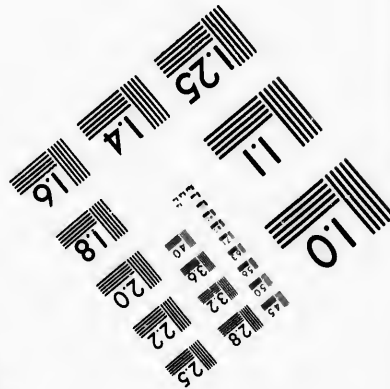
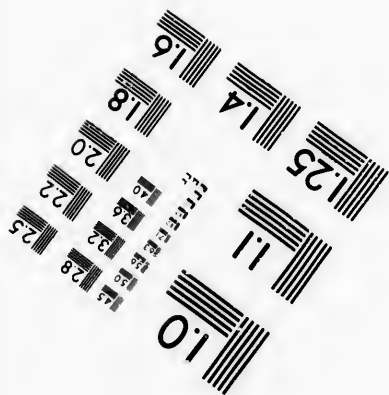
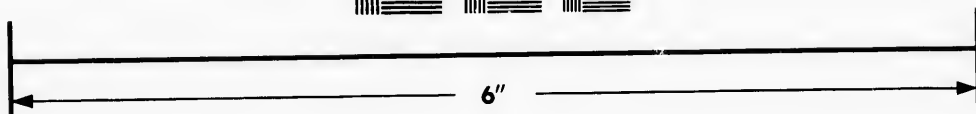
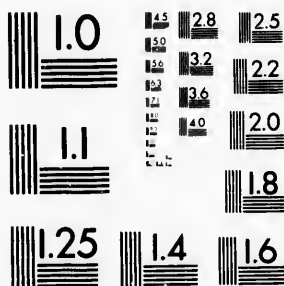


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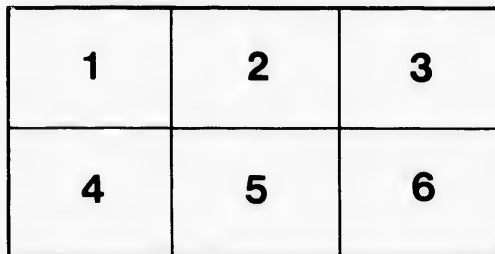
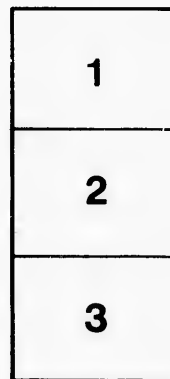
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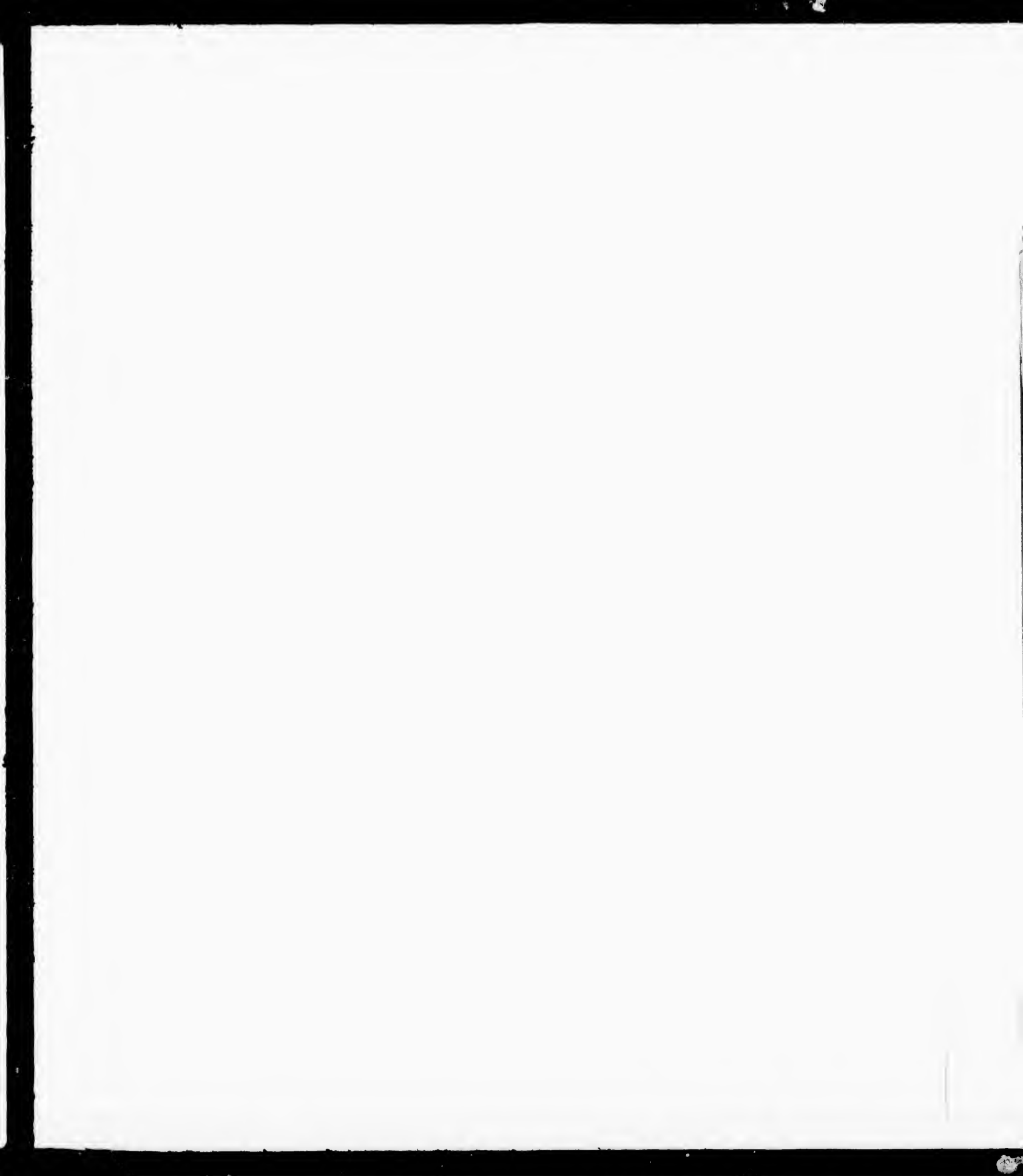
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[From the Fifth Annual Report of the Peabody Academy of Science.]

PUBLISHED JULY, 1873.

NOTES ON NORTH AMERICAN MOTHS OF THE FAMILIES PHAL-
LENIDE AND PYRALIDE IN THE BRITISH MUSEUM. BY A.
S. PACKARD, JR.

DURING a short stay in London I was enabled to spend a few days in the British Museum and study the collection of moths named and arranged by Mr. F. Walker, forming a part of the types of the species described by him in the Catalogue of the Lepidoptera Heterocera of the British Museum. I am indebted to Dr. J. E. Gray, the keeper of the Zoological Department, to Mr. F. Smith, and also to Mr. Walker, for many courtesies and facilities extended to me. Though Messrs. Grote and Robinson* have already published some notes on these families, I present for publication these, containing references to all the species of Phalénide and Pyralide in the Museum from North America, to aid American entomologists in the thankless and well nigh impossible task of identifying our species from the too brief and insufficient or misleading descriptions contained in the museum catalogue of Heterocerous Lepidoptera, and also for my own use in my museum work.

Messrs. Grote and Robinson have fully expressed the feelings I entertain regarding the nature of these catalogues. Their publication will forever be a sad hindrance to American lepidopterists, and a warning to students to describe fully and *comparatively* their species, and from a sufficient number of specimens. A number of leading European entomologists have also expressed their opinion as to the value of these lepidopterological catalogues. In endorsing their criticisms I can but advert to the doubtfully expedient course of the officers of the museum in accepting and publishing such imperfect and unsatisfactory work. As it is, the species described in these cata-

*Notes on the North American Lepidoptera in the British Museum and described by Mr. Francis Walker. (Trans. Amer. Ent. Soc. Vol. 2, 1868-9.) Philadelphia.

logues, as may be seen below, can only be recognized by personal examination of the specimens, since so many are referred to wrong genera, or based on rubbed and imperfect specimens. When there is any doubt about the description, the safer course is to ignore it altogether. These notes refer simply to the specimens as they stand in the museum, and not to the published lists. I have not attempted here to collate them with the names in the catalogues or with the names of other authors; so that the name given here may be quite different either from the published or correct one. A mark of exclamation (!) is placed after the names of such species as seemed to me valid, so that students of the catalogue may be sure that such names represent a distinct species, and are not founded on some imperfect specimens of allied species or genera. In a few cases names believed by me to be correct are enclosed in brackets. The notes are printed just as written on the spot.

Chorodes incurrata (Florida), specimens same as *C. transmutans* from Fla! and both are the same as *C. transversata* and *C. transversata*! *C. transversata* is the dark var. with submarginal zigzag shade. *C. transversata* is the paler var. with the zigzag shade wanting, and borders of both wings subochreous.

C. transversata, one ♂ only. Is a var. of *C. transversata*.

C. conlingens, scarcely a var. of *C. transversata*.

C. translucens = ♂ *Entrepela clemataria*!

C. transiens = ♀ *E. clemataria*!

The other species of *Chorodes* are good.

In drawer 3 are 6 ♂ labelled *Entrepela clemataria* — same as the single ♂ *E. clemataria* labelled *C. translucens*.

Apiccia arborea is a small *Caberodes*, and *A. agathocaria* is not congeneric with it, or congeneric with *A. rithrosaria*. There is no species of *Apiccia* in the collection.

Prionocla armataria!

Epione calypsoaria = *Sicya solfataria*.

Epione scribaria! There are two specimens of this species labelled *E. solfataria*.

Epione agylaria is a good species; from St. Martins' Falls.

Epione pustularia is neither *Epione* nor *Sicya*. Do not know

what it is; reminds me of Drepanodes, but too much rubbed for identification.

Sieja truncataria; there are no examples.

Hyperetis alienaria!

H. agysaria. One of the specimens (*b*) does not differ from *H. alienaria*. The other (*a*) is a ♀, dark, finely preserved, but conspecific, and I should unite *agysaria* with *alienaria*.

H. subsiniaria seems to be a small, dark, well marked var. of *alienaria*, but scarce anything more.

H. wpiasaria!

H. irregularata is not a *Hyperetis*. Do not know what it is. No locality.

Eudropia pectinaria; the 4th specimen is a *Selenia*!

E. pectinaria = *E. deductaria* Walker's type; one specimen is a rubbed *E. pectinaria* Walk.!!

E. hypochraria!

E. metusaria = *E. hypochraria*.

E. refractaria is a much rubbed *E. hypochraria*.

E. astylusaria!, a good species, closely allied to *E. pectinaria* of Walker.

E. madusaria a good species, closely allied to *E. amoenaria*.

E. oponearia does not differ from *E. madusaria*.

E. moztaria!

E. propriaria is a rubbed *E. tigrinaria*.

E. liciaria. A good species.

E. semiclusaria is a large *Cleora*.

Ellopia subprivata, much rubbed = *Epione serinaria*!

E. pultaria!

E. perfidaria = *fiscellaria*, both = *E. flagitiaria*.

E. panisaria, one specimen is a true *E. pultaria*, and the other is = *Eudropia lateritiaria*!

E. althausaria is nearly related to *E. seminulata*, and both are apparently good species.

Ellopia? amyrisaria is a *Caberodes*! and too much rubbed for identification or description.

E. plagifasciata is a *Numeria*.

E. basilaria = *E. incoloraria*, both species of *Acidalia*.

- E. deplanaria* is an *Endropia*.
E. scitata is probably the common *E. flagitaria*.
E. ribearia = *Abraaxas ribearia*.
E. ngandaria is a *Caberodes*!
Caberodes imbraria!
C. remissaria!
C. superaria = *C. remissaria*! both may prove to be dark varieties of *C. floridaria* Walk.
C. phasiomaria [= *C. metrocamparia*].
C. antiliscaria!
C? *agreasaria* = *Endropia lateritaria*.
Tetracis asplata!
T. poularia is a large rubbed *Caberodes metrocamparia*!
Eurymene phlogosaria!
E. alcoholaria!
Selenia asionaria is a large singular species of *Hyperetis*!
S. alciphearia!
Azelina neonaria is a true *Hyperetis alienaria*.
A? *zalissaria* is a true *Azelina* closely allied to *A. Hübneraria*. It is a good species.
Metanema inatomaria!
Eanomomus magnaria!
E? *arsesaria* [= *Tetracis aegrotata*!]
E. subsignaria!
Caripeta angustiorata [= *Parennomos piniaria* Pack.!]
C. latiorata!
C. divisa!
Biston ursaria!
Amphidasys cognataria!
A. sperataria!
Boarmia momaria!
B. humaria! All the specimens rubbed.
B. intraria!
B. defectaria = *B. larvaria*.
B. indicataria!
B. signaria = *B. sublunaria*.
B. filaria!

- B. transfararia* is ♀ of *B. intraria*, represented by 2 ♂.
B. sublanaria!
B. albigenaria!
B. ephyra = *B. humaria*!
B. intractaria is a rubbed *B. momaria*.
B. signataria is *Tephrosia Canadaria*!
B. pleuraria, from Mexico, is a good species.
T. phrosia Canadaria!
T. spatiosaria = *Boarmia sublanaria*.
T. abscissaria!
T. intractaria is a rubbed *B. sublanaria*!
T. sublanaria!
T. dispuncta is a *Macaria*.
Tephrosia? comptaria are two rubbed specimens of *Tephrosia scitularia*, which is a small *Citaria*.
T. notaria [= *Filouia bicoloraria* Minot!]
T. imperfectaria, of this species there is only a poor single specimen.
T. amplaria = *Bronchelia disseptaria*, both = *B. liriodendrararia*.
Stenotrachelys approximaria!
Geometra inclusaria!
Jodis tractaria [= *Aplodes mimosaria* Guenée.]
Nemoria suberocata!
N. incertata. Almost too much rubbed for identification.
Dyspteris abortivaria!
Aplodes glaucaria!
Ephyra myrtaria! *E. stabilita*! *E. solitaria*!
Acidalia parata!
A. tacturata!
A. impuperata!
A. ordinata!
A. restrictata!
A. enucleata!
A. compensata!
A. timandrata!
A. quadrangulata = *Ephyra myrtaria*!

- A. restorata!*
A.? fissinotata = *Tephrosia dispuncta* and *Macaria granitata*
 and *Larentia? exnotata*.
A.? sparsaria is scarcely an *Acidalia*.
Stegania pustularia!
Cubera erythemaria!
C. latentaria!
Corycia costaliata!
C. albata!
Macaria granitata!
M. haliata = *M. granitata!* Not even a variety!
M. maculataria!
M. leticineta is a *Hyperetis* allied to *H. alienaria*.
M. equiferaria! *M. inaptata!* This is not a *Macaria*.
M. transitaria!
Macaria? submarmorata is a good species. It is a true
Macaria.
M. postrema is a rubbed *M. equiferaria!* *Macaria impro-*
pria is a *Paraphia* too much rubbed for identification.
Macaria? indelicata = *Eudropia hypochraria!*
M. integraria is an *Aspilates*.
M. inextricata!
M. exanspicata is entirely too much rubbed and can probably
 never be identified.
M. tractata!
M. irregularata = *M. granitata*.
M.? refusaria is too much rubbed for identification, probably
 a rubbed *M. granitata*, and I should call it a synonyme.
M. retinotata = *M. granitata!*
Halia subcessaria is very near *H. wacaria*, but ground color
 much whiter.
Tephrina expressaria! is a species of *Boarmia*.
Lozogramma defluaria.
L. extremaria!
Numeria occiduaris!
N. obfirmaria!
Fidonia truncataria!

- F. discospilata*!
Hemutopis grataria!
Aspilates atrapunctaria!
A. canosaria [= *Cleora pulchra* of Minot]!
Napaea arciferata!
Zerene catenaria! A *Cleora pulchra* is among the specimens placed under this name.
Anisoplegma sericeiferata [= *A. vernata* Peck].
Laurentia? fiduclata [= *Fidonia bicoloraria*].
Laurentia? plumifera!
L. cernuifascia!
L. basaliata!
L. ziezacata!
L. placidata = *L. ziezacata*!
L.? exnotata = *Macaria granitata*!
L.? renunciata is our common *Ypsipetes pluviana*.
L.? exornata!
L. castinotata [= is *Tephria strigularia* (Minot sp.)!]
Eupithecia implicata!
E. explanata!
Lobophora fusifasciata!
Thera? bitaenata!
Ypsipetes? immersata [is *Tephrosia disconventa* *vide* Grote.]
Melanthia ruficollata!
M. gratulata!
M. gothicata!
M. reciprocata [= *Odezia albovittata* Guen.]
M. concordata!
M. lacustrata!
M. intermediata = *M. lacustrata*.
M. ideata = *M. lacustrata*.
Conomia propugnata!
C. ferrugata!
C. abruptata is a *Camplogramma*. The species good.
Camplogramma geminata!
C? abruptata, St. Martin's Falls, is a genus not known to me; it is based on a poor specimen.

Philalapteryx erosiata!

P. intestinata!

P. Floridata = *P. intestinata*.

Scotosia dubitata!

S. undulata!

S. lobophorata is not a *Scotosia*.

S. ineplicata is probably not a *Scotosia* and too much rubbed for identification. The specific name is exceedingly appropriate.

Cidaria ruscata!

C. remotata!

C? gibbivostata [= *Teplirina strigularia* (Minot)].

C. discretilinata!

C. propulsata!

C. molliculata may prove to be a var. of *C. remotata*.

C. emigrata!

C. inclinataria seems to be a true *Correnia*!

C. rigulata!

C. exphagata; one broken and rubbed specimen.

C. albifusata!

C? frigidata is an *Ypsipetes*!

Pelenya similis is closely allied to *Cidaria propulsata*.

Anatlis orillata!

Heterophleps atrosignata is *Halia succensaria*.

PYRALIDÆ.

Hypena Baltimoralis!

H. rafinalis is a *Crambus*.

H. damnosalis!

H. scabralis!

H. benignalis is a variety of *H. Baltimoralis*.

H. bijugalis is a variety of *H. Baltimoralis*.

H. edictalis!

H. generalis!

H. deceptalis!

H. manalis!

- H. idousalis* is not a Pyralid; perhaps a Tineid.
H. calucalis!
H. germanalis is near, if not the same as *H. humuli* Harris.
H. caecalis! Is it a Hypena?
H. edutalis!
H. sobrioides is not a Hypena.
H. cacanthoides. Too much rubbed for description.
H. fractiosalis. A good species, but is it a Hypena?
H. fulvicollis!
H. habitalis!
Doripodes acutalis [not *D. acutalis* Guen.] is a genus allied
remotely to Hypena.
Hormisa absorptalis!
Rivula propinqualis!
Heraclia morbidalis!
H. pedipalis!
H. curralis!
H. jacobusalis!
H. theralis! Too much rubbed for identification.
H. gyalis = *H. pyramusalis*.
H. pyramusalis = *H. gyalis*.
H. protumnusalis!
H. eumelusalis!
H. metonalis! Specimens in bad condition.
H. bifurcalis! Specimen in bad condition.
H. clonialis!
H. phalerosalis!
H. salusalis!
H. heliosalis!
H. clitosalis!
Bleptina surrectalis is the common large Aglossa.
B. nymusalis!
Epizeuxis goosalis is not a Helia.
E. lituralis!
Palthis angulalis!
Pyralis farinalis!
P. hyllalis!
Aglossa cuprealis!

Eumyphla glomeralis!

Desmia funeralis!

D? janassialis!

Ediodes minimalis!

Samea ebulealis!

S. elealis!

S. phyllisalis!

Asopia archasialis!

Agathodes monstralis!

Parapomyx allionealis!

Hydrocampa itealis! Not a true *Hydrocampa*; wings much longer.

Zebronia serinialis, but with longer wings than usual in the genus.

Leucochroma icciusalis!

Platellura nitidalis!

Ph. hyalinatalis!

Ph. immaculalis!

Botys arypralis is *B. ventralis* G. & R. their label annexed.

B. verticalis!

B. apertalis!

B. strictalis!

B. theseusalis!

B. siriusalis!

B. liccalis!

B. oliusalis!

Isopteryx? oblitalis! The species is a good one.

I. leucothoalis! The species is a good one.

Oligostigma seminealis!

O. curviferalis!

Catyclista lamialis!

C. claudialis!

C. principalis!

C. confusalis!

Botys oblitalis and *B? pantheralis* are considered as synonyms by Walker, one specimen representing both labels. Specimens too much rubbed for identification.

B. thysalis = *B. apertalis* and *B. oxydalis*. Placed together by Walker.

B. mysippusalis = *B. perinsalis*.

B. perinsalis = *B. mysippusalis*.

B. arsaltealis!

B. thymelusalis!

B. oglealis!

B. illutalis!

Pionea emousalis!

P. sculpturalis [= *Pantographa lineata* G. & R.]

P. helicalis, too much rubbed for description.

P. diomalis! " " "

Spilodes nisceccalis, too much rubbed for identification.

Scopula rubigalis, *S. orasulalis*, *S. nesturalis*, *S. commistalis*.

Meepna reversalis. All founded on poor, unrecognizable specimens.

Stenopteryx hybridalis!



