. *redimicula* Morr. Can.; west to Colorado.
 275. *strigilis* Grt. Vancouver.
 276. *fusimacula* Sm. New Mexico.
 277. *atrifera* Grt. Maine; Colorado; California.
 278. *tesselloides* Grt. Cal.; Arizona; Nev.; Colorado.
 Gen. *Richia* Grt, 1887.
 Type: *R. chortalis*.
 279. *chortalis* Harvey. Texas; Arizona; N. Mexico.
 280. *aratrix* Harvey. Texas; Arizona; N. Mexico.
 an dim. var. pr.?
 281. *parentalis* Grt. Colorado; New Mexico.
 var. *decipiens* Grt.

*) My type or types of *sexatilis* are in B. Museum. *Sexatilis* is larger and brighter colored than what is generally called *obeliscoides*. See Smith's remarks, Cat., 105. from which it seems possible there are two species passing under *obeliscoides*.

282. *distichoides* Grt. New Mexico.
 Gen. ***Anytus*** Grt. 1873.
 Type: *A. sculptus*.
 283. *sculptus* Grt. Canada to Colorado.
 ? *privatus* Wlk. (Polia.)
 var. *planus* Grt.
 Gen. ***Eucptocnemis*** Grt.
 Type: *E. fimbriaris*.
 284. *fimbriaris* Gn. North Am.; Massachusetts.
obvia Wlk. (Graphiphora.)
 var. *sordida* Grt.*)
 Gen. ***Agrotiphila*** Grt. 1875.
 Type: *A. montana*.
 285. *alaskae* Grt. Alaska.
 286. *staudingeri* Moeschl. Labrador; Mt. Washington; Montana.
montana Morr.
 287. *colorado* Sm. Colorado.
 288. *rigida* Sm.**) Colorado.
 Trib. Psaphidiini.
 = *Dicopinae* Grt. 1883.
 Gen. ***Psaphidia*** Wlk. 1865.
 = *Dicopis* Grt. 1874.
 Type: *P. resumens*.
 289. *resumens* Wlk. Canada; Eastern and Middle States.
muralis Grt.
 var. *viridescens* Wlk.
 290. *grotei* Morr. Eastern to Southern States.
 291. *electilis* Morr.***) Pennsylvania.
 292. *thaxteriana* Grt. Massachusetts to Texas.
 Gen. ***Eutolype*** Grt. 1874.
 Type: *E. rolandi*.
 293. *bombyciformis* Sm. Mass.; Missouri.
 an *electilis*?
 294. *depilis* Grt. New York; Ohio; Texas.
 295. *rolandi* Grt. Mass. to Missouri; Texas.
vernalis Morr.

*) I have not seen Guenée's type. From Smith's remarks I think it not impossible that I have mistaken Guenée's species (as also Morrison) and that I may have had Worthingtoni before me. Types of what I call *fimbriaris* and its variety *sordida* have been sent to the National Museum, Washington.

**) I am the first to show the relation of the genus *Agrotiphila* to the *Heliothini*, and to suggest that, from their spinose tibiae and other structural features, we may regard the two tribes as naturally allied. The *Agrotini* may be taken out of their present position and be placed between the *Orthosini* and *Heliothini*, to which they are apparently nearest related. This is more in accordance with Guenée's arrangement than Lederer's. See my different papers in Canadian Entomologist.

***) The type is or was in coll. Tepper. I believe Smith may have redescribed the species as *Eutolype bombyciformis*.

296. *damalis* Grt. California.
 Gen. **Copipanolis** Grt. 1874.
 Type: *C. cubilis*.
297. *borealis* Sm. Minnesota.
 298. *cubilis* Grt. Mass.; Michegan.
 299. *fasciata* Sm. Missouri; Texas.
 300. *stigma* Sm. Florida.
- Trib. *Hadenini*.
- Gen. **Copimamestra** *) Grt. 1883.
 Type: *C. brassicae* L.
301. *occidentis* Grt. New Mexico.
 302. *curialis* Sm. Eastern States.
- Gen. **Admetovis** Grt. 1873.
 Type: *A. oxymorus*.
303. *oxymorus* Grt. California; Colorado.
 Gen. **Mamestra** Ochs 1816.
 Type: *M. pisi* L.
304. *discalis* Grt. Colorado; California; New Mexico.
 305. *rogenhoferi* Moeschl. Labrador.
 306. *nimbosa* Gn. Canada; west to Colorado.
 307. *imbrifera* Gn. Canada; west to Colorado.
 308. *purpurissata* Grt. Canada west to Utah.
 var. *juncimacula* Sm. (*Hadena.*)
309. *insolens* Grt. California.
 ♂ *arietis* Grt.
 earina Morr.
310. *leucogramma* Grt. California.
 311. *lepidula* Sm. Texas.
 312. *determinata* Sm. Colorado.
 313. *meditata* Grt. Canada to So. States; Kansas.
 314. *lustralis* Grt. Canada to So. States; Colorado.
 315. *detracta* Wlk. Canada to So. States; New Mexico.
 claviplena Grt.
316. *gnata* Grt. Arizona; New Mexico.
 317. *distincta* Hüb. Can. to Texas; west to Colorado.
 vitis French.
318. *crotchii* Grt. Colorado; Oregon; California.
 var. *fusculenta* Sm.
319. *farnhami* Grt. Colorado.
320. *liquida* Grt. Washington; Oregon; Colorado.

*) *Barathra* Hüb. Verz. 218, is a mixed genus consisting of *brassicae* and *albicolon*. Smith's assertion that *brassicae* is the type, is thus perfectly unwarranted. Under the rules I was perfectly free to take either of the species as the type of my new genus founded on structural characters. *Albicolon*, as I now learn, is not a typical *Mamestra*, nor strictly congeneric with *pisi*. The term *Barathra* must be kept open for the type of *albicolon*. The first species cited under a generic term is not to be held the type in the absence of express statement. In certain circumstances in the *Verzeichniss* Hübner seems only to know the first species cited by figure, e. g. *Xanthopastis*.

321. *capsularis* Gn. Middle and So. States west to Colo.
 ? *propulsa* Wlk.*)
322. *vittula* Grt. New Mexico.
323. *prodeniformis* Sm. Arizona; N. Mexico.
324. *atlantica* Grt. Can. to Virginia; Western States.
- w-*latinum*⁺ Gn.
- discolor* Spey.
- an *dissimilis*?
325. *radix* Wlk. Canada to California.
- dimmocki* Grt.
- desperata* Sm.
326. *canadensis* Sm. New Brunswick.
327. *nevadae* Grt. California.
328. *subjuncta* G. & R. Can. to Virginia; west to N. Mexico.
329. *grandis* Boisd. Greenland to Penn.; west to Colo.
- libera* Wlk. (*Xylophasia*.)
330. *invalida* Sm. California; Oregon; Colorado.
331. *trifolii* Rott. Europe and N. America.
- var. *albifusa* Wlk. (*Hadena*.)
- glaucovaria* Wlk. (*Apamea*.)
- major* Spey.
332. *oregonica* Grt. Oregon.
333. *u-scripta* Sm. California; Colorado.
334. *rosea* Harvey. Can. to Va.; west to Colorado.
335. *congermana* Morr. Can. to Va.; west to Colorado.
336. *pieta* Harris**) Can. to Virginia; west to Colorado.
- exusta* Gn. (*Ceramica*.)
- contraria* Wlk. (*Mythimna*.)
337. *rubefacta* Morr. Can.; Northern and Middle States.
338. *lubens* Grt. Can.; Eastern and Middle States; Colo.
- rufula* || Morr.
- cristifera*⁺ Butl. nec. Wlk.
- brassicae*⁺ Wlk.
339. *assimilis* Morr. Can.; Northern States.
- var. *pulverulenta* Sm.

*) Mr. Walker had placed a specimen of *capsularis* above his printed label of *Raphia propulsa*, as we saw it there in 1867. His description does not apply, however, and he may have really described another species. What this was, or whether the supposition is correct, is perfectly useless to enquire. How Mr. Smith "ever persuaded himself that *Mamestra purpurissata* could be referred to *Hadena* is one of those mysteries that will probably never find a solution", Proc. Nat. Mus. XII, 463.

**) This is the type of Guenée's genus *Ceramica*. Although the insect has a slight thoracic paler cresting, yet the habitus and untufted abdomen, cut of wing and markings are unlike *Mamestra* and show a resemblance to *Graphiphora* (*Taenioecampa*), to which the larva seems also allied.

340. <i>latex</i> Gn. <i>demissa</i> Wlk.*)	Can.; Middle States.
341. <i>passa</i> Morr.	California.
342. <i>adjuncta</i> Boisd.	Can.; Atlantic States west to Miun.
343. <i>variolata</i> Sm.	Washington.
344. <i>glaciata</i> Grt.	Arizona; Colorado.
345. <i>minorata</i> Sm.	California; Colorado.
346. <i>defessa</i> Grt.	California.
347. <i>chartaria</i> Grt.	California; Colorado.
348. <i>brachiolum</i> Harvey.	Texas; Arizona.
349. <i>beanii</i> Grt.	Illinois; Texas; Colorado.
350. <i>legitima</i> Grt.	Can.; Atlantic States west to Oregon.
351. <i>lilacina</i> Harvey.	Can.; Atlantic States west to N. Mexico.
352. <i>rugosa</i> Morr.	Maine.
353. <i>noverca</i> Grt.	California; Colorado; Arizona.
354. <i>goodelli</i> Grt.	Canada; west to Nebraska.
355. <i>quadrata</i> Sm.	California.
356. <i>obscura</i> Sm.	Western States.
357. <i>ectypa</i> Morr.	Middle States.
358. <i>renigera</i> Steph. <i>herbimacula</i> Gn. <i>infecta</i> Wlk.	Can. to So. States; Colorado.
359. <i>stricta</i> Wlk. <i>ferrea</i> Grt. var. <i>cinnabarinata</i> Grt.	California; Oregon; Vancouver.
360. <i>ferrealis</i> Grt.	Montana.
361. <i>spiculosa</i> Grt.	Arizona.
362. <i>circumcineta</i> Sm.	California.
363. <i>olivacea</i> Morr. var. <i>obscurior</i> Sm.	Atlantic to Pacific.
364. <i>comis</i> Grt.**)	Vancouver.
365. <i>rectilinea</i> Sm.	New York; Colorado; California.
366. <i>vau-media</i> Sm.	Colorado.

*) According to Smith: „The types of both names are in the British Museum and have been correctly applied to the same species.“ There is nothing like the power of expressing oneself correctly.

**) Smith says: „The type of *comis* is a very bright, strongly marked specimen, like typical *olivacea*, but so spread that the insect appears more plump, shorter winged and differently marked“, Proc. N. M. XIV., 255. Smith cites there, and copies Cat. 125, the Geol. Survey; but I described the species in Buffalo Bull., III., 85. I knew *olivacea* well; in fact I originally indicated it as new for Mr. Morrison. *Comis* is altogether handsomer and brighter coloured. „Rich brownish black. Tegulae basal and subterminal spaces whitish, of various shades, slightly olive or lilac. Median space rich brown with the small oval reniform greenish white; the smaller orbicular is oblique black ringed, a very little paler than the wing. Head collar and thorax blackish; collar with a black line; the white tegulae also with an inner line, etc. l. c. I submit this description will not apply „to typical *olivacea*“. It may be a variety; I hope some conscientious observer will look into the matter. How the setting of the specimen could make it look „more plump, shorter winged and differently marked“ is, I confess, to me a „mystery“.

367. *incurva* Sm. Colorado; Arizona; New Mexico.
 368. *marinitineta* Harvey. Texas.
 369. *laudabilis* Gn. Middle to So. States; Colorado;
 California.
 indicans Wlk. (*Hapalia*)
 strigicollis Wallgr. (*Hecatera*)
 370. *alboguttata* Grt. New Mexico; Oregon; California.
 371. *cuneata* Grt. New York; Oregon; California.
 372. *sutrina* Grt. Colorado.
 373. *loreia* Gn. Canada, southwardly.
 ligata Wlk. (*Hydroœcia*.)
 dodgei Morr.*)
 374. *quadrannulata* Morr. Nebraska; Texas; Colorado.
 375. *erecta* Wlk. Texas.
 constipata Wlk. (? *Perigea*.)
 innexa Grt. (*Perigrapha*)
 376. *longielava* Sm. Colorado.
 377. *vicina* Grt. Maine to Texas; California.
 teligera Morr.
 var. *acutipennis* Grt.
 378. *anguina* Grt. Maine to Illinois; Colorado.
 379. *pensilis* Grt. Texas; California; Vancouver.
 380. *impolita* Morr. „Canada“.
 Gen. ***Hadena*** Schrank. 1802.
 Type: *H. cneubali*.
 = *Dianthroœcia* Boisd. 1829.
 381. *subdita* Moeschl. „Labrador“.
 Gen. ***Scotogramma*** Sm. 1887.
 Type: *S. phœca*.
 382. *submarina* Grt. Arizona; Montana; Oregon.
 383. *phœca* Moeschl. Labrador; Colorado.
 promulsa Morr.
 384. *perplexa* Sm. Colorado.
 385. *inconcinna* Sm. Colorado.
 386. *umbrosa* Sm. Arizona; Colorado.
 387. *stretchii* Hy. Ed. Colorado Desert.
 Gen. ***Ulolonche*** Sm. 1887.
 Type: *U. niveiguttata*.
 388. *niveiguttata* Grt. California; Arizona.
 389. *fasciata* Sm. New Mexico.
 390. *disticha* Morr. Texas; Colorado.
 391. *modesta* Morr. Can.; Eastern and Middle States.

*) I am persistently credited by Smith with this synonym; since I knew Gnené's *loreia* as far back as 1862, it seems incredible to me that I should have redescribed it. I cannot refer, however, now to the seventh Volume of the Can. Ent. p. 90, where I believe Morrison must have described the species.

392. *orbiculata* Sm. Colorado.
 Gen. **Cladocera** Rbr. 1839.
 Type: *C. optabilis*.
393. *niveivenosa* Grt.*^{**)} Montana; Colorado.
 Gen. **Apamea** Ochs.**) 1816.
 Type: *A. testacea*.
394. *stipata* Morr. Maine to Colorado.
395. *passer* Guen. Canada to Colorado; Oregon.
viralis Grt.
loculata Morr.
 var. *conspicua* Morr.
396. *burgessi* Morr. Mass. to Arizona.
discors Grt.
397. *longula* Grt. New Mexico; Nevada; Washington.
 Gen. **Xylena** Hubn.***) 1806.
 Type: *X. lithoxylea*.
 = *Xylophasia* Steph. 1829.
398. *remissa* Hübn. Eastern to Southern States.
indocilis Wlk.
399. *separans* Grt. New York to Wisconsin.
ducta + Smith.
+
400. *suffusca* Morr. Canada to Texas.
illata + Grt.
401. *apamiformis* Gn. Canada to Colorado.
contenta Wlk. (Hadena.)

*) Referred by Smith to Hadena Auct. where it cannot remain on account of the smooth unftued linear body. The eyes are naked and the ornamentation is like *Agrotis* where I first referred the species from a single female specimen which I was obliged to return. I could not at the time clearly make out the structure of the folded legs, which I now believe were unarmed. I consider the moth as the American Western representative of the European *C. optabilis*, and think that the male will be found to have plumose antennae.

**) See Grote, Bull. Buff. S. N. S. 54, 1874. This genus is often credited to Treitschke, but it is founded in Ochsenheimer 4, 75. Under Lederer's restriction one species originally included viz: *testacea*, becomes the type of *Apamea* Ochs., in sensu Led., Stand. Cat. 98. I do not know the type of *Luperina* Boisd. 1829, but none of Boisduval's original species of *Luperina* are included by Lederer or Staudinger under this name. Lederer's genus must be known, except *Haworthii*, as *Ledereria* Grt. 1874. So far as I am able to judge, our N. American species are congeneric with *testacea*, for instance *burgessi* (= *discors*). I proposed at one time to take *nictitans* as the type of *Apamea*; but Lederer's prior action seems to fix *testacea* as the type. I have been at some pains to fix the types and the correct generic synonymy in the Noctuidae and this work has been here and there adopted but largely disregarded by Smith who seems to go upon the principle that priority has its chief value when the British Museum coll. and Lists can be used to destroy one of my names and that the researches of other writers than himself can be disregarded at his pleasure.

***) See Grote Buff. Check List, 37, 1876. Also Tr. V., 107, 1825. In the absence of material Smith's extension of the genus is here followed.

402. *vultuosa* Grt. Canada to N. York; west to Illionis.
 403. *exornata* Moeschl. Labrador; Colorado.
 404. *morna* Streck. Colorado.
 405. *hulstii* Grt. Colorado.
 406. *finitima* Gn. Canada to N. York; west to Oregon.
 407. *lateritia* Hfn. Europe; North America.
 obliviosa Wlk. (*Mamestra*)
 molochina Hbn.
 408. *insignata* Wlk. (1860). Canada to California.
 cogitata Sm.
 409. *dubitans* Wlk. Canada to Middle States.
 insignata Wlk. (1857, *Apamea*)
 sputatrix Grt.
 410. *plutonia* Grt. Maine; Wisconsin.
 411. *alticola* Sm. Colorado.
 412. *ducta* Grt. Canada; New York; Washington.
 413. *impulsa* Grt. Canada to Texas.
 var. *mixta* Grt.
 414. *devastatrix* Brace. Canada; United States.
 devastator Brace. (*Phalaena*)
 ordinaria Wlk. (*Mamestra*)
 contenta Wlk. (*Mamestra*)
 marshallana Westw. (*Agrotis*)
 415. *exulis* Lef. Labrador; Greenland; Iceland.
 gelata Lef. (*Hadena*)
 groenlandica Zett. (*Hadena*)
 marmorata Zett. (*Hadena*)
 difflua Gey. (*Exarnis*)
 gelida Gn. (*Crymodes*)
 poli Gn. (*Crymodes*)
 borea Gn. (*Crymodes*)
 416. *sommeri* Lef. Labrador; Greenland; Iceland.
 417. *arctica* Bdv. Canada to New Mexico; Colorado.
 amputatrix Fitch (*Hadena*).
 amica ⁺₊ Harris. (*Hadena*)
 418. *albina* Grt. California.
 419. *pluviosa* Wlk. California; Vancouver.
 castanea Grt.
 cymosa Grt.
 420. *occidens* Grt. Nevada; Colorado; California.
 421. *perpensa* Grt. Arizona; New Mexico.
 422. *cuculliiformis* Grt. California.
 423. *verbascoides* Gn. Canada to Middle States.
 424. *nigrior* Sm. Maine.
 425. *cariosa* Gn. Maine to Texas.
 426. *idonea* Grt. Maine to Texas.
 427. *vulgaris* G. & R. Canada to Middle States.
 428. *cristata* Grt. New York (Buffalo).

429. *antennata* Sm. California.
 430. *relecina* Morr. Texas; Colorado.
 431. *cinefacta* Grt. Washington; Calif.; Colorado.
 432. *centralis* Sm. California.
 433. *auranticolor* Grt. Col.; Arizona; Nebraska; Oregon.
 434. *lignicolor* Gn. Canada to Arizona.
 lignicolora Gn.
 var. *quaesita* Grt.
 435. *genialis* Grt. California.
 436. *inordinata* Morr. Maine to Colorado.
 437. *semilunata* Grt. Washington; Colorado.
 Gen. ***Helioscota*** Grt. 1895.
 Type: *H. miselioides*.
 = *Hadena* + Auct. nec. Schrank.
 438. *evelina* French. California; Colorado.
 439. *bridghami* G. & R. Canada; Eastern States.
 440. *violacea* Grt. California; Colorado.
 441. *transfrons* Neum. British Columbia.
 442. *leucoscelis* Grt. Canada; Eastern States to Colorado.
 fibulata Morr.
 443. *claudens* Wlk. Newfoundland; Eastern States.
 hillii Grt.
 444. *admixa* Grt. Nevada.
 445. *paviae* Behr. California.
 inconspicua Sm. List 2034.
 446. *binotata* Wlk. California; Vancouver.
 curvata Grt.
 extersa Wlk.
 447. *genetrix* Grt. Nevada; Colorado.
 448. *characta* Grt. Nevada; Arizona.
 449. *fumosa* Grt. Colorado; Washington.
 450. *indirecta* Grt. California; Utah; Colorado.
 451. *divesta* Grt. California; Colorado; Vancouver.
 452. *tusa* Grt. California.
 453. *tonsa* Grt. Nevada.
 454. *semicana* Wlk. Wisconsin to Colorado.
 latireptana Wlk. (*Erastria* ?)
 modiola Grt. (*Hadena*.)
 455. *fractilinea* Grt. Canada; New York to Colorado.
 vulgivaga Morr.
 456. *misera* Grt. New York; Illinois; Wisconsin.
 457. *egens* Wlk. Hudson's Bay; Colorado.
 458. *minuscula* Morr. Canada; Eastern States.
 an *Dyschorista* ?
 459. *marina* Grt. California.
 460. *miselioides* Gn. Canada to Texas.
 461. *chlorostigma* Harvey. Texas; Illinois.
 462. *smaragdina* Neum. Arizona.

463. *mactata* Gn. Canada to Colorado.
 464. *turbulenta* Hübn. New York to Southern States.
 arcuata Wlk. (*Xylophasia*)
 465. *modica* Gn. Canada to Colorado.
 subcedens Wlk.
 466. *hausta* Grt. Maine to New Mexico.
 467. *cylindrica* Grt. Nevada.
 an Hadenella ? teste Sm.
 468. *patina* Harvey. Southern States.
 469. *diversicolor* Morr. Eastern and Middle States.
 470. *tortilis* Grt. Washington.
 471. *chryselectra* Grt.*
 ? benigna Hy. Ed.
 Gen. **Hillia** Grt.
 Type: *H. senescens*.
 472. *erasis* H.-S. Canada; Northern New York;
 Northern Europe.
 var. *senescens* Grt. (gray form.)
 var. *vigilans* Grt. (dark or reddish form.)
 var. *erdmani* Moeschl. (intermediate form.)
 473. *discinigra* Wlk. "Hudson's Bay Territory".
 474. *algens* Grt. Eastern States; Colorado.
 Gen. **Achatia** Hbn. 1806.
 Type: *A. atriplicis*.
 = *Trachea* Hbn. 1818.
 475. *delicata* Grt. Canada southwardly.
 var. *interna* Grt.
 Gen. **Pseudanarta** Hy. Ed. Grt. in litt.
 Type: *Anarta crocea* Hy. Ed.
 476. *flava* Grt. Br. Columbia; Oregon; Colorado.
 var. *crocea* Hy. Ed.

*) I have taken for the type of this genus an ordinary form commonly occurring for purposes of comparison. The species here included are those placed by Smith in *Hadena*, with the remark that they probably belong to more than one generic type. They are in fact my former genus *Hadena*, minus the species separated by Smith under *Xylophasia*. The type of *Hadena* Schrank is, as I have ascertained, the European *cucubali*, a form with hairy eyes and referred by Boisduval to *Dianthoccia*. In no event can the term *Hadena* be applied correctly to any of the species of *Hadena* sensu Led. Our species need revision. Those agreeing with *X. lithoxylea* must be separated under *Xylena*. Those agreeing with *O. strigilis* must be separated under *Oligia* (= *Miana* Steph.). There remains a residue for which I have proposed the term *Helioscota*. The type of *Celaena* is *Haworthii*, a species included under *Luperina* Led., but which is not *Luperina* of Boisduval. The genera *Hillia* and *Achatia*, placed here by Smith, are out of place, but the object of this List is not to revise the sequence of the species or genera. The American genus *Pseudanarta* is close to *Helioscota*. The name was proposed by me in letters to Hy. Edwards, then in San Francisco, for his *Anarta crocea*, a form which is at least a good variety of my previously described *Hadena flava*. I have not seen his paper quoted by Smith, Proc. Ac. Sci. Cal., 6, 133, 1875.

477. *singula* Grt. Texas; Colorado; Arizona.
 478. *flavidens* Grt. Colorado; New Mexico.
 Gen. **Oligia** Hübn. 1818.
 Type: *O. strigilis*.
 = *Miana* Steph. 1829.
479. *festivoides* Gn. Canada to Florida and Texas.
 varia Wlk. (*Erastria*.)
480. *chalcedonia* Hbn. Canada to Texas; New Mexico.
 arna Gn. (*Celaena*.)
 vineta Wlk. (*Miana*.)
 irresoluta Wlk. (*Celaena*?)
 var. tracta Grt.
481. *versicolor* Grt. Canada; Northern Atlantic States.
 482. *exesa* Gn. Florida.
 floridiana Wlk. (*Hadena*.)
483. *fuscimacula* Grt. Florida; Texas.
 484. *grata* Hübn. Southern States.
 rasilis Morr. (*Hadena*)
485. *nucicolora* Gn. Florida; Texas.
 unisignata Wlk. (*Laphigma*.)
 paginata Morr. (*Hadena*.)
 var. clara Harvey (*Caradrina*.)
 Gen. **Perigea** Guen. 1852.
 Type: *P. xanthioides*.
486. *xanthioides* Gn. Canada to Florida.
 var. enixa Grt. (pale form.)
487. *iole* Grt. Florida.
488. *vecors* Gn. Middle States southwardly.
 remissa Wlk. (*Apamea*)
 luxa Grt. (*Perigea*)
489. *epopea* Cram. Gulf States; along the coast to Maine.
 infelix Gn. (*Perigea*.)
 palpalis Wlk. (*Condica*.)
 confederata Grt. (*Hadena*)
490. *claufacta* Wlk. Eastern to Southern States.
 commoda Wlk. (*Xylina*.)
 fabrefacta Morr. (*Segetia*)
491. *punctifera* Wlk. „United States“; St. Domingo.
 492. *falsa* Grt. California.
493. *albolabes* Grt. Arizona; Colorado; New Mexico.
 494. *loculosa* Grt. Arizona; New Mexico.
 495. *alfkenii* Grt.* Western States.
 perplexa Grt. in lists.

*) *Perigea alfkenii* sp. nov. 1 male, 2 females. Male antennae shortly pectinate, female simple. Shape and aspect of *P. pulverulenta*, Smith, but paler and much less distinctly marked. Wings of a fleshy brown, all the marks very obscure and hardly legible. S. t. line most distinct, pale, irregularly and rather angularly waved. Reniform dark, a pale line inwardly, outwardly a pale patch which abuts against the obscure pale s. t. line. Orbicular large, slightly oval, pale; it and the minute claviform outlined

496. *niveirena* Harvey. Vancouver.
 497. *pulverulenta* Sm. Colorado.
 498. *fasciata* Hy. Ed. Colorado Desert.
 499. *dilecta* Hy. Ed. "Arizona".
 500. *continens* Hy. Ed. "Arizona".
 501. *mersa* Morr. "California".
 502. *proxima* Morr. "Texas".

Dipterygia Steph. 1829.Type: *D. pinastri*.

503. *seabriuseula* Linn. North America and Europe.
pinastri Linn.

Hyppa Dup. 1844.Type: *H. rectilinea*.

504. *xylinoides* Gn. Canada to Southern States.

rectilinea + Wlk.
 +

contraria Wlk.

ancocisconensis Morr.

Valeria Steph. 1829.Type: *V. oleagina*.

505. *opina* Grt. California.

Calophasia Steph. 1829.

506. *strigata* Sm. Colorado.

Homohadena Grt. 1873.Type: *H. badistriga*.

507. *incomitata* Harvey. Texas.

508. *inconstans* Grt. Arizona.

509. *figurata* Harvey. California; Nevada; Colorado.

510. *chorda* Grt. California; Colorado.

511. *epipaschia* Grt. Kansas; New Mexico.

512. *vulnerea* Grt. Arizona.

513. *deserta* Sm. Colorado Desert.

514. *induta* Harvey. Texas.

515. *kappa* Grt.* Western States southwardly.

retroversa Morr.

? *infixa* Wlk.

516. *badistriga* Grt. Canada to Colorado.

Adita Grt. 1874.Type: *A. chionanthi*.

narrowly and faintly in black. Other lines scarcely indicated. Veins subterminally blackish and a series of dusky shades along costa indicating the terminations of all the lines. Secondaries whitish, shading to brown along the outer margin. Types coll. Neumoegeen. This species is the *P. perplexa* Grt. of former lists. I name the species for my kind friend Mr. D. Alfsken of the Bremen Museum the well known apidologist. I change the unpublished name as it is also otherwise used in the family.

* Smith says that "it would not have been possible to identify Walker's *Xylophasia infixa* from the description and without seeing the type." Hence I refuse to adopt Walker's name, as the "description" and not the "type", authorizes the name. The "type" is not beyond doubt.

517. *chionanthi* Abb. Sm. Can.; Middle to Southern States.

Gen. ***Oncoecnemis*** Led. 1857.

Type: *O. confusa*.

= *Metahadena* Morr. 1875.

518. *hayesi* Grt. Colorado; California; Br. Columbia.

519. *dayi* Grt. Colorado.

520. *mirificalis* Grt. Nevada; California.

521. *fasciatus* Sm. California; Colorado.

522. *tenuifascia* Sm. Colorado.

523. *atrifasciata* Morr. Eastern States; N. York.

524. *viriditineta* Sm. Canada; Brit. Columbia.

525. *terminalis* Sm. Colorado.

526. *levis* Grt. Arizona; Colorado.

527. *simplex* Sm. Utah.

528. *augustus* Harvey. Texas; Colorado.

529. *iricolor* Sm. Colorado.

530. *saunderiana* Grt. Canada to Texas.

531. *behrensi* Grt. California.

532. *pernotata* Grt. Arizona.

533. *glennyi* Grt. Colorado.

534. *homogena* Grt. Colorado.

535. *extremis* Sm. Columbia.

536. *occata* Grt. California; Colorado; Texas.

537. *meadiana* Morr. "Arizona".

538. *fortis* Grt. California; Nevada.

vorax Behrens.

var. *picina* Grt.

539. *chandleri* Grt. Colorado.

540. *riparia* Morr. Eastern and Middle States.

541. *colorado* Sm. Colorado.

542. *major* Grt. California; Arizona; Colorado.

curvicollis Grt.

var. *aqualis* Grt.

543. *cibalis* Grt. Colorado.

544. *gracillima* Grt. Arizona.

545. *atricollaris* Harvey. Colorado; Texas.

546. *griseicollis* Grt. Arizona.

547. *oblita* Grt. Nevada.

Gen. ***Aporaphyla*** Guen. 1841.

548. *yosemitae* Grt. California.

Gen. ***Macronoctua*** Grt. 1874.

Type: *M. onusta*.

549. *onusta* Grt. Eastern States; Middle States to Iowa.

Gen. ***Hadenella*** Grt. 1883.

Type: *H. pergentilis*.

550. *pergentilis* Grt. Washington; Colorado; Wyoming.

Gen. ***Trichopolia*** Grt. 1883.

Type: *T. dentatella*.

551. *dentatella* Grt. Arizona.

552. *ptilodonta* Grt. Arizona.
 Gen. **Pachypolia** Grt. 1874.
 Type: *P. atricornis*.
 553. *atricornis* Grt. Illinois.
 Gen. **Platypolia** Grt. 1895.
 Type: *P. acutissima*.
 554. *acutissima* Grt. Canada; Nova Scotia.
 555. *medialis* Grt. Canada; Middle States.
 556. *capax* G. & R. Canada to Colorado.
 557. *speciosa* Morr. "Massachusetts".
 558. *confragosa* Morr. "Canada".
 559. *ilocata* Wlk. Canada to Colorado.
 stigmata Grote.
 560. *illepida* Grt.* New Mexico; Nevada; Colorado.
 Gen. **Andropolia** Grt. 1895.
 Type: *A. theodori*.
 561. *theodori* Grt. Colorado; Nevada; California.
 var. *epichysis* Grt.
 562. *aedon* Grt. Colorado; Nevada; Washington.
 563. *olorina* Grt. California; Colorado.
 Gen. **Polia** Hüb. Tent. 1806.
 Type: *P. flavicincta*.
 = *Xanthopastis* Hb. Verz. excl. timais.
 564. *pallifera* Grt. Illinois.
 565. *contacta* Wlk. Hudsons Bay; Northern N. Y.
 aspera Morr.
diffusilis Harv.
 566. *cristifera* Wlk.**) "Hudson's Bay Territory".
 567. *pulvernenta* Sm. Colorado.
 Gen. **Fishia** Grt. 1877.
 Type: *F. enthea*.

*) Smith says that my type of *Hadena diversilineata* is a patched specimen of *illepida*. The description is totally different, therefore the wings must belong to some other species, at least the patches. In this case it is an absurdity to call the species by a name based on a patched specimen, because the insect must be recognised by the description, which in this case is impossible. The description of *H. diversilineata* must be cancelled and the name dropped. I remember I was very doubtful about the insect; I was pressed for a report on the specimens, which I had to return at once and have always had on it my mind that I ought to examine the type over again.

**) The identification by Butler and Smith of this species with *Mamestra lubens* is contradicted by the description, and my own direct observation of the type; it is probably the result of a transposition of the specimen. The specimen of *M. lubens* which now figures as the "type" of *cristifera* is most probably, almost certainly, the one determined by Walker, C. B. M. 9, 230, "W. Orilla, Canada, from Mr. Bush's collection", as *Mam. brassicae*. The erroneous determination of *lubens* as *brassicae* came to me, either from London, Canada, or direct. I never compared the two nor did I originally determine *lubens* as *brassicae*. The name in American collections was the result of Walker's original mistaken determination of *lubens* as *brassicae*. See Morris' Catalogue. Neither Butler or Smith mention *brassicae* Walk. from North America.

568. *enthea* Grt. Maine.
 Gen. **Actinotia** Hübn. 1816.
 Type: *A. perspicillaris*.
569. *ramosula* Guen. Canada to So. States.
 570. *stewarti* Grt. California.
 Gen. **Lussa** Grt. 1883.
 Type: *L. nigroguttata*.
571. *nigroguttata* Grt. Florida.
572. *infexa* Morr. "Florida".
 Gen. **Laphygma** Guen. 1852.
 Type: *L. exigua*.
573. *frugiperda* A.b. & Sm. Canada to West Indies.
macra Gn.
signifera Wlk.
plagiata Wlk.
autumnalis Riley.
 var. *fulvosa* Riley.
 var. *obscura* Riley.
574. *flavimaculata* Harvey. Hawaii; California; Colorado.
 Gen. **Prodenia** Gn. 1852.
 Type: *P. retina*.
575. *eridania* Cram. Southern States.
phytolaccae A. & S.
derupta Morr. (*Actinotia*)
nigrofasciata Hulst.*) (*Leucania*)
576. *commelinæ* A.b. & Sm. Canada to So. States.
? *androgena* Cram.
577. *ornithogalli* Gn. Canada to So. States; California.
commelinæ + Riley.
lineatella Harvey.
578. *eudiopcta* Gn. Canada to So. States; California.
commelinæ + Riley.
flavimedia Harvey.
an ♂ spec. praec.?

*) Smith says: The names above given apply to our own fauna only; the insect has been further redescribed by Walker as *Xylinia inquieta*; *Prodenia strigifera*, and *Leucania externa*, and by Mr. Butler as *Prodenia ignobilis*. Mr. Hulst's synonym is very characteristic. Smith's reference, Cat. 168, that in Can. Ent. VIII, 189, I regarded *flavimaculata* as = *frugiperda*, is incorrect. I there, from two examples, regarded it as an "extreme variety", which is a different thing. And in my Revised List I say that I have been wrong I believe in this reference and that it may resemble the European *exigua*. I left it in the genus where Dr. Harvey placed it, although I had referred it in 1875 to *Laphygma*. Certain European writers do not consider *Laphygma exigua* as generically distinct from the species of *Caradrina*. I have had no opportunity of examining the European species and the relationship of the genera is not known to me.

579. *praefica* Grt. California.
 Gen. **Dargida** Wlk. 1856.
 = *Eupsephopaectes* Grt. 1873.
580. *procincta* Grt. California; Oregon; Colorado.
 Gen. **Conservula** Grt. 1875.
 Type: *C. anadonta*.
581. *anadonta* Gn. Canada to Middle States.
 Gen. **Trigonophora** Hübn. 1818.
 Type: *T. flammæa*.
582. *periculosa* Gn. Canada to Colorado.
 var. *v-brunneum* Grt.
 Gen. **Brotolomia**, Led. 1859.
 Type: *B. meticulosa*.
 = *Mesolomia* Sm. 1893.*)
583. *iris* Gn. Canada to Middle States.
 Gen. **Euplexia** Steph. 1829.
 Type: *E. lucipara*.
584. *lucipara* Linn. North America and Europe.
 Gen. **Nephelodes** Guen. 1852.
 Type: *N. minians*.
585. *minians* Gn. Canada to Colorado.
expansa Wlk.
sobria Wlk.
 var. *violans* Gn.
subdolens Wlk.
 Gen. **Tricholita** Grt. 1875.
 Type: *T. signata*.
586. *signata* Wlk. Canada to New Mexico.
semiaperta Morr.
587. *fistula* Harvey. California; Arizona; Colorado.
588. *inconspicua* Grt. Arizona.
 Gen. **Helotropha** Led. 1857.
 Type: *H. leucostigma* (*fibrosa*).
589. *reniformis* Grt. Canada to Middle States.
 var. *atra* Grt.
an spec. europ.?
 Gen. **Gortyna** Oehs. 1816.
 Type: *G. micacea*. (Hübn. restr.)
 = *Hydroecia* Gn. 1837.
590. *lunata* Sm. California.
591. *n-album* Guen. Middle States to Minnesota.
purpuripennis Grt.
baliola Morr.

*) Smith says "our species is probably (?) as distinct generically from the European form as any others in this series" etc. Now the "others" are referred as agreeing generically! *Conservula* with entire fringes is simply an extra American form not belonging to the special series: *Trigonophora*, *Brotolomia*, *Euplexia*. There seems no reason and certainly Smith gives nothing that can be called one for his new term.

592. *velata* Wlk. Canada to Middle and Eastern States.
sera G. & R.
593. *juvenilis* Grt. Colorado; Kansas.
594. *nictitans* Linn. N. America and Europe.
americana Spey.
var. *erythrostigma* Haw.
var. *lucens* Freyer.
595. *erepta* Grt. Kansas.
596. *immanis* Gn. Can.; Eastern States to California.
var. *obliqua* Harvey.
597. *stramentosa* Gn. Middle States.
598. *inquaesita* G. & R. Can.; Eastern and Middle States.
599. *cerina* Grt. Eastern and Middle States.
600. *impecuniosa* Grt. Eastern and Middle States.
601. *cataphracta* Grt. Can.; Eastern and Middle States.
602. *purpurifascia* G. & R. Canada to Colorado.
603. *rutila* Gn. Canada to Colorado.
leucostigma || Harr.
604. *harrisii* Grt. Eastern States.
605. *speciosissima* G. & R. Eastern States.
606. *marginidens* Guen. Can.; Eastern & Middle States.
var. *limpida* Gn.
607. *cerussata* Grt. Eastern and Middle States.
608. *appassionata* Harvey. Canada.
609. *nitela* Gn. Canada to Georgia.
var. *nebris* Gn.
610. *necopina* Grt. New York.
611. *serrata* Grt. Colorado.
- Gen. **Ochria** Hübn. 1818.
Type: *O. flavago*.
= *Gortyna* Led. nec Ochs.
612. *sauzalitae* Grt. California.
613. *buffaloensis* Grt. New York.
- Gen. **Achatodes** Guen. 1852.
Type: *A. sandix*.
614. *zeae* Harris. Canada to Colorado.
sandix Gn.
- Gen. **Xanthopastis** Hübn. 1818.
Type: *X. timais* (Berg restr.).
= *Philochrysa* Grt. 1863.
615. *timais* Cram. Florida; Atlantic coast, migratory.
regnatrix Grt. (*Philochrysa*.)
- Gen. **Euglyphia** Hübn. 1818.
Type: *E. elegans*.
= *Noropsis* Guen. 1852.

616. *hieroglyphica* Cram. Texas; Florida.
 festiva Fabr. (*Bombyx*)
 elegans Hbn. (*Euglyphia*)
 fastuosa Gn. (*Noropsis*)
 Trib. *Bellurini*.
 = *Arzaminae* Grt. 1883.
 Gen. ***Bellura*** Wlk. 1865.
 Type: *B. gortynoides*.
 = *Arzama* Walk. 1865.
617. *gortynoides* Wlk. Canada to Southern States.
 densa Wlk. (*Arzama*)
 vulnifica Grt. (*Arzama*)
 var. *melanopyga* Grt.
618. *diffusa* Grt. Canada; Maine.
 Gen. ***Sphida*** Grt. 1878.
 Type: *S. obliquata*.
619. *obliqua* Wlk. Canada to Southern States.
 obliquata G. & R. (*Arzama*)
 Trib. *Nonagriini*.
 = *Nonagriadae* Harris.
 Gen. ***Nonagria*** Oehs. 1816.
 Type: *N. typhae*.
620. *permagna* Grt. Florida.
 621. *laeta* Morr. an spec. Am.?
 622. *subflava* Grt. Maine to Illinois.
 623. *oblonga* Grt. Maine.
 624. *subcarnea* Kell. Buffalo, N. Y.
 625. *inquinata* Guen. „New York“.
 Gen. ***Fota*** Grt. 1882.
 Type: *F. armata*.
626. *armata* Grt. Arizona.
 627. *minorata* Grt. Arizona.
 Gen. ***Senta*** Steph. 1829.
 Type: *S. maritima*.
628. *defecta* Grt. Eastern and Middle States.
 629. *enervata* Gn. Florida.
 fodiens Gn.
 Gen. ***Platysenta*** Grt. 1874.
 Type: *P. atriciliata*.
630. *videns* Gn. Canada to Southern States.
 indigens Wlk. (*Nonagria*?)
 atriciliata Grt. (*Platysenta*)
 meskei Spey. (*Caradrina*)
 nucicolora + Sm. (*Monodes* + .)
631. *angustiorata* Grt. Colorado.
 Gen. ***Tapinostola*** Led. 1857.
632. *orientalis* Grt. Maine; Buffalo, N. Y.

633. *variana* Morr. „Detroit, Mich.“
 Trib. *Heliophilini*.
 Gen. *Ommatostola* Grt. 1873.
 Type: *O. lintneri*.
634. *lintneri* Grt. New York; New Jersey.
 Gen. *Heliophila* Hübn. Tent. 1806.
 = *Leucania Ochs.* 1816.
 Type: *H. pallens* L.
635. *pallens* Linn. North America; Europe.
 636. *oxygala* Grt. Colorado.
 637. *praegracilis* Grt.* Colorado; Idaho; New Mexico.
 638. *bicolorata* Grt. Colorado; Arizona; New Mexico.
 639. *patricia* Grt. Colorado; New Mexico.
 640. *pertracta* Morr. „Pennsylvania“.
 641. *rubripennis* G. & R. Texas.
 642. *rufostriga* Pack. „Labrador“.

643. *albilinea* Hübn. Canada to Southern States.
diffusa Wlk. (*Leucania*.)
moderata Wlk.
harveyi Grt.

644. *ligata* Grt. Texas; Colorado; Florida.
 645. *dia* Grt. California.
 646. *extincta* Gn. Maine to Texas.
linita Gn.
scirpicola Gn.
amygdalina Harv.

647. *multilinea* Wlk. Can. to Middle States.
lapidaria Grt.

648. *phragmatidicola* Gn. Can. to Southern States.
 649. *texana* Morr. „Texas“.
 650. *juncicola* Gn. Southern States.
adjuta Grt.

651. *farcta* Grt. California.
 652. *insueta* Gn. Canada to Colorado.
 var. *adonea* Grt.

653. *commoides* Gn. Canada to So. States; New Mexico.
 654. *flabilis* Grt. Long Island, New York.
 655. *rimosa* Grt. Maine.
 656. *unipuncta* Haw. Canada to Texas, west to Rocky Mts.
extranea Gn.

657. *subpunctata* Harvey. Texas.
 658. *pilipalpis* Grt. Florida.
 659. *pseudargyria* Gn. Canada to Texas, west to Rocky Mts.
 var. *obusta* Gn.
 var. *callida* Grt.

*) The specimen marked "gracillima, type", in Mus. Comp. Zool is the identical type of this species. The name was changed in press. I regard the species as distinct from *bicolorata*. I adopt Smith's references of Guenée's species, though their correctness is not beyond reasonable doubt.

660. ebriosa Gn. „Am. Sept.“ an spec. Am.?

Gen. **Zosteropoda** Grt. 1874.

Type: Z. hirtipes.

661. hirtipes Grt. California.

Gen. **Ufens** Grt. 1873.

Type: U. satyricus.

662. sagittarius Grt. California.

663. plicatus Grt. Canada to California.

664. unicolor Grt. Illinois; Colorado.

665. satyricus Grt. Canada to Middle States.

Gen. **Pteroscia** Morr. 1874.

Type: P. atrata.

666. atrata Morr. Mt. Washington, N. H.

Trib. *Scolecocampini*.

= *Scolecocampinae* Grt. 1883.

Gen. **Scolecocampa** Gn. 1852.

Type: S. ligni.

667. liburna Geyer. Canada to Florida, west to Rocky Mts.
ligni Gn.

Gen. **Eucalyptera** Morr. 1857.

Type: E. bipuncta.

668. obscura Grt. Arizona.

669. bipuncta Morr. Mass. to Florida.

Gen. **Doryodes** Gn. 1857.

Type: D. acutaria.

670. bistrialis Geyer. Canada to Southern States.

acutaria H.-S. (*Ligia*)

divisa Wlk. (*Thermma*)

promptella Wlk. (*Tunza*)

671. spadaria Gn. „Florida“.

Gen. **Phiprosopus** Grt. 1872.

= *Sudariophora* Zell. 1872.

672. callitrichoides Grt. New York to Texas.
nasutaria Zell.

Gen. **Amolita** Grt. 1874.

Type: A. fessa.

673. fessa Grt. Eastern to So. States; Colorado.

Gen. **Cilla** Grt. 1880.

Type: C. distema.

674. distema Grt. Texas.
Trib. *Balsini*.

Gen. **Balsa** Wlk. 1860.

Type: B. obliquifera.

= *Nolaphana* Grt. 1873.

675. malana Fitch. Canada to Southern States.
obliquifera Wlk.

676. *triquetra* Fitch. "New York".
677. *labecula* Grt. New York to Texas.
 Subgen. *Gargaza* Wlk.
 = *Asisyra* Grt.
 Type: *B. tristigella*.
678. *tristrigella* Wlk. Eastern States to Texas.
 _{zelleri} Grt. (*Nolaphana*)
 malana + Zell. (*Nola*)
 Trib. *Caradrinini*.
 Gen. **Catabena** Wlk. 1865.
 Type: *C. lineolata*.
 = *Adipsophanes* Grt. 1873.
679. *lineolata* Wlk. Canada to California.
 miscellus Grt.
680. *terminella* Grt. Texas.
 Gen. **Crambodes** Gn. 1852.
 Type: *C. talidiformis*.
 = *Carvanca* Wlk. 1856.
681. *talidiformis* Gn. Canada to Colorado.
 conjugens Wlk.
 Gen. **Fotella** Grt. 1882.
 Type: *F. notalis*.
682. *notalis* Grt. Arizona.
 Gen. **Caradrina** Ochs. 1816.
 Type: *C. respersa*.
683. *miranda* Grt. New York to California.
684. *meralis* Morr. Canada to New Mexico.
 bilunata Grt.
685. *tarda* Gn. "North America".
686. *derosa* Morr. "New Jersey".
687. *multifera* Wlk. Canada; Middle States to Illinois.
 fidicularia Morr.
688. *subaquila* Harvey. Texas.
689. *conviva* Harvey. Texas.
690. *fragosa* Grt. Arizona.
691. *extimia* Wlk. Colorado to California.
 civica Grt.
 Gen. **Pyrophila** Hübn. 1806.
 Type: *P. pyramidea*.
 = *Amphipyra* Ochs. 1816.
692. *tragopoginis* Linn. North America and Europe.
 repressus Grt.
693. *gabella* Morr. Middle States to California.
694. *triqueta* Grt. Arizona.
695. *pyramidooides* Gn. Can.; Atlantic States to Colorado.
 var. *inornata* Grt.
 ab. *conspersa* Riley.
 Gen. **Anorthodes** Sm. 1891.

696. *prima* Sm. Ohio; Southern States.
 an *Car. tarda* Gn.?
 Trib. *Orthosiini* Grt. 1890.
 = *Taeniocampinae et Orthosiinae* Grt. 1883.
 Gen. ***Orthodes*** Gn. 1852.
 Type: *O. infirma*.
697. *crenulata* Butl. Canada to Texas. -
infirma var. A. Gn.
infirma + Sm. Proc. N. M. XII, 471.
698. *cynica* Gn. Canada to Colorado.
candens Gn.
tecta Wlk.
699. *enervis* Gn.*) Canada, southwardly.
vecors Gn.
nimia Gn.
togata Wlk. (also *velata* and *prodeuns* Wlk.)
 var. *nitens* Grt.
 aberr. *griseocineta* Harvey.
700. *virgula* Grt. Arizona; Colorado.
701. *irrorata* Sm. Washington; Br. Columbia.
702. *puerilis* Grt. California.
 Gen. ***Himella*** Grt. 1874.
 Type: *H. fidelis*.
703. *contrahens* Wlk. Canada to New Mexico.
theacata Morr.
704. *intractata* Morr. Mass.; New York; Illinois.
fidelis Grt.
 Gen. ***Crocigrapha*** Grt. 1875.
 Type: *C. normani*.
705. *normani* Grt. Canada to Middle States.
 Gen. ***Graphiphora*****) Hüb. 1806.
 Type: *G. gothica*.
 = *Taenioecampa* Gn. 1839.
706. *furfurata* Grt. Atlantic States to California.
707. *peredia* Grt. Eastern States.

*) According to the custom now prevalent in Europe changes in name proposed by the Author in the same work must be respected. All changes proposed by Guenée in his third Volume should be followed. Indeed there is no reason why they should not, since the duplication of specific names is a manifest evil.

**) The use of *Graphiphora* for Agrotid forms is due to Ochsenheimer's misapplication of Hübner's term, Sch. Eur. 4, 68, 1816. Nearly every species of Ochsenheimer's genus *Graphiphora*, is an *Agrotis* in sensu Lederer. Ochsenheimer's genus *Agrotis* contains Hübner's type of that genus, but also a number of species quite unrelated in structure. Ochsenheimer refers Hübner's type of *Graphiphora* to *Episema*, p. 65, and cites also Hübner's collective term in brackets. This irregular course has caused all the confusion in European literature in the use of these terms.

708. <i>perbrunnea</i> Grt.	California.
709. <i>uniformis</i> Sm.	Arizona.
710. <i>palilis</i> Harvey.	Texas.
711. <i>trifascia</i> Sm.	Colorado.
712. <i>carminata</i> Sm.	Colorado.
713. <i>columbia</i> Sm.	Br. Columbia.
714. <i>eulea</i> Gn. <i>modifica</i> Morr. var. <i>consopita</i> Grt.	Canada to Arizona.
715. <i>rufula</i> Grt.	California; Colorado.
716. <i>perforata</i> Grt.	Arizona.
718. <i>oviduea</i> Gn. <i>capsella</i> Grt. var. <i>orobia</i> Harvey.	Canada to Florida.
718. <i>utahensis</i> Sm.	Utah.
719. <i>curtica</i> Sm.	California.
720. <i>incineta</i> Morr.	Eastern States to Colorado.
721. <i>suffusa</i> Sm.	Colorado; Arizona.
722. <i>obtusa</i> Sm.	Arizona.
723. <i>pectinata</i> Sm.	California.
724. <i>annulimacula</i> Sm.	Texas.
725. <i>addenda</i> Sm.	California.
726. <i>terminata</i> Sm.	So. California.
727. <i>subfuscula</i> Grt.	Oregon; Montana.
728. <i>arthrolita</i> Harvey.	California.
729. <i>agrotiformis</i> Grt.	Colorado.
730. <i>pacifica</i> Harvey.	Colorado; California.
731. <i>alia</i> Gn.	Canada to Southern States.

instabilis + Fitch.

insciens Wlk.

var. *hibisci* Gn.

confluens Morr.

732. *rubrescens* Wlk.

venata Sm.

733. *subterminata* Sm.

Canada; Eastern States.

Eastern and Middle States.

734. *garmani* Grt.

Illinois; Iowa.

735. *praeses* Grt.

California.

736. *planalis* Grt.

New Mexico.

737. *revicta* Morr.

„Illinois“.

738. *styracis* Gn.

„Georgia“.

Gen. *Acerra* Grt.* 1874.

Type: A. *normalis*.

*) In reply to Smith Cat. 207, I would state that *Stretchia* is almost certainly later of issue than *Acerra*, Sept. 1874. To the best of my belief Edwards' paper was not really issued before 1875. Then, that I consider *S. plusiiformis*, with its pectinate antennae, as generically distinct from *normalis*, with its simple antennae. A structural difference between *Stretchia plusiiformis* and *Perigrapha* I have not been able to verify.

739. *normalis* Grt. California.
 740. *inferior* Sm. California.
 741. *muricina* Grt. Oregon.
 742. *behrensiiana* Grt. California.
 743. *variabilis* Sm.* Colorado.
 744. *pulchella* Harvey. California.
 745. *erythrolita* Grt. California.
 746. *transparens* Grt. Washington.

Gen. ***Perigrapha*** Led. 1857.

= *Stretchia* Hy. Ed. 1874?

747. *plusiiformis* Hy. Ed. Nevada; Colorado.
 748. *prima* Sm. California.

Gen. ***Perigonica*** Sm. 1890.

749. *angulata* Sm. California.
 750. *fulminans* Sm. Colorado.

Gen. ***Trichoclea*** Grt. 1883.

Type: *T. decepta*.

751. *decepta* Grt. Arizona.
 752. *edwardsii* Sm. California.
 753. *antica* Sm. California.
 754. *postica* Sm. Colorado.

Gen. ***Trichocosmia*** Grt. 1883.

Type: *T. inornata*.

755. *inornata* Grt. Arizona.

Gen. ***Trichorthosia*** Grt. 1883.

Type: *T. parallela*.

756. *parallela* Grt. New Mexico.

Gen. ***Metalepsis*** Grt. 1875.

Type: *M. cornuta*.

757. *cornuta* Grt. California; Washington.

Gen. ***Pseudoglaea*** Grt. 1876.

Type: *P. blanda*.

758. *blanda* Grt. Colorado; Texas; California.

var. *taedata* Grt.

var. *decepta* Grt.

Gen. ***Pseudorthosia*** Grt. 1874.

Type: *P. variabilis*.

759. *variabilis* Grt. Colorado; California.

Gen. ***Choephora*** G. & R. 1868.

Type: *C. fungorum*.

760. *fungorum* G. & R. Eastern and Middle States.

Gen. ***Zotheca*** Grt. 1874.

Type: *Z. tranquilla*.

*) The persistent duplication of specific titles in the Agrotidae by Mr. Smith is a source of confusion and a positive detriment to the science. Even names which I am the first to use in the family are duplicated by him. The rule of Guenée that no two species should bear the same title is commendable. Such duplication occurs only in my writings accidentally and I have always tried to avoid it.

761. *tranquilla* Grt. California.
sambuci Behr.
var. *viridula* Grt.
Gen. **Cosmia** Hbn. 1806.
Type: *C. affinis*.
762. *orina* Gu. Canada to Texas; California.
var. *calami* Harvey.
? *canescens* Behr.
Gen. **Ipimorpha** Hbn. 1818.
Type: *S. subtusa*.
= *Plastenis* Boisd.
763. *pleonectusa* Grt. Eastern and Middle States to Colorado.
aequilinea Sm.
764. *subvexa* Grt.* Texas.
Gen. **Trileuca** Grt. 1883.
Type: *T. buxea*. (Sm. restr.)
765. *buxea* Grt. Texas.
766. *dentalis* Sm. Texas.
767. *gulnare* Streck. Pennsylvania; Illinois.
Gen. **Atethmia** Hbn.**) 1818.
Type: *A. subusta*.
767. *subusta* Hbn. Florida; Texas; Mexico southwardly.
769. *inusta* Gn. Same localities.
an spec. dist.?
770. *rectifascia* Grt. Middle and Southern States.
Gen. **Cea** Grt. 1883.
771. *immaculata* Grt. Arizona.

*) My type should be in Brit. Mus.; I am in some doubt that it represents a species really distinct from the preceding. From an examination of the type specimen of *Mesogona intexta* Harvey, I came to the conclusion that the example had been remounted and that it was of European origin, referable to *M. oxalina* Hbn.

**) The type of *Atethmia* Verz. 238, is wrongly taken by me in 1874 as *xerampelina*. Guenée makes this in 1852 the type of *Cirroedia*. Hence *Atethmia* must be retained for *subusta* and our N. American species. Our North American *Eucirroedia pampina* seems to me generically distinct from the European *Cirroedia xerampelina* by the more robust form and the shape of external margin of primaries. The type of *Cosmia* is *C. affinis* Hbn. Tent. 1806. Ochsenheimer includes six dissonant species under *Cosmia* in 1816, citing Hübner for the name. Henceforth the name becomes misapplied for the structural type *paleacea*. Whether our North American species *C. orina* is congeneric with *Cosmia affinis*, I cannot now decide; it seems to me not. *Calymnia* Hbn. Verz. 1818, appears to me a synonym of *Cosmia* Hbn. 1806. With the type of *Cosmia (affinis)* Hübner includes *trapezina*, apparently a congeneric species. *Paleacea* is sole species therefore type of *Enargia*. Hübner, in the Verzeichniss, divides the species referred by Ochsenheimer to *Cosmia*, under the genera *Enargia* (*paleacea*), *Calymnia* (*trapezina*, *affinis*, this latter the true type of *Cosmia*) and *Eustegnia* (*diffinis*, *pyralina*). With regard to *Cosmia perophoroides* Strecke, cited here by Smith, it is either the Notodontid *Hyparpax aurora* or a closely related species of *Hyparpax*; see my Ill. Essay 45, 1852.

Gen. **Enargia** Hbn. 1818.Type: *E. paleacea*.

772. *paleacea* Esp. Europe and North America.
discolor Wlk. (*Mythimna*.)
infumata Grt.

Gen. **Cleoceris** Boisd. 1829.Type: *C. viminalis*.

773. *onychina* Gn. „North America“.
 774. *elda* French. California.
 775. *rectifascia* Sm. California.
 776. *curvifascia* Sm. California.

Gen. **Anchocelis** Gn. 1839.

777. *digitalis* Grt. Eastern and Middle States.

Gen. **Dyschorista** Led.* 1857.Type: *D. suspecta*.

778. *discivaria* Wlk. Canada to Middle States.
gentilis Grt.
 var. *perbellis* Grt.

Gen. **Orthosia** Ochs. 1816.Type: *O. lota*.

779. *purpura* Grt. California.
 var. *crispa* Harvey.
 780. *decipiens* Grt. Indiana.
 781. *ralla* G. & R. Eastern and Middle States.
 782. *bicolorago* Gn. Canada to Middle States.
 typ. form *ferruginoides* Gn.
 var. *bicolorago* Gn.
 spureata Walk.

783. *euroa* G. & R. Canada to Colorado.
 puta G. & R. (nom. rej. auct.)

784. *inops* Grt. Maine.
 785. *hamifera* Grt. California.
 786. *aurantiago* Gn. Eastern to Southern States.
 illitterata Grt. (*Pyrrhia*.)
 differata Morr. (*Orthosia*.)
 illinoiensis Fr. (*Heliothis*.)

787. *americana* Morr. „New York“.

788. *posticata* Harvey. Texas.

789. *citima* Grt. Arizona.

790. *conradi* Grt. Eastern and Middle States.

791. *helva* Grt. Canada to Colorado.

792. *lntosa* Andrews. Canada to Middle States.

793. *belangeri* Morr. „Canada“.

794. *immaculata* Morr. „Nevada“.

*) *Parastichtis* Hübn. 1818 is a mixed genus; it includes the type of *Dyschorista*, but whether it should be restricted to this type I cannot quite satisfactorily ascertain. I leave however our American species as referred by Morrison as the safest course.

795. *chloropha* Hbn. "Georgia".

Gen. **Homoglaea** Morr. 1875.

Type: *H. hircina*.

796. *hircina* Morr. Canada to Middle and Western States.

797. *carnosa* Grt. Eastern and Middle States.

Gen. **Glaea** Hbn. Tent. 1806.

= *Cerastis* Ochs. 1816.

Type: *G. vaccinii*.

= *Orrhodia* Hbn. 1818.

798. *viatica* Grt. Canada to Southern States.

799. *inulta* Grt. Canada to Southern States.

800. *olivata* Harvey. California.

801. *signata* French.*
an *anchoceliooides* Gn.?

802. *sericea* Morr.** (Unidentified.)

803. *californica* Sm. California.

Gen. **Epiglaea** Grt. 1878.

Type: *E. apiata*.

804. *pastillicans* Morr. Eastern to Middle States.

805. *tremula* Harvey. Texas.

806. *venustula* Grt. Eastern to Southern States.

sericea + Auct.
+

807. *apiata* Grt. Eastern to Middle States.

808. *decliva* Grt. Canada to Southern States.

Gen. **Xanthia** Hbn. Tent. 1806.

Type: *X. fulvago* (*cerago*).

809. *flavago* Fabr. North America and Europe.

togata Esp.

silago Hbn.

*) This species I had identified with Guenée's *Cerastis*, of which genus it has the structural characters. Mr. Smith found a specimen of *Agrotis cupida* bearing the label in coll. Brit. Mus., but Guenée's type must be examined in coll. Oberthür before one can credit such a mistake on Guenée's part. Mr. Smith says that Guenée's description would be distinctly applicable were the generic reference correct.

**) The identification of this name with my *Epiglaea venustula* came to me from Albany collectors. From Morrison's description I have shown the absolute impossibility that Morrison could have had my *venustula* before him. The markings described make it probable that the insect described as *sericea* is not a *Glaea* at all. Where Morrison's type is I know not, nor do I remember I ever saw it. Mr. Smith's references probably all belong to *venustula* which he identifies as *sericea*. I regard *Orrhodia* as a synonym of *Glaea* and all the species here cited as congeneric with the European, Stand. Cat. 118. I distinctly oppose Mr. Smith's opinion that the Tentamen must be rejected. Unless we admit it there is no authority for a number of names now in use.

Gen. **Jodia** Hbn. 1818.

Type: *J. croceago*.

= *Hoporina* Boisd.

810. *rufago* Hbn. Canada to Southern States.
honesta Wlk.

Gen. **Eucirroedia** Grt. 1875.

Type: *E. pampina*.

811. *pampina* Gn. Canada to Virginia; Western States.

Gen. **Scoliopteryx** Germ. 1812.

Type: *S. libatrix*.

812. *libatrix* Linn. North America and Europe.

Gen. **Scopelosoma** Curtis 1838.

Type: *S. satellitia*.

= *Dichagramma* Grt. 1864.

813. *moffatiana* Grt. Canada to Southern States.

814. *indirecta* Wlk. Canada to Southern States.
graefiana Grt.

815. *pettiti* Grt. Canada to Middle States.

816. *ceromatica* Grt. Canada to Middle States.

817. *tristigmata* Grt. Canada to Middle States

818. *walkeri* Grt. Canada to Texas.

819. *sidus* Gn. Canada to Texas.

vinulenta Grt.

820. *morrisoni* Grt. Canada to Middle States.

821. *devia* Grt. Canada to Middle States.

Gen. **Litholomia** Grt. 1875.

Type: *L. napaea*.

822. *napaea* Morr. Canada to California.

823. *dunbari* Harvey. Vancouver.

Gen. **Lithophane***) Hübn. 1818.

Type: *L. socia* (*petrificata*).

= *Xyline* Auct. nec *Xyline* Hübn.

824. *disposita* Morr. Canada to Middle States.

825. *hemina* Grt. Eastern and Middle States.

826. *petulca* Grt. Canada to Middle States.

signosa + Sm.
_{+ Sm.}

827. *signosa* Wlk. Canada to Colorado.

innominata Sm.

828. *patefacta* Wlk. Canada.

829. *ferrealis* Grt. Canada to Middle States.

830. *gausapata* Grt. California.

831. *bethunei* G. & R. Canada to Middle States.

832. *oriunda* Grt. Canada; Illinois; Wisconsin.

833. *semiusta* Grt. Canada to Middle States.

*) For my argument as to the correct name for this genus and for the synonymy of the species see my paper in Canadian Entomologist 79, 1894.

834. *contenta* Grt. California.
835. *fagina* Morr. Eastern and Middle States.
836. *oregonensis* Harvey. Oregon; California; Colorado.
837. *georgii* Grt. Canada to Colorado.
838. *antennata* Walk. Canada to Nebraska.
 cineraea Riley.
839. *laticinerea* Grt. Canada to Western States.
840. *grotei* Riley. Canada to Western States.
 || *cinerosa* Grt.
841. *unimoda* Lintn. Canada to Middle States.
842. *tepida* Grt. Canada to Middle States.
843. *baileyi* Grt. Middle States.
844. *querquera* Grt. Middle to Western States.
845. *viridipallens* Grt. Eastern and Middle States.
846. *levida* Lintn. Canada to Middle States.
847. *thaxteri* Grt. Canada to Middle States.
848. *pexata* Grt. Canada to Washington.
 var. *washingtonia* Grt.

Gen. **Euharveya** Grt. 1894.
Type: *E. carbonaria*.

849. *carbonaria* Harvey. California; Colorado.

Gen. **Pleroma** Sm. 1891.
Type: *P. obliquata*.

850. *conserta* Grt. Washington.
851. *obliquata* Sm. California; Colorado.
an spec. praec.?

Gen. **Lathosea** Grt. 1881.
Type: *L. pulla*.

852. *pullata* Grt. Oregon; Colorado.
 pulla Grt. (nom. rej. auct.)

Gen. **Lithomia** Hbn. 1818.
Type: *L. solidaginis*.

853. *germana* Morr. Canada to Middle States.
an *solidaginis*?

Gen. **Calocampa** Steph. 1829.
Type: *C. vetusta*.

854. *nupera* Lintn. Canada to Nebraska.
an *vetusta*?
855. *cineritia* Grt. Canada to California; Oregon.
 var. *thoracica* Put.-Cr.
856. *brucei* Sm. Colorado; Rocky Mts.
857. *curvamacula* Morr. Canada to Oregon.

Gen. **Morrisonia** Grt. 1874.Type: *M. evicta*.

858. *evicta* Grt.*)) Canada to Middle States.
var. *vomerina* Grt.

sectilis + Sm.
+

859. *peracuta* Morr. California (?).
860. *infidelis* Grt. Michigan.
861. *mucens* Hbn. Middle States to Texas.
 spoliata Wlk. (*Xylina*).
 ? *sectilis* Gn. (*Xylophasia*).
862. *rileyana* Sm. Missouri; Texas.
863. *bisulea* Grt. Arizona.
864. *confusa* Hbn. Canada to Texas; California.
 infructuosa Wlk. (*Xylina*).
 multifaria Wlk. (*Xylina*).)

Gen. **Xylomiges** Gn. 1852.Type: *X. conspicillaris*.

865. *hiemalis* Grt. California.
 californica Behr.
866. *peritalis* Sm. Colorado; Oregon.
867. *simplex* Wlk. California; Vancouver.
 crucialis Harvey.
868. *curialis* Grt. California.
869. *dolosa* Grt. Colorado; Maine; Mts. New Hampshire and New York.
870. *rubrica* Harvey. California; Oregon.
871. *perlubens* Grt. Colorado; Oregon; California.
 subapicalis Sm.
872. *ochracea* Riley. California.
873. *patalis* Grt. Vancouver; California.
 fletcheri Grt.
874. *tabulata* Grt.**) New York.

*) Mr. Butler refers the poor specimen labelled *sectilis* Gn., in coll. B. Mus. to *mucens*. Mr. Smith says it is a "poor specimen of the normal form of *evicta* and that it would have been utterly impossible to recognize the species from the description alone". To this I say that there is no proof that this "poor specimen" was Guenée's "type" and that, taking Mr. Smith's assertion as true, the name *sectilis* has only one leg to stand on viz: the labelled specimen in Brit. Mus., seeing that names must depend upon descriptions not upon specimens produced as "types". Mr. Smith seems to believe that specimens shown him as "types" are always genuine and thenceforth writes about them as replacing all other evidence, or as if he had been present when the author drew up his description.

**) The two genera *Morrisonia* and *Xylomiges* have hairy eyes and might be both placed among the hairy-eyed Orthosians where I placed the first in my catalogue of 1890. But why they are placed by Mr. Smith between the naked eyed genera *Lithophane* and *Calocampa* is "a mystery". Since Mr. Smith has shown the two to be more nearly related than I knew and has corrected my reference of three species of the former genus, I allow both to stand here together and close the Orthosian series which stands in need of a full comparison with the European generic types.

Tribe Cleophanini.

Gen. **Cleophana** Bdv. 1832.

875. *eulepis* Grt. Oregon; California.
 876. *antipoda* Streck. Colorado; Arizona.

Tribe Cuculliini.

Gen. **Cucullia** Schrank 1802.Type: *C. verbasci*.

877. *convexipennis* G. & R. Canada to Middle States.
 878. *montanae* Grt. Colorado; Montana.
 879. *similaris* Sm. Colorado.
 880. *obscurior* Sm. Colorado.
 881. *asteroides* Guen. Canada to Nebraska.
 882. *postera* Guen. Eastern to Middle States.
 883. *florea* Guen. Eastern and Middle States.
 884. *laetifica* Lintn. Texas; Arizona.
 cita Grt.
 hartmanni Fr.
 885. *speyeri* Lintn. Canada to Nebraska.
 886. *dorsalis* Sm. Colorado.
 887. *intermedia* Speyer. Canada to Southern States.

umbratica⁺ Gn.

888. *cinderella* Sm. Colorado.
 889. *bistriga* Sm. Colorado.
 890. *serraticornis* Lintn. California.
 matricariae Behr.

Trib. Euteliini.

Gen. **Eutelia** Hübn. 1818.Type: *E. adulatrix*.= *Eurhipia* Boisd.= *Ripogenus* Grt.

891. *pulcherrima* Grt. Middle States.
 dentifera Wlk.

Gen. **Marasmalus** Grt. 1882.Type: *M. ventilator*.

892. *ventilator* Grt. Canada to Texas.
 893. *inficitus* Wlk. Canada to Texas.
 histrio Grt.

Gen. **Paectes** Hbn. 1818.= *Ingura* Gn. 1852.Type: *P. pygmaea*.

894. *abrostoloides* Gn. Canada to Southern States.
 producta Wlk.
 895. *delineata* Gn. Canada to Southern States.
 896. *declinata* Grt. California; Colorado.

897. *pygmaea* Hbn. *) Southern States; New Mexico.

fuscescens Wlk.

abrostella Wlk.

praepilata Grt.

898. *flabella* Grt. Kansas.

899. *oculatrix* Gn. Canada to Southern States.

Trib. *Anomiini*.

Gen. ***Anomis*** Hbn. 1818.

Type: *A. erosa*.

900. *erosa* Hbn. Eastern to Southern States.

901. *exacta* Hbn. Southern States.

texana Riley.

902. *luridula* Gn. Gulf States; West Indies.

derogata Wlk.

903. *conducta* Wlk. Texas; Mexico southwardly.

hostia Harv.

Gen. ***Aletia*** Hbn. 1818.

Type: *A. argillacea*.

904. *argillacea* Hbn. **) South Am.; West Ind.; Migratory to Canada.

xylina Say. (*Noctua*.)

grandipuncta Gn. (*Anomis*.)

bipunctina Gn. (*Anomis*.)

Gen. ***Pteraelothix*** Grote 1873.

Type: *P. bullula*.

905. *bullula* Grt. Southern States.

*) A renewed study of Hübner's figure makes it certain that the insect is an *Ingura*; and so highly probable that it is intended for my *praepilata* that I venture to restore the name.

**) The so-called "Cotton Worm", which destroys the foliage of the Cotton Plant. In 1874 I read an original paper before the American Association in which I showed that the insect is migratory, does not belong properly to the North American Fauna, but comes to us every year from the south. It obtained an extensive field for existence within the political limits of the United States with the cultivation of cotton in the Southern States at the close of the last century, previous to which it had devasted the plantations in Martinique. I showed that it was winter-killed over most of the North American territory over which it flies and suggested for the Department of Agriculture the ascertaining of the zone of permanent occupation, if such zone exists with us. This may roughly correspond with the tropical region of Le Conte's faunal map. No alternative food plant for the Cotton worm in the North or South is yet discovered. Mr. C. V. Riley first treated the insect as indigenous (Missouri Reports): next he improperly criticized my observations: now he seems to claim them as his own. The sight of an Alabama plantation full of the disclosing chrysalids of the first brood, suddenly in three or four days free from the moths which had all wandered northward, confirmed me in my theory. See Proc. Am. Ass. 1874: State Reports of Alabama; Ill. Essay pp. 18 et seq.: Verhandl. Gesell. Nat. Aerzte, Bremen, 1890. The North American Fauna consist of three elements, descendants from a preglacial circumpolar fauna, an indigenous survival, a yearly immigration from tropical America which in part has secured a foot hold.

- Gen. **Amyna** Gn. 1852.
 = *Chytoryza* Grt. 1876.
906. *orbica* Morr. Southern States to Kansas.
tecta Grt.
 Tribe *Litoprosopini*.
- Gen. **Litoprosopus** Grt.* 1869.
 Type: *L. futilis*.
907. *futilis* G. & R. Florida; Georgia.
 Tribe *Plusiini*.
- Gen. **Nipista** Walk 1857.
 Type: *N. tigris* Butl. restr. 1892.
 = *Plagiola* Grt. 1890.
908. *tigris* Gn. Southern States.
lineata Wlk.
 Gen. **Ogdoonta** Butl. 1891.
 Type: *O. cinereola*.
909. *cinereola* Gn. Canada to Texas.
atomaria Walk. (Miana.)
910. *carneola* Sm. New Mexico.
 Gen. **Deva** Wlk. 1857.
 Type: *D. purpurigera*.
911. *purpurigera* Wlk. Canada to New Mexico.
 912. *morigera* Hy. Ed. Colorado.
 913. *palligera* Grt. California; Coloradoa.
- Gen. **Behrenzia** Grt. 1875.
 Type: *B. conchiformis*.
914. *conchiformis* Grt. California; Oregon.
 Gen. **Abrostola** Ochs. 1816.
 = *Habrostola* Sodoff.
 Type: *A. urticae*.
915. *ovalis* Gn. Canada to Middle States.
 916. *urentis* Gn. Canada to Middle States.
 Gen. **Plusia** Hüb.**) 1806.
 Type: *P. chrysitis*.

*) To this genus belong the closely allied *L. configens* Wlk., from Central America and *L. hatuey* Poey, from Cuba.

**) The earliest mention of *Plusia* may be by Fabricius in his *Systema Glossatorum*, a work I have not seen and which is said to be "unpublished". But Ochsenheimer, in 1816, cannot be credited with the term, because in his work 4,89, he distinctly credits Hübner (*Tentamen*, 1806), and Hübner fixes the generic type. Here the *Tentamen* again lifts us out of all difficulty and silences dispute. With our 3 N. Am. species here referred to the subgenus *Plusia*, the European *Chrysitis*, *Zosimi* and *Chryson* appear to agree structurally. The other European groups do not appear to have been compared accurately with the American and, until that is done, the names in the *Verzeichniss* cannot be correctly applied to our species. *Euchalcia* Hüb., is a name for an European group seemingly not American. I arrange our species therefore under *Autographa* Hüb., with the type *gamma*, represented with us and from which the dissonant American groups must be separated by future systematists.

S. g. *Plusia* Hübn.

= *Agrapha* Hübn. 1818.

Type: *P. chrysitis*.

917. *aerea* Hübn. Canada to Texas; Colorado.

918. *aereoides* Grt. Canada to Texas; Colorado.

919. *balluca* Geyer. Canada to Middle States.

S. g. *Autographa* Hübn. 1818.

Type: *P. gamma* L.

920. *metallica* Grt. California (Mendocino).

921. *contexta* Grt. Canada to Middle States.

922. *putnami* Grt. Canada to Colorada.

923. *venusta* Wlk. Canada to Middle States.

striatella Grt.

924. *formosa* Grt. Eastern and Middle States.

925. *thyatiroides* Gu. Canada to Middle States.

926. *mappa* G. & R. Canada; Mt. Washington; North States.

927. *bimaculata* Steph.
 u-brevis Gn.

928. *biloba* Steph. Canada southwardly; California; Texas.

929. *verruca* Fabr. Eastern States to South America.

omega Hbn.

omicron Hbn.

?*omicron* Linn.

?*questionis* Tr.

930. *rogationis* Gn. New York to South America.

hamifera Wlk.

dyaus Grt.

931. *culta* Lint. „New York“.

laticlavia + Sm.

+ Sm.

932. *precationis* Gn. Canada southwardly.

933. *egena* Gn. Florida (Indian River).

934. *labrosa* Grt. California.

935. *flagellum* Wlk. Hudson's Bay to Eastern States.

monodon Grt.

936. *pseudogamma* Grt. Nova Scotia.

937. *ou* Gn. Middle and So. States; California.

 var. *californica* Spey.

 var. *russea* Hy. Ed.

938. *fratella* Grt. Texas; So. States.

939. *pedalis* Grt. Kansas.

940. *ni* Hübn. Europe and North Ameria.

brassicae Riley.

echinocystis Behr.

941. *oxygramma* Geyer. Southern States.

942. *scapularis* Hy. Ed. Washington.

943. *lenzi* French. „California“.

944. *u-aureum* Gn. Labrador; Greenland; Canada.
groenlandica Stand.
945. *mortuorum* Gn. Canada to Middle States.
946. *octoscripta* Grt. Canada; Anticosti to Middle States.
947. *falcigera* Kirby. „Nova Scotia“.
948. *rectangula* Kirby. „Canada“.
949. *vaccinii* Hy. Ed. Nova Scotia; Mts. in Northern States.
 an *falcigera*?
950. *selecta* Wlk. Hudson's Bay to Middle States;
 Colorado.
- viridisignata* Grt.
951. *angulidens* Sm. Colorado.
952. *celsa* Hy. Ed. Oregon.
953. *epigaea* Grt. Eastern and Middle States; Colorado.
954. *surena* Grt. Maine.
955. *basigera* Wlk. Middle and Southern States.
laticlavia Morr.
956. *ampla* Wlk. Hudson's Bay to Middle States.
957. *simplex* Gn. Hudson's Bay to New Mexico.
958. *pasiphiaeia* Grt. California.
959. *diasema* Bdv. Labrador; Lapland; Colorado.
960. *parilis* Hbn. Labrador; Lapland.
961. *snowi* Hy. Ed. New Mexico; Colorado.
962. *sackeni* Grt. Colorado.
963. ? *alterna* Streck. „Colorado“.
964. ? *corrusca* Streck. „Colorado“.
965. ? *accurata* Hy. Ed. „Washington“.

Gen. *Syngrapha* Hbn.* 1818.Type: *S. devergens*.= *Caloplusia* Sm. 1893.

966. *hohenwarthi* Hohenw. White Mts.; Labrador; Colorado;
 Europe.

divergens Fabr.

967. *devergens* Hbn. Colorado; Labrador; Europe.

968. *alticola* Wlk. Colorado; Rocky Mts.

ignea Grt.Trib. *Calpini*.= *Calpidae* Bdv.

*) Hübner proposes this term for the yellow winged *Plusias* and includes under it *Ain* and the two first here cited. *Ain* seems to be a normal *Plusia* allied to *P. sackeni*. Therefore Hübner's term must be used for the other species which Mr. Smith first shows to possess distinct structural features. The name is generally incorrectly cited "Hohenwarth" instead of "Hohenwarth". That Mr. Smith in his "researches among the ancients" pulls up at Staudinger is, perhaps, excusable. I have never seen the type of *alticola* Wlk. The type of *ignea*, to the best of my recollection, should still be in Philadelphia. Walker's description is not very clear and it may be he describes a different species. I do not remember at the moment where my material of *ignea* now in Brit. Mus. came from.

Gen. **Calpe** Tr.* 1825.Type: *C. capucina*.

969. *canadensis* Bethune. Canada to Middle States.
purpurascens Wlk.
sobria Wlk.

Gen. **Gonodonta** Hbn. 1818.

670. *unica* Neum. Florida (Indian River).

Gen. **Plusiodonta** Gn. 1852.Type: *P. compressipalpis*.

971. *compressipalpis* Gn. Canada to Southern States.
insignis Wlk.

Gen. **Hypsoropha** Hbn. 1818.Type: *H. monilis*.

972. *monilis* Fabr. Southern States to Kansas.
 973. *hormos* Hbn. Middle States to Texas.

Gen. **Hemiceras** Gn. 1852.

974. *cadmia* Gn. "Middle and Southern States".
obliquilinea Wlk.

Trib. **Stiriini**.Gen. **Basilodes** Gn. 1852.Type: *B. pepita*.

975. *pepita* Gn. Southern States to Colorado.
 976. *chrysopis* Grt. Arizona; Colorado; New Mexico.
 977. *territans* Hy. Ed. Arizona.
 978. *howardi* Hy. Ed. Arizona.
 979. *arizona* French. Arizona.
 980. *mirabilis* Neum. Arizona.

Gen. **Stiria** Grt. 1874.Type: *S. rugifrons*.

981. *rugifrons* Grt. Kansas; Colorado.
 982. *sulphurea* Neum. Arizona.
 983. *nanata* Neum. New Mexico.

Gen. **Stibadium** Grt. 1874.Type: *S. spumosum*.

984. *spumosum* Grt. Middle States to Colorado.
 985. *aureolum* Hy. Ed. Arizona.
 986. *curiosum* Neum. Arizona.
 987. *navium* Harvey. Texas.

Gen. **Plagiomimicus** Grt. 1873.Type: *P. ptyochromus*.= *Polenta* Morr. 1875.

988. *ptyochromus* Grt. Middle, Southern and Western States.
media Morr.

* According to Treitschke, *Calyptera* Ochs. 1816, is taken in the Mollusca. Hübner refers the species in 1816 (1818) to *Gonodonta* with four other, probably dissonant species, one of which must be taken as the type of *Gonodonta*.

989. *triplagiatus* Sm. New Mexico.
 990. *tepperi* Morr. Texas; Colorado.
 richi Grt.
 991. *expallidus* Grt. Montana; Colorado.
 992. *viridifera* Grt.*). Arizona.
 Gen. **Fala** Grt. 1875.
 Type: *F. ptycophora*.
 993. *ptycophora* Grt. California.
 Gen. **Acopa** Harvey 1874.
 Type: *A. carina*.
 994. *carina* Harvey. Texas.
 995. *perpallida* Grt. Kansas.
 996. *incana* Hy. Ed. Arizona.
 997. *pacifica* Hy. Ed. „Arizona“.
 Gen. **Neumoegenia** Grt. 1882.
 Type: *N. poetica*.
 998. *poetica* Grt. Arizona; Oregon.
 Trib. *Heliothini*.
 Gen. **Antapлага** Grt. 1877.
 Type: *A. dimidiata*.
 = *Eulithosia* Hy. Ed. 1884.
 999. *dimidiata* Grt. Colorado.
 1000. *biundulalis* Zell. Texas.
 1001. *composita* Hy. Ed. Arizona.
 1002. *thoracica* Hy. Ed. Arizona.
 1003. *sexseriata* Grt. Arizona.
 Gen. **Grotella** Harvey 1874.
 Type: *G. septempunctata*.
 1004. *septempunctata* Harvey. Texas; Colorado.
 1005. *dis**)* Grt. New Mexico; Arizona.
 Gen. **Pippona** Harvey 1875.
 Type: *P. bimatrata*.
 1006. *bimatrata* Harvey. Texas.
 Gen. **Bessula** Grt. 1881.
 Type: *B. luxa*.
 1007. *luxa* Grt. New Mexico; Colorado.
 Gen. **Oxytennis** Grt. 1882.
 Type: *O. advena*.
 1008. *advena* Grt. Arizona.

*) This is one of a few instances where, describing from a single type, and without the opportunity at the moment for a proper microscopical study, I have been misled by the habitual appearance of the species. Another is my *Agrotis planalis* which, according to Smith, is a *Graphiphora* (*Taeniocampa*). A third is my *Eustrotia mitographa*, referred by Smith to *Bomolocha*.

**) Galli se omnes ab Dite patre prognatos praedican, et seq. De bell. gall. VI., 18. The derivation of the name from "gloomy Dis" is obscured in writing the syllable with small initial letter.

Gen. **Nycterophphaeta** Sm.*) 1882.Type: *N. magdalena*.= *Epinyctis* Grt. 1882.

1009. *luna* Morr. Dakota; Montana; Colorado.
magdalena Hulst Sm.
notatella Grt.

Gen. **Copablepharon** Harvey 1878.Type: *C. absidum*.

1010. *absidum* Harvey. California; Oregon; Colorado.
grandis Streck.
1011. *subflavidens* Grt. Montana.
1012. *longipenne* Grt. Montana.
1013. *album* Harvey. Oregon; Colorado; Montana.

Gen. **Aedophron** Led. 1857.Type: *A. rhodites*.= *Thyreion* Sm. 1891.

1014. *pallens* Tepp. So. California.
1015. *snowi* Grt. Kansas.
1016. *rosea* Sm. Colorado.

Gen. **Chloridea** Westw. 1841.Type: *C. rheiae*.

1017. *virescens* Fabr. Canada to California; Southern States.
rheiae Abb. & Sm.
spectanda Strk.
? *subflexa* Gn.

Gen. **Heliochilus** Grt. 1865.Type: *H. paradoxus*.

1018. *paradoxus* Grt. Southern States; Colorado.
1019. *albidentina* Wlk. „Florida“.

Gen. **Heliothis** Hbn. 1806.Type: *H. dipsacea*.

1020. *armiger* Hbn. North America; Europe.
var. *umbrosus* Grt.

*) "Closely allied to *Cucullia* which it very much resembles superficially etc.: it agrees in many respects with *Cleophana* and should stand between that genus and *Cucullia*", Smith Brook. Bull. 45. This genus was described by me, almost at the same time as one of the white *Heliothinae* where Smith now places the insect. Smith's course with regard to this Noctuid affords a striking commentary upon the opening phrase of his Synopsis of the *Heliothinae*: "Under the term *Heliothinae* are grouped a number of genera etc. having a certain facies which enables the student to determine almost at a glance the species of the group", Trans. Am. Ent. Soc. 1882. — The statement that I described this species from the Neumoegen collection is incorrect. My type was purchased by me from the last Montana collection of Morrison and was unsexed. I could not then suspect it to be that author's *Cucullia luna*.

1021. *phlogophagus* G. & R. Canada; U. S. generally.
dipsaceus + Sm.
 var. *interjacens* Grt.
 var. *luteitinctus* Grt.
maritima + Sm.
1022. *scutosus* Fabr. North America; Europe.
nuchalis Grt.
1023. *suavis* Hy. Ed. „New Mexico“.
 Gen. **Pyrrhia** Hübn.* 1818.
 Type: *P. umbra* (*rutilago*).
1024. *umbra* Hufn. Eastern North America; Europe.
1025. *exprimens* Walk. Eastern North America.
angulata Grt.
1026. *stilla* Grt. Colorado; New Mexico; Western States.
 Gen. **Cirrhophanus** Grt. 1872.
 Type: *C. triangulifer*.
1027. *triangulifer* Grt. Middle States to Kansas.
pretiosa Morr.
1028. *duplicatus* Sm. Colorado.
 Gen. **Chamaeclea** Grt. 1883.
 Type: *C. pernana*.
1029. *pernana* Grt. Arizona.
 Gen. **Derrima** Wlk. 1857.
 Type: *D. stellata*.
 = *Philomma* Grt. 1864.
1030. *henrietta* Grt. Eastern and Middle States.
stellata Wlk. an var.?
 Gen. **Alaria** Westw. 1841.
 Type: *A. gaurae*.
1031. *gaurae* Abb. & Sm. Canada; U. S. east of Rocky Mts.
 Gen. **Rhodophora** Guen. 1852.
 Type: *R. florida*.
1032. *florida* Gn. Canada; U. S. east of Rocky Mts.
 Gen. **Oxylos** Grt. 1875.
 Type: *O. citrinellus*.
1033. *citrinellus* G. & R. Texas; Colorado.
 Gen. **Rhodosea** Grt. 1883.
 Type: *R. julia*.
1034. *julia* Grt. New Mexico; Arizona.

* Smith quotes Verz. 262, instead of 232; in fact his Catalogue contains a number of errors of citation which I have no space here to fully point out. In Smith's Revision of the Heliothinae he refused to consider the genus as distinct from *Heliothis*. Afterwards "as his ideas of types and other matters changed" he removed it bodily from the Heliothinae to the Orthosians.

Gen. **Rhododipsa** Grt. 1877.Type: *R. volupia*.

1035. *volupia* Fitch. Colorado; Texas.
1036. *miniana* Grt. New Mexico.

Gen. **Triocnemis** Grt. 1881.Type: *T. saporis*.

1037. *saporis* Grt. Colorado; Washington; California.

Gen. **Pseudaconta** Sm. 1882.Type: *P. crustaria*.

1038. *crustaria* Morr. Nebraska; Colorado.

Gen. **Graeperia** Grt. 1895.= || *Heliodora* Neum. 1891.Type: *G. magnifica*.

1039. *magnifica* Neum. Texas.

Gen. **Euleucyptera** Grt. 1865.Type: *E. cumatilis*.

1040. *cumatilis* Grt. Colorado; New Mexico.
sulmala Strk.

1041. *tenuescens* Grt. Arizona.

Gen. **Tricopis** Grt. 1874.Type: *T. chrysellus*.

1042. *chrysellus* Grt. Texas; Colorado; New Mexico.

1043. *hulstia* Tepp. Texas; Colorado.

1044. *aleucis* Harvey. Texas.

Gen. **Schinia** Hübn. 1818.Type: *S. gracilenta*.= *Tamila* Gn. 1852.Type: *S. nundina*.= *Lygranthoezia* G. & R. 1870.Type: *S. marginata*.

1045. *velaris* Grt. California.

ochreifascia Sm.

1046. *biundulata* Sm. „Colorado“.

1047. *sexplagiata* Sm. „Colorado“.

1048. *trifascia* Hbn. Atlantic States to Colorado.
lineata Wlk.

1049. *gracilenta* Hbn. Southern States.
oleagina Morr.

imperspicua Streck.

1050. *simplex* Sm. „Colorado“.

1051. *arefacta* Hy. Ed. Florida.

1052. *unimacula* Sm. „Colorado“.

1053. *obliqua* Sm. Arizona.

1054. *bifascia* Hbn. Southern States to Colorado.

1055. *nundina* Drury. Middle to Southern States.
nigrirena Haw.

1056. *parmeliana* Hy. Ed. „Maryland“.
 1057. *acutilinea* Grt. Colorado; Utah; Nevada.
 var. *separata* Grt.
 1058. *balba* Grt. Arizona.
 separata⁺ Sm.
 1059. *coercita* Grt. Arizona.
 1060. *walsinghami* Hy. Ed. Oregon.
 separata⁺ Sm.
 1061. *brucei* Sm. Colorado.
 1062. *lynx* Gn. Eastern to Southern States.
 1063. *roseitincta* Harvey. Texas; Colorado.
 exaltata Hy. Ed.
 1064. *saturata* Grt. Eastern States to Florida; California.
 rubiginosa Strk.
 1065. *diffusa* Sm. Colorado.
 1066. *sordida* Sm. Southern States.
 1067. *tertia* Grt. Texas.
 1068. *lanul* Streck. Texas.
 1069. *jaguarina* Gn. Southern States to Colorado.
 1070. *arcifera* Gn.*)
 var. *spraguei* Grt. ♂♀
 dim. form ♀ *arcifera* Gn.
 1071. *petulans* Hy. Ed. Florida.
 1072. *crenilinea* Sm. Texas.
 1073. *packardii* Grt. Texas; Arizona; Colorado.
 nobilis Grt.
 var. *mortua* Grt.
 1074. *bicuspidata* Sm. Southern Texas.
 1075. *thoreaui* G. & R. Middle to Southern States.
 1076. *marginata* Haw. Middle to Southern States.
 rivulosa Gn. (Anthoecia.)
 divergens Wlk. (Microphysa.)
 contracta Wlk. (Microphysa.)
 designata Wlk. (Euclidia.)
 1077. *digitalis* Sm. Texas.
 1078. *constricta* Hy. Ed. North Carolina.
 1079. *tuberculatum* Hbn. Middle to Southern States.
 dorsilutea Wlk.
 1080. *brevis* Grt. Middle States to New Mexico.
 var. *atrites* Grt.
 1081. *septentrionalis* Wlk. „Illinois“.
 1082. *concinna* Sm. Texas.

*) I figure in 1863 both sexes of *Spraguei*, with yellow secondaries. Therefore I cannot account for Smith's statement that the differences are sexual. I have never seen a male *arcifera* with black hind wings. If such exist, then the chances are that the two names refer to distinct species. The fore wings of both forms are quite similar.

1083. *errans* Sm. Arizona.
 1084. *inclara* Streck. "Texas".
 1085. *meskeana* Grt. Texas; Florida.
 fastidiosa Streck.
 var. *rufimedia* Grt.
 1086. *limbalis* Grt. Kansas.
 1087. *ultima* Streck. "Texas".
 1088. *siren* Streck. "Texas".
 1089. *nubila* Streck. "Texas".
 1090. *albafascia* Sm. "Utah".
 Gen. **Canidia** Grt. 1890.
 Type: *C. scissa*.
 1091. *scissa* Grt. Florida.
 Gen. **Eupanychis** Grt. 1890.
 Type: *E. spinosae*.
 1092. *spinosae* Gn. Canada; Eastern and Middle States.
 hirtella G. & R.
 Gen. **Porrima** Grt.* 1877.
 Type: *P. sanguinea*.
 1093. *sanguinea* Geyer. Southern States.
 carmosina Neum.
 1094. *gloriosa* Streck. Texas.
 sanguinea⁺₊ Neum.
 1095. *regia* Streck. Kansas; Texas; Colorado.
 Gen. **Trichosellus** Grt. 1890.
 Type: *T. cupes*.
 1096. *cupes* Grt. Texas; Colorado; California.
 crotchii Hy. Ed.
 Gen. **Dasypoudea** Sm. 1883.
 Type: *D. lucens*.
 1097. *lucens* Morr. Montana; Colorado; New Mexico.

*) On page 274 Mr. Smith cites "Oria Hbn. Verz. 238" as a generic synonym of *Schinia*. This seems incorrect. *Oria* Hbn. Verz. is erected solely for *musculosa*. It is the misapplication of Hübner's term by Geyer which is probably intended. The correct citation is "Oria Hbn. Verz. 240, No. 2388". Hübner himself indexes the species wrongly as 2368. I am not insisting here upon the validity of the genera erected by me at the expense of *Schinia* (*Lygranthoecia*) but I cite them for the purpose of keeping the application of the terms clear. As long before urged by me, the proper classification can only be accomplished when the armature of all the species has been minutely studied. Mr. Smith says that I have erected some of these genera on characters pointed out by himself. If so, it were a very modest return for the mass of information taken by him without proper credit from my writings. I have been unable to certainly identify a single Heliothid from Smith's figures or descriptions in Am. Ent. Soc.; I think the author of these figures, and the Plate in the Brooklyn Soc. Proc illustrating Mr. Hulst's synonym, should have refrained from a criticism of any of my figures in the III. Essay. These latter figures and the Plate issued by me at the same time in Papilio, II., seem simply the best illustrations of North American Noctuidae yet issued. They ought to be; they cost me £ 50.

- var. *luxuriosa* Grt.
1098. *meadii* Grt. Montana; Colorado.
Gen. **Pseudanthoecia** Sm. 1883.
Type: *P. tumida*.
1099. *tumida* Grt. Colorado.
Gen. **Stylopoda** Sm. 1891.
Type: *S. cephalica*.
1100. *cephalica* Sm. California.
Gen. **Copanarta** Grote 1895.
Type: *C. aurea*.
1101. *aurea* Grt. Southern Texas; Mexico.
1102. *falcata* Neum. "Arizona".
1103. *aterrima* Grt. California.
Gen. **Incita** Grt.* 1895.
Type: *I. aurantiaca*.
1104. *aurantiaca* Hy. Ed. California.
Gen. **Euros** Hy. Ed. 1881.
Type: *E. proprius*.
1105. *proprius* Hy. Ed. California.
Gen. **Pseudotamila** Sm. 1883.
Type: *P. vanella*.
1106. *vanella* Grt. Nevada; California.
1107. *perminuta* Hy. Ed. California.
Gen. **Dysocnemis** Grt. 1890.
Type: *M. belladonna*.
1108. *belladonna* Hy. Ed. Utah.
Gen. **Melaporphyria** Grt. 1874.
Type: *M. immortua*.
1109. *immortua* Grt. Eastern States to Colorado.
1110. *prorupta* Grt. California; Oregon.
venusta Hy. Ed.
- Gen. **Melicleptria****) Hbn. 1818.
Type: *M. cardui* (Grt. restr.)
= *Adonisea* Grt. 1875.
Type: *M. pulchripennis*.
1111. *celeris* Grt. California.

*) At Mr. Edwards request I examined the type of this species in his collection. As the result I stated to him that it was undescribed and seemed the type of a new genus allied to *Melicleptria*. I have since examined an extra American species which recalled our insect. Mr. Edwards seems to have thought it not sufficiently distinct from *Annaphila*, without having examined it properly I think. Mr. Smith says it is not an *Annaphila* but a *Heliothid*. According to my view *Annaphila* is (from the constricted eyes) to be regarded as one of the lower *Heliothini*.

**) In 1874, Bull. Buf. Soc. I., 116, I took this generic title with the type *M. cardui*, for our congeneric Am. species, and this course is followed by Smith. See also Bull. Buf. Soc. II., 220. Hübner's is a mixed genus, but, so far as I

1112. *pulchripennis* Grt. California; Colorado.
 1113. *graefiana* Tepper. California.
 1114. *villosa* Grt. Colorado; California.
 pauxillus Grt.
 1115. *persimilis* Grt. Colorado; California.
 1116. *suela* Grt. Colorado; California.
 var. *californiensis* Grt.
 1117. *honesta* Grt. Oregon.
 1118. *vacciniae* Hy. Ed. California.
 1119. *oregona* Hy. Ed. Colorado; Nevada; Oregon.
 ononis⁺ Sm.
 1120. *septentrionalis* Hy. Ed. „Hudson Bay Territory“.
 an *ononis*?
 Gen. ***Heliolonche*** Grt. 1873.
 Type: *H. modicella*.
 1121. *modicella* Grt. Colorado; California.
 Gen. ***Heliosea***^{*)} Grt. 1875.
 Type: *H. pictipennis*.
 1122. *pictipennis* Grt. California.
 Gen. ***Heliophana*** Grt. 1875.
 Type: *H. mitis*.
 1123. *mitis* Grt. Alabama; Texas.
 obliquata Sm.

understand the matter, contains only typical *Heliothis* and the *cardui* type. However I do not know No. 2577, and Smith seems to consider *ononis* as belonging to *Melaporphyria*, a genus I would restrict to *immortua*. The type of *Anthoecia* Gn. is also *cardui*. If *Melicleptra* cannot hold, besides Guenee's term, the genus *Adonisea* with the type *pulchripennis* must be considered. The future monographist of our *Heliothinae* must go carefully to work. If I have made too many genera for him, I have at least given the types of each and the matter must be decided when all the material is got together. My material was never sufficient.

*) Mr. Smith describes the fragmentary condition of the type in Brit. Mus. and delightfully remarks that "whether it was in that condition when the figure was made I can not say of course". No one calls upon him for his opinion, but if he were honest he must say that the specimen was surely broken after being figured, perhaps, as often happens, through the carelessness of the artist. I never saw my pretty type broken and am glad I have been spared the sight. The plates of my Essay were finished after I left London. Smith's object is to cast a reflection upon the condition of some of my types by way of an offset to Morrison's and Walker's. The fact is, and my descriptions prove it, that my types were nearly all excellent when I described them. Frail insects, like *Eustrotia malaca*, will break after 25 years readily on being subjected to what Smith calls "the vicissitudes of the voyage" and manipulation in the British Museum. The types of this and *B. mitographa*, collected by myself, were absolutely perfect at first, in 1872. In fact I remember only two cases of indifferent types, *Agrotis dapsilis* and *Hadena diversilineata*; the latter name I have cancelled as the specimen turns out to have been "patched" by some enterprising collector. The type of the former was brought by my friend Dr. Thaxter from Florida. It will be a labour of love for Smith to make this out and if he takes only a tenth part of the trouble he has bestowed upon Walker's miserable specimens and worse descriptions he will succeed. If he cannot I will help him.

1124. amaryllis Sm. California.
 1125. bina Guen. Middle States to Nebraska.
 Gen. **Xanthothrix** Hy. Ed. 1878 (?)
 Type: *X. ranunculi*.
 1126. ranunculi Hy. Ed. California.
 Gen. **Euedwardsia** Grt. 1882.
 Type: *E. neumoegeni*.
 1127. neumoegeni Hy. Ed. California.
 Gen. **Axenus** Grt. 1873.
 Type: *A. arvalis*.
 1128. arvalis Grt. Colorado; California.
 oehraceus Hy. Ed.
 amplus Hy. Ed.
 Gen. **Heliaca** H. S. 1853.
 Type: *H. tenebrata*.
 1129. diminutiva Grt. California; Nevada; Colorado.
 1130. fasciata Hy. Ed. Colorado.
 1131. dubitans Tepper. Nevada.
 1132. nexilis Morr. Colorado; California.
 elaborata Hy. Ed.
 Gen. **Anarta** Ochs. 1816.
 Type: *A. myrtilli*.
 1133. acadiensis*) Beth. Nova Scotia.
 an myrtilli?
 1134. luteola G. & R. Labrador to Colorado.
 an cordigera?
 1135. melaleuca Thunb. Labrador.
 bicycla Pack.
 1136. melanopa Thunb. Labrador; Mt. Washington; Rocky Mts.
 nigrolunata Pack.
 1137. quadrilunata Grt. Colorado.
 1138. schoenherri Zett. Labrador; Greenland; Capland.
 leucocycla Staud.
 1139. richardsoni Curtis. Labrador; Lapland.
 algida Lef.
 septentrionis Wlk.
 1140. secedens Wlk. "Hudson's Bay Territory".
 1141. impingens Wlk. Colorado; "Rocky Mts."
 nivaria Grt.
 curta Morr.
 purpura Morr.

*) Mr. Smith says he is not satisfied that this is the same with the European *myrtilli*; but he seems quite satisfied that *luteola* is the same as *cordigera*. The fact is, that in both cases the identity is more than probable; but, since in neither case have the European and American examples been carefully compared, both American names may for the moment be retained and with equal right. In my catalogue of 1874 I make the American names synonyms and very probably correctly (p. 31). We left the type of *luteola* in coll. Am. Ent. Soc. in 1865, as I recollect. The originals of our Plates were I believe perhaps usually left in Philadelphia.

1142. membranosa Morr. „White Mts.“
 1143. laponica Thunb. Greenland; Labrador.
 amissa Lef.
 1144. kelloggi Hy. Ed. „California“.
 1145. zetterstedtii Staud. Labrador; Lapland.
 1146. quieta Hbn. Arctic Coast.
 constricta Wlk.
 rigida Wlk.
 1147. funebris Hbn. „Labrador“.
 1148. mimula Grt. New Mexico.
 1149. mimuli Behr. „California“.

Gen. **Annaphila** Grt. 1873.Type: *A. diva*.

1150. diva Grt. California.
 1151. casta Hy. Ed. Oregon.
 1152. superba Hy. Ed. California.
 1153. divinula Grt. California.
 1154. germana Hy. Ed. California.
 1155. decia Grt. California.
 amicula Hy. Ed.
 1156. picta Grt. California.
 1157. salicis Hy. Ed. California (Sierra Nevada).
 arvalis Hy. Ed. (nom. rej. auct.)
 1158. mera Harvey. California.
 1159. immerens Harvey. California.
 1160. danistica Grt. Nevada; California.
 1161. pustulata Hy. Ed. Arizona.
 1162. domina Hy. Ed. California.

Gen. **Trichotarache** Grt. 1875.Type: *T. assimilis*.

1163. assimilis Grt. California.

Tribe *Acontiini*.= *Acontiinae* Grt. 1883.Gen. **Tarache** Hübn.* 1818.Type: *T. aprica*.

1164. flavigennis Grt. Oregon; California.
 1165. aprica Hbn. Southern and Western States.
 var. *biplagia* Gn.
 1166. abdominalis Grt. Texas to Kansas.
 1167. expolita Grt. Arizona.
 1168. lanceolata Grt. Texas.
 1169. angustipennis Grt. Texas to California; New Mexico.
 1170. sutrix Grt. Colorado; Nevada; New Mexico.
 1171. tenuicola Morr. Texas.
 1172. erastrioides Gn. Canada to Middle States.

* In the Verzeichniss Hübner restricts Ochsenheimer's Genus *Acontia* to the type *malvae*. *Xanthodes* Gn. is a synonym of *Acontia* Ochs., under this restriction.

1173. *candefacta* Hbn. Canada; South and West.
debilis Wlk.
1174. *arizonae* Hy. Ed. „Arizona“.
1175. *sedata* Hy. Ed. „Arizona“.
1176. *elegantula* Harvey. Arizona; Nevada; Colorado.
semiopaca Grt.
seminivealis Hulst.
1177. *binocula* Grt. Arizona; Texas.
var. *virginalis* Grt.
1178. *cretata* G. & R. Texas; Colorado.
1179. *lactipennis* Harvey. Texas.
1180. *delecta* Wlk. Middle to Southern States.
metallica Grt.
1181. *terminimaculata* Grt. Eastern and Middle States.
Gen. **Chamyris** Gn. 1852.
Type: *C. cerintha*.
1182. *cerintha* Treits. Canada to Southern States.
Tribe Cerathosiini.
Gen. **Cerathosia** Sm. 1887.*)
Type: *C. tricolor*.
1183. *tricolor* Sm. Texas.
Tribe Eustrotiini.
Gen. **Azenia** Grt. 1882.
Type: *A. implora*.
1184. *implora* Grt. Arizona.
1185. *edentata* Grt. Arizona.
Gen. **Escaria** Grt. 1882.
Type: *E. clauda*.
1186. *clauda* Grt. Arizona.
Gen. **Fruva** Grt. 1877.
Type: *F. fasciatella*.
1187. *fasciatella* Grt. Southern and Western States.
var. *obsolete* Grt.
1188. *acerba* Hy. Ed. „California“.
1189. *modesta* Hy. Ed. „Nevada“.

*) Letters from a fellow-student inform me that in my *Tarache angustipennis* from Colorado the costal vein is united to the subcostal on hindwings as far as in the majority of Arctiinae. This distinction between Arctiidae and Agrotidae will probably then not hold; it may be the weightiest distinction will be offered in larval structure. I have long been of opinion that *angustipennis* and probably another of my species were not congeneric with *apraca* and the majority of our forms of *Tarache*. For *angustipennis* I propose the genus *Therasaea*, differing from *Cerathosia* in frontal structure, but otherwise seemingly related. From the utter want of material to carry out these studies, I leave the type in *Tarache* where it will be naturally looked for. According to Dr. Packard's studies on the larva, *Cerathosia* belongs to this family and neither to the *Arctiinae* or my subfamily *Cydosiinae*, to which latter group Mr. Smith has more recently referred it after my correction of his original observations on the structure of the moth.

1190. *apicella* Grt. Southern States.
truncatella Zell.
accepta Hy. Ed.
1191. *parvula* Wlk. Arizona.
georgica Grt.
1192. *deleta* Hy. Ed. Nevada; Hudson's Bay Terr.
Gen. **Xanthoptera** Gn. 1852.
Type: *X. nigrofimbria*.
1193. *nigrofimbria* Gn. Eastern States to Texas.
1194. *clausula* Grt. Arizona.
1195. *semillava* Gn. Southern States.
Gen. **Spragueia** Grt. 1875.
Type: *S. leo*.
1196. *leo* Gn. Southern States.
onagrus⁺H.-S.
₊
1197. *onagrus* Gn. Florida; Texas.
1198. *magnifica* Grt. Arizona.
1199. *plumbifimbriata* Grt. Texas.
1200. *obatra* Morr. „Southern States“.
1201. *dama* Guen. Southern States; Cuba.
1202. *transmutata* Wlk. Florida; St. Domingo.
pardalis Grt.
1203. *funeralis* Grt. Arizona.
1204. *sordida* Grt. Texas.
1205. *guttata* Grt. Texas.
1206. *tortricina* Zell. Southern States to Kansas.
inorata Grt.
- Gen. **Exyra** Grt. 1875.
Type: *E. semicrocea*.
1207. *semicrocea* Gn. Middle to Southern States.
1208. *ridingsii* Riley. Southern States.
nigrociput Morr.
1209. *fax* Grt. Southern States.
1210. *rolandiana* Grt. Canada; Eastern to Middle States.
- Gen. **Prothymia** Hbn. 1818.
1211. *rhodialis* Wlk. Canada; Eastern to Southern States.
coccineifascia Grt.
1212. *semipurpurea* Wlk. Canada; Eastern to Southern States.
confinialis Wlk.
rosalba Grt.
1213. *plana* Grt. Arizona.
1214. *orgyiae* Grt. Texas.
var. *sublivacea* Harvey.
- Gen. **Metathorasa** Moore 1881.
1215. *argentinnea* Wlk. Middle to Southern States.
1216. *monetifera* Gn. Canada to Southern States.

Gen. *Euherrichia* Grt. 1882. Sm. restr.Type: *E. mollissima*.= *Haploolophus* Butl. 1891.

1217. *mollissima* Gn. Canada to Southern States.
 1218. *granitosa* Gn. Southern States.
 1219. *cervina* Hy. Ed. California; Colorado.

Gen. *Callopistria* Hbn. 1818.Type: *E. pteridis*.= *Eriopus* Auct.

1220. *floridensis* Gn. „Florida“.
 1221. *strena* Grt.* Florida.

Gen. *Lithacodia* Hbn. 1818.Type: *L. bellicula*.

1222. *bellicula* Hbn. Canada to Southern States.
semichalcea Wlk.

Gen. *Eustrotia* Hbn. 1818.Type: *E. unea*.= *Erastria* || Ochs. 1816.

1223. *malaca* Grt. Middle States.
 1224. *albidula* Gn. Canada to Southern States.
intractabilis Wlk.
 1225. *secta* Grt. Massachusetts.
 1226. *flaviguttata* Grt. Texas.
 1227. *conceinnimacula* Gn. Canada to Texas.
 var. *parvimapula* Grt.
 1228. *synochitis* G. & R. Canada to Texas.
 1229. *olivula* Gn. „North America“.
 1230. *musta* G. & R. Eastern to Southern States.
 1231. *muscosa* Gn. Canada to Middle States.

*) *Callopistria strena* Grote. 1 male 2 females. Male antennae thickened on one side (the top) near the base, the rest slender (half gone), densely ciliate below, of female, simple. Vein 7 from and of accessory cell, 8-9 on a stalk, 10 from top of accessory cell, 11 from discal cell; on secondaries, 5 nearer 4 than 6. Aspect of *C. obscura*, Butl. from Japan (but this has male antennae simple). Primaries with outer margin angled at vein 4; brown with a purplish and slightly bronzy tint; reniform and orbicular obsolete, just faintly indicated by whitish outline, the orbicular obliquely produced and compressed. Between them a brown costal patch, rounded and bordered by a narrow white line, the patch broad on costa, reaching median vein. It corresponds to the same mark in *obscura*, but is sharply defined. A brown subapical patch, relieved by the white subterminal line, which is produced outward to the margin on vein 4, again retracted below, irregularly waved, obscure, more or less distinctly bordered by brown within. Space before subterminal line paler more purplish. A very narrow white (terminal?) line, which leaves the margin for an arc above and below end of vein 4. T. p. line dark brown, geminate, slightly irregularly waved, not very sharply defined. T. a. line strongly arcuated outward so as to reach origin of vein 2, its upper half lost, whitish, geminate. A short sub-basal pale line enclosing a dark brown basal space. Secondaries whitish, brown outwardly. Type cell. Neumoegen. Descriptions of this and *P. perplexa* Grt. were lost in 1882 and are now published from notes kindly sent me by Mr. Dyar.

1232. *caduca* Grt. Canada to Middle States.
 1233. *retis* Grt. Pennsylvania.
 1234. *distincta* Grt. Arizona.
 1235. *propera* Grt. Arizona.
 1236. *apicosa* Haworth. Canada to Cuba.
 nigritula Gn.
 undulifera Wlk.
 1237. *carneola* Gn. Canada to Southern States.
 bipлага Wlk.
 1238. *dividua* Grt. Texas.
 1239. *aeria* Grt. Western to Southern States.
 1240. *includens* Wlk. Canada, southwardly.
 norma Morr.
 penita Morr.
 mariae Grt.
 Gen. **Thalpochares** Led. 1853.
 = *Anthophila* || Hbn. 1806.
 1241. *aetheria* Grt. Florida.
 Gen. **Eumestleta** Butl. 1892.
 Type: *E. flammicineta*.
 1242. *flammicineta* Wlk. Texas; St. Domingo.
 patula Morr.
 patruelis Grt.
 1243. *carmelita* Morr. Texas; California.
 1244. *mundula* Zell. Texas.
 1245. *orba* Grt. Alabama.
 1246. *fortunata* Grt. Arizona.
 1247. *perita* Grt. Arizona.
 Gen. **Galgula** Gu. 1852.
 Type: *G. hepara*.
 1248. *hepara* Gn. Canada to Texas.
 1249. *subpartita* Gn. Canada to Texas.
 partita Gn. (nom. rej. anet.)
 vesca Morr.
 Gen. **Tripudia** Grt. 1877.
 Type: *T. quadrifera*.
 1250. *flavofasciata* Grt. Southern States; Colorado.
 versutus Hy. Ed.
 1251. *quadrifera* Zell. Mexico; Texas; Missouri.
 1252. *opipara* Hy. Ed. Texas.
 1253. *limbata* Hy. Ed. Mexico; Texas.
 1254. *basicinerea* Grt. Arizona.
 1255. *lixiva* Grt. Arizona.
 Gen. **Gyros** Hy. Ed. 1881.
 Type: *G. muirii*.
 1256. *muirii* Hy. Ed. California.

Gen. **Metoponia** Dup. 1844.

1257. obtusa H.-S. Middle States to Texas.

obtusula Zell.

1258. perflava Harvey. Texas.

1259. macula Sm. New Mexico.

Tribe **Hyblaeini**.Gen. **Hyblaea** Fabr. 1793.= *Aenigma* Strecker 1876.

1260. puera Cram. Texas; Florida; West Indies.

saga Fab.

mirificum Strecker.

apricans Bdv.

Mamestra and **Dianthoecia**.

In his "letter of transmittal", appended to the "Revision" Mr. C. V. Riley embraces the opportunity for making the uncalled for and unwarranted statement that "the genus *Mamestra* is one of the largest and best characterized genera of the Noctuidae"; at the same time that Mr. Smith, just above the line, flatly contradicts such a statement by correctly saying that it is difficult to distinguish *Mamestra* from certain hairy-eyed Orthosian genera by separate description. In fact, in locating certain species on single or not always fresh examples, I have felt quite uncertain. And certain species placed here by me, and afterwards by Smith, will probably be removed when the larvae are known and compared; e. g. *pieta*, *loreia* etc. Mr. Smith's "Revision" which I follow here, because I have no material, takes no cognizance of *Dianthoecia*, a genus which is recognised in Europe on account of peculiarities in the immature stages. I have given a list of the Am. species probably to be referred here, Bremen Check List, 13, 1890. Because I found the ovipositor an uncertain character and, in the absence of the female, this genus is always uncertain in the moth stage, Mr. Smith would apparently drop the generic term *Dianthoecia*. I think this should not be done. If *cucubali* is a *Mamestra* then the present genus would have to be called *Hadena*. Mr. Smith's Revision of *Mamestra* must be revised. I have left here the single species *subdita*, unknown to me, in *Hadena* (= *Dianthoecia*) merely to place the genus, but probably most of the species cited by me in the Bremen Check List, 1890, under *Dianthoecia* must be also placed here under *Hadena* Schrank.

Xylena cariosa Guen.

The specimen in the British Museum cited by Smith is evidently wrongly labelled, since it does not agree with Guenée's description as cited by me, Bull. U. S. G. S. VI., 266, 1881, a paper which has perhaps not received Mr. Smith's full attention, since it is not quoted for my synonymous references of Morrison's preliminary descriptions of *Agrotis* in several instances. Mr. Smith's classification

in the Catalogue, is evidently copied from mine in Am. Phil. Soc. Trans., June, 1883, where I propose the three families Thyatiridae, Noctuidae, Brephidae, the name Thyatiridae I believe originally, and this copy is made without a proper acknowledgment of the source. The sequence in the "Catalogue" is for the most part my own. The "Catalogue" itself, so far as it is Mr. Smith's work, is less the result of a fresh investigation into the synonymy, than that of a comparison with labelled specimens in the British Museum and other collections. Borne upon the bubble of assumption, Mr. Smith passes lightly over the serious work of investigating in every case the authenticity of these labels. Since I wrote, much fresh western material has been received in Washington which has been apparently carefully identified by Mr. Smith in general, to whose "Catalogue" I am indebted for the enlarged localities.

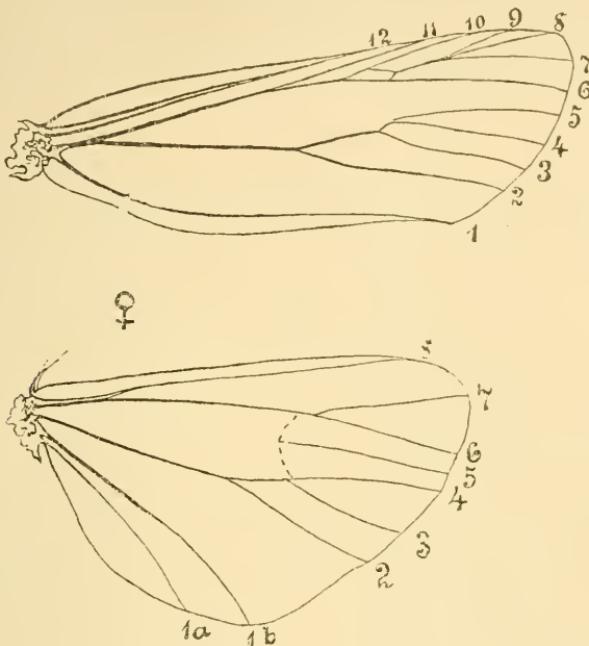
Sphida obliqua Walk.

The aquatic habits and structure of the larvae of this tribe are described by Comstock, Papilio, I., 148, 1881. For papers on other larvae with aquatic habits, consult Packard, Am. Nat. 824, Aug. 1884, and W. Müller: Ueber einige im Wasser lebende Schmetterlingsraupen Brasiliens. The present tribe are the only known Owlet Moths with aquatic habit as larvae, and are peculiarly American. I have shown that they are related as moths to the Nonagrians. I have myself seen none of the larvae, which must have apparently acquired the described structure of the spiracles by subsequent adaptation to a life in the element in which they are now so much at home as to remain voluntarily immersed for the space of half an hour. The earliest Insecta were doubtless gill-breathing, losing the gills in exchange for the tracheal system. Existing Insecta must then possess their structural modifications enabling them to exist in water, through a gradual process of renewed adaptation.

Cerathosia and Cydosia.

I cannot compare Cydosia at the moment; it may belong here, in which case the name of the group may be changed. The present genus is in no case an Arctian; the only other possibility seems to me that both genera are Agaristidae. No Arctian and no Lithosian has such a structure of the head parts; thus Cerathosia is not excluded from the Lithosians alone by the presence of ocelli, as incorrectly stated by Mr. Smith, but by the structure of the clypeus also. In structure Cerathosia should not be compared with Lithosia, but somewhat in form and colour. The dotted wings probably led Mr. Smith to place it "next to Utetheisa". Mr. Smith's statement that in no Noctuid the costal arises from the subcostal, appears to be "founded in ignorance" of the venation of the family (see Grote, Bremen Check List, 40, 1890). I think then my original paper (Ent. Am. IV., 121, 1888) fully justified by the facts and that Mr. Smith's somewhat hysterical reply, kindly printed on the back

of my paper by Mr. Hulst, will remain as a permanent record of the futility of Mr. Smith's opinions, which Mr. Hulst, and quite naturally, considers to be of the "highest value". The enlarged figure here given of the neuration of *Cerathosia* is from a dry preparation (Dimmock's method). Six examples do not apparently vary in the slightest.



Postscript.

Note on the Thyatiridae etc.

Mr. Dyar writes, that: "*Bombycia candida* of Smith must be removed from *Bombycia* because vein 6 arises below the apex of cell. The wings are rather narrow and the maculation also suggests *Euthyatira*, although the accessory cell is not long, not reaching over $\frac{1}{3}$ length to apex". Thus it would fall into *Thyatira* in the synopsis; but Mr. Dyar would prefer to accommodate this form in order to associate it with *semicircularis* under *Euthyatira*. In his published paper Mr. Dyar refers both *lorata* and *semicircularis* to *Euthyatira*; thus all the three species placed here under *Persiscota* are referred by Mr. Dyar to *Euthyatira*, and the new term appears superfluous. It seems to me however certain, that my *Persiscota semicircularis*, if not my *lorata*, is structurally and generically different from *Euthyatira pudens*. I therefore do not change my determination, because very little material in the group has been yet examined; of the three species of *Persiscota* only the single types appear to be known, the larvae are of course undiscovered. The term *Persiscota* will surely become available for one or more of the three species, but it is possible with another type than that here indicated by me. I am very glad so good an authority

as Mr. Dyar follows my restitution of *Habrosyne*, a genus structurally related to *Pseudothyatira* Grote. Mr. Dyar writes me also, under May 6, that *Melalopha* and *Datana* may prove to belong to the Eupterotidae. If *Datana*, then I would include *Phalera*: I have suggested as probable that both genera have a common preglacial ancestor, the slightly differentiated species in both genera may have originated in postglacial time. Finally I mention that I originally, in 1864, described *Apatelodes angelica* under *Parathyris*, and it seems possibly nearer the South American *P. cedonulli*, in shape and structure of primary, than it is to *Apatelodes torrefacta*. I cannot say, in default of material, but we may leave this and other questions relating to the Eupterotidae to Mr. Wm. Schaus, who will soon give us further information from his studies of the group.

Heliophila.

The type of *obusta*, is darker than my var. *callida*, Grt. Ess. 40, and I have never seen such a specimen in Am. collections. It is not true, therefore, that it is "just exactly" my variety, Sm. Cat. 190. The usual red variety should therefore be labelled *callida* in collections, until the exact equivalent of *obusta* is turned up and the matter settled. In Can. Eut. XIII., 15, I say that I believe under this name Guenée has described a red form of *pseudargyria*, but, after seeing the type in Brit. Mus., I made the note that it was darker and more intensely coloured than the ordinary specimens in coll. which I subsequently named *callida*.

The following synominal study will show that I am correct in using the generic title Tarache:

Acontia Ochs. 1816, 4, 91. *A. malvae*, *aprica*, *caloris*, *titania*, *solaris*, *luctuosa*. Hübner, Verz. 257, restricts it to *malvae*, which thus becomes the type and *Xanthodes* Guen., proposed for the same type, must fall. No American species described. *Tarache* Hüb. 1818 (1822?), Verz. 261: Hübner proposes the name for *caloris*, *solaris*, *aprica*, *opalina* and an undescribed species. Grote. 1874, takes *aprica* as type. For this genus the term *Acontia* is incorrectly used by Authors.

Mr. Smith, Cat. 309, remarks "Eustrotia Hbn., bears date the same year (as *Erastria*) but was certainly not published until 1818 at least". I do not know if the above statement was intended to be original. *Erastria* Ochs. falls, not because younger than *Eustrotia*, but because *Erastria* is preoccupied by Hübner in 1806 for a genus of Geometridae, as I have repeatedly shown for this twenty years past. It is in the same case with *Cymatophora*.

Baileya Grt. I propose this term for *Leptina* Guen. preoccupied. Named for the late Dr. Jas. S. Bailey.

Euglyphia Hüb. Verz. 203: This term is already used by Hübner himself, Verz. 190, *Euglyphis*. Retain *Noropsis* here for *hieroglyphica*, and refer *Euglyphia* to the synonymy.

Alabama Grt. Type: *A. argillacea* Hüb. Since *argillacea* is not included in the genus *Aletia* in the Verzeichniss, it must have been published in the Zutraege after this signature of the Verzeichniss was printed; therefore a new term for the Cotton worm is necessary, since it differs generically from any of the species of *Aletia* of the Verzeichniss. Mr. Hulst at least will not object to the name *Alabama*: it is an Indian word and means: Here we rest.

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Errata and Addenda.

In the title for „Ptilodontae“ read „Ptilodontidae“.

(Fam. A patelidae.)

No. 47, following: insert „Subgen. Megacronicta Grt. Type: A.americana“.

No. 51, following: for „A patela“ read „Pharetra“; for „1806“,
read „1818“.

No. 70, following: for „Arctomyces“ read „Arctomyscis“.

(Fam. Agrotidae.)

No. 41½: add, under this number, „apposita Grt.“

No. 79½: add „vetusta Walk. West Canada (Bethune).“

No. 86: for „pellucidulis“ read „pellucidalis“.

No. 100: add „var. eriensis Grt.“

No. 112: for „Harv.“ read „Harr.“

No. 158½: add, under this number, „obesula Sm.“

No. 176: for „G. & R.“ read „Grt.“ as authority.

No. 177: for „insertana“ read „insertans“.

No. 248: restore „eurooides Grt.“ for the species. There is an Agrotis vetusta Walk. unidentified, for which the title vetusta must be left.

No. 256: add „maizii Fitch.“ as a synonym.

No. 278½: add, under this number, „silens Grt.“

No. 357: add „bella Grt.“ as a synonym.

No. 367½: add, under this number, „4-lineata Grt.“

No. 369: add „var. illaudabilis Grt.“

No. 413: for „Grt.“ read „Gn.“ as authority to impulsa.

No. 480: record arna as var. (Arna has concolorous costa. To tracta belong all examples having „thorax and basal and costal region of primaries luteous“ Sm. Ent. Am. V., 148; Grt. Bull. U. S. Geol. S. VI., 262. In the Verzeichniss, 213 (not „404“ as cited by Smith l. c.), Hübner omits chalcedonia, to include it under Trigonophora, 217, which has another type. I have taken strigilis as type of Oligia. If the N. Am. species here cited, Nos. 479 to 487, which have been carefully described by Smith l. c., differ, the term Monodes Guen. may be applied to them. I doubtfully considered O. paginata to be Monodes nucicolora Guen. In reply to this Mr. Smith made my genus Platysenta a synonym of Monodes, without scruple, Phil. List 46. However in the Cat. 184, this error is corrected and Mr. Smith adopts also my suggestion as to paginata. From „recollement“, American species like fractilinea agree better with strigilis than the forms we both arrange under Oligia).

For: „Aporaphila“ read „Aporophila“.

No. 485: for „nucicolor“ read „nncicolor“.

For a second copy of the „Historical Sketch“, Salem, 1875, I am indebted to the renewed kindness of the author. The date given by me in this List (1806) for the Tentamen, agrees with that given by Mr. Scudder. But the date (1818) adopted here for the Verzeichniss, while sufficient to establish priority for Ochsenheimer's fourth Volume, is presumably only correct for the first five signatures (1816—18). From Mr. Scudder's researches we may possibly give 1822 as the date by which the first twenty signatures were issued, the entire work being completed by 1827. I am not aware that even the latter date would disturb any names adopted here, while the Noctuids, being concluded on page 282, would fall within the first eighteen signatures, which were probably printed before the autumn of 1825. Hist. Sketch, 97. Hübner omits to cite argillacea under Aleria, p. 239; the latter term is used in the Verzeichniss for aberrant species of Heliophila. On page 243 Hübner gives mucens without citation, hence the signature must have been issued before the species appeared in the Zutraege, while confusa is similarly treated on the same page. Mr. Smith dates the first species „1825“, Cat. 231, and the last „1823“, Cat. 232, although both, according to Mr. Smith, were issued in the same „Hundred“. The interesting details as to the „systematic work“ of Mr. Smith (Preface 14, l. c.) which „necessitated a card catalogue“, will not impose upon any one using his work, which as to the sequence of the species is a copy of my Lists, except where the genera have been „revised“ by Mr. Smith or Mr. Hulst; while the very numerous mistakes in the citations, but a small part of which I have had space to notice here, suggest that the „card system“ was either not understood by Mr. Smith or that it leaves too great a „margin for error“ to be a really valuable invention.

Certain synonyms (e. g. of messoria) are here omitted, as well as a few doubtful names. C. decora Morr. is a synonym of Trichosea cavillator Walk., with a wrong locality. Where I have omitted to designate the generic type I have not ascertained it. To secure uniformity in nomenclature, the generic types here designated should be accepted, unless it can be plainly shown that in special cases I have made a wrong application of the generic term.