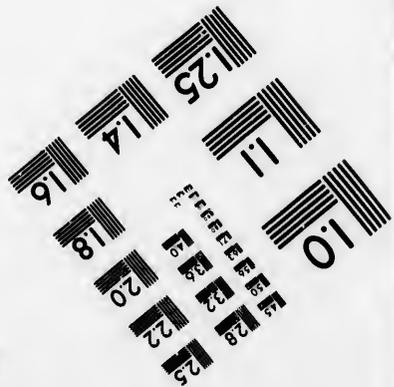
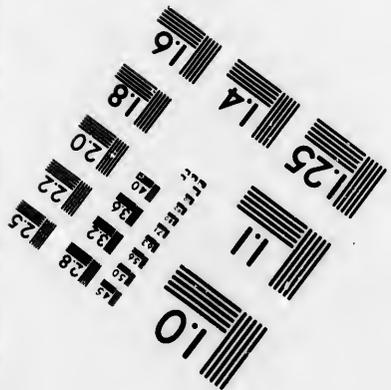
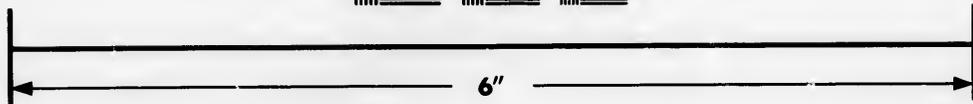
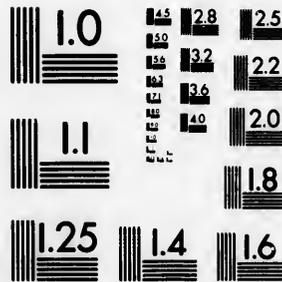


**IMAGE EVALUATION  
TEST TARGET (MT-3)**



**Photographic  
Sciences  
Corporation**

23 WEST MAIN STREET  
WEBSTER, N.Y. 14580  
(716) 872-4503

15 28 25  
16 32 22  
18 20

**CIHM/ICMH  
Microfiche  
Series.**

**CIHM/ICMH  
Collection de  
microfiches.**



Canadian Institute for Historical Microreproductions / Institut canadien de microreproductions historiques

10  
01

**© 1982**

Technical and Bibliographic Notes/Notes techniques et bibliographiques

The Institute has attempted to obtain the best original copy available for filming. Features of this copy which may be bibliographically unique, which may alter any of the images in the reproduction, or which may significantly change the usual method of filming, are checked below.

L'Institut a microfilmé le meilleur exemplaire qu'il lui a été possible de se procurer. Les détails de cet exemplaire qui sont peut-être uniques du point de vue bibliographique, qui peuvent modifier une image reproduite, ou qui peuvent exiger une modification dans la méthode normale de filmage sont indiqués ci-dessous.

- |  |  |
|--|--|
| <input type="checkbox"/> Coloured covers/<br>Couverture de couleur   | <input type="checkbox"/> Coloured pages/<br>Pages de couleur   |
| <input type="checkbox"/> Covers damaged/<br>Couverture endommagée  | <input type="checkbox"/> Pages damaged/<br>Pages endommagées   |
| <input type="checkbox"/> Covers restored and/or laminated/<br>Couverture restaurée et/ou pelliculée  | <input type="checkbox"/> Pages restored and/or laminated/<br>Pages restaurées et/ou pelliculées  |
| <input checked="" type="checkbox"/> Cover title missing/<br>Le titre de couverture manque  | <input type="checkbox"/> Pages discoloured, stained or foxed/<br>Pages décolorées, tachetées ou piquées  |
| <input type="checkbox"/> Coloured maps/<br>Cartes géographiques en couleur   | <input checked="" type="checkbox"/> Pages detached/<br>Pages détachées   |
| <input type="checkbox"/> Coloured ink (i.e. other than blue or black)/<br>Encre de couleur (i.e. autre que bleue ou noire)   | <input type="checkbox"/> Showthrough/<br>Transparence  |
| <input type="checkbox"/> Coloured plates and/or illustrations/<br>Planches et/ou illustrations en couleur  | <input type="checkbox"/> Quality of print varies/<br>Qualité inégale de l'impression   |
| <input checked="" type="checkbox"/> Bound with other material/<br>Relié avec d'autres documents  | <input type="checkbox"/> Includes supplementary material/<br>Comprend du matériel supplémentaire   |
| <input type="checkbox"/> Tight binding may cause shadows or distortion<br>along interior margin/<br>La reliure serrée peut causer de l'ombre ou de la<br>distortion le long de la marge intérieure   | <input type="checkbox"/> Only edition available/<br>Seule édition disponible   |
| <input type="checkbox"/> Blank leaves added during restoration may<br>appear within the text. Whenever possible, these<br>have been omitted from filming/<br>Il se peut que certaines pages blanches ajoutées<br>lors d'une restauration apparaissent dans le texte,<br>mais, lorsque cela était possible, ces pages n'ont<br>pas été filmées. | <input type="checkbox"/> Pages wholly or partially obscured by errata<br>slips, tissues, etc., have been refilmed to<br>ensure the best possible image/<br>Les pages totalement ou partiellement<br>obscurcies par un feuillet d'errata, une pelure,<br>etc., ont été filmées à nouveau de façon à<br>obtenir la meilleure image possible. |
| <input type="checkbox"/> Additional comments:/<br>Commentaires supplémentaires:  |  |

This item is filmed at the reduction ratio checked below/  
Ce document est filmé au taux de réduction indiqué ci-dessous.

10X	14X	18X	22X	26X	30X
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
12X	16X	20X	24X	28X	32X

The copy filmed here has been reproduced thanks to the generosity of:

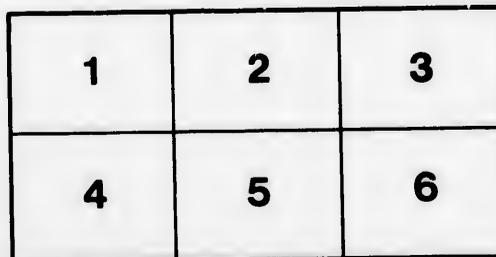
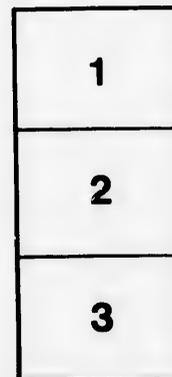
Library of Congress  
Photoduplication Service

The images appearing here are the best quality possible considering the condition and legibility of the original copy and in keeping with the filming contract specifications.

Original copies in printed paper covers are filmed beginning with the front cover and ending on the last page with a printed or illustrated impression, or the back cover when appropriate. All other original copies are filmed beginning on the first page with a printed or illustrated impression, and ending on the last page with a printed or illustrated impression.

The last recorded frame on each microfiche shall contain the symbol  $\rightarrow$  (meaning "CONTINUED"), or the symbol  $\nabla$  (meaning "END"), whichever applies.

Maps, plates, charts, etc., may be filmed at different reduction ratios. Those too large to be entirely included in one exposure are filmed beginning in the upper left hand corner, left to right and top to bottom, as many frames as required. The following diagrams illustrate the method:



L'exemplaire filmé fut reproduit grâce à la générosité de:

Library of Congress  
Photoduplication Service

Les images suivantes ont été reproduites avec le plus grand soin, compte tenu de la condition et de la netteté de l'exemplaire filmé, et en conformité avec les conditions du contrat de filmage.

Les exemplaires originaux dont la couverture en papier est imprimée sont filmés en commençant par le premier plat et en terminant soit par la dernière page qui comporte une empreinte d'impression ou d'illustration, soit par le second plat, selon le cas. Tous les autres exemplaires originaux sont filmés en commençant par la première page qui comporte une empreinte d'impression ou d'illustration et en terminant par la dernière page qui comporte une telle empreinte.

Un des symboles suivants apparaîtra sur la dernière image de chaque microfiche, selon le cas: le symbole  $\rightarrow$  signifie "A SUIVRE", le symbole  $\nabla$  signifie "FIN".

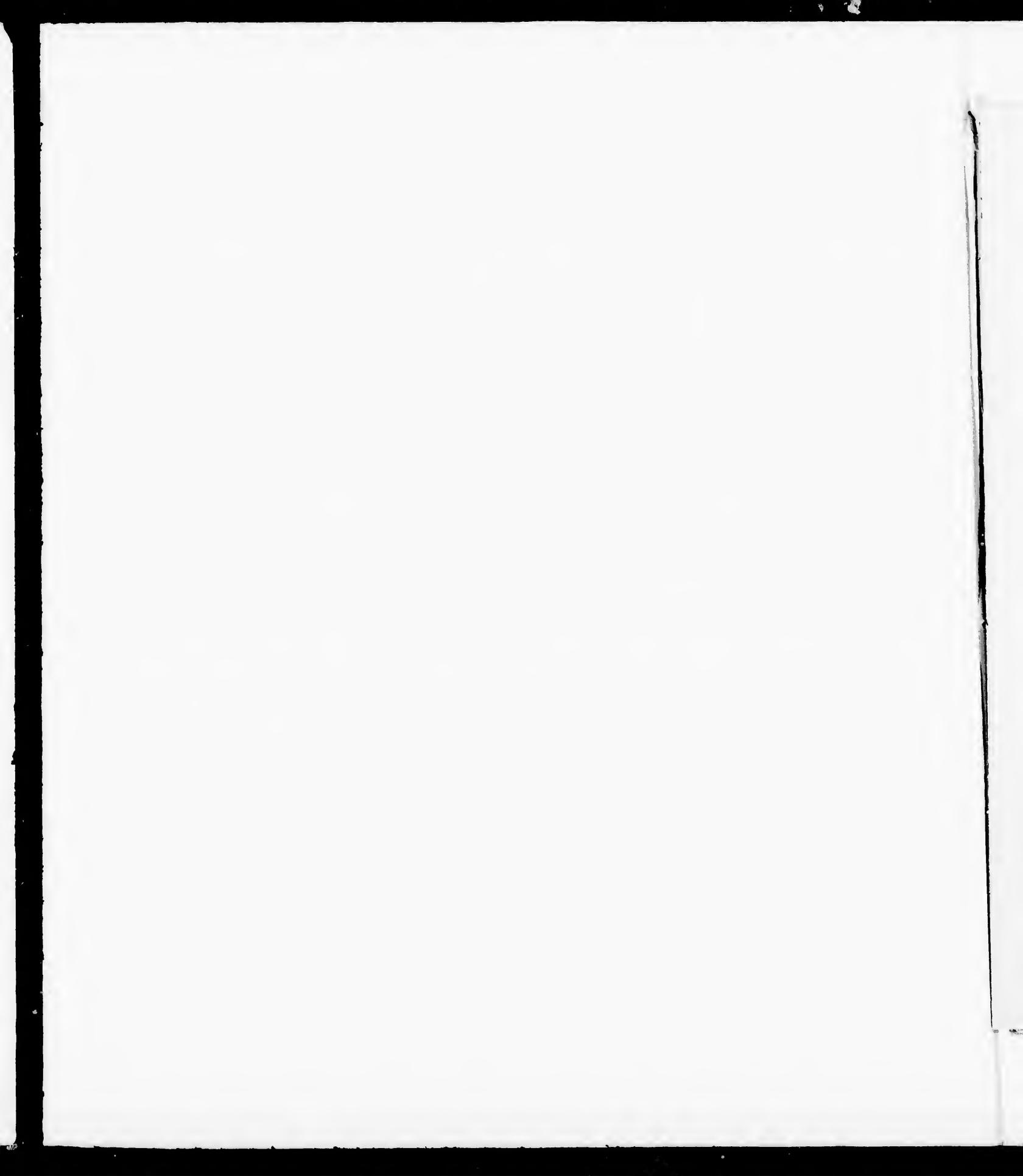
Les cartes, planches, tableaux, etc., peuvent être filmés à des taux de réduction différents. Lorsque le document est trop grand pour être reproduit en un seul cliché, il est filmé à partir de l'angle supérieur gauche, de gauche à droite, et de haut en bas, en prenant le nombre d'images nécessaire. Les diagrammes suivants illustrent la méthode.

errata  
to

pelure,  
on à



32X



with the wing. Hind wings with the first division spoon-shaped at the end: third very short and blunt at end; entire wings fawn color, with no dark brown scales in the fringe on third division. Legs whitish-brown, hind pair as far as middle of tibiae, beyond brown, spurs paler. Beneath uniformly brown, thickly dusted with paler scales; with a large pale cloud on the costal division of primaries.

Length of body .48; of fore wing .43 of an inch. California (Edwards). This species may at once be known by its hind short wings, its uniform fawn color, and by the faded ochreous cloud near the apex of costal division of fore wings. It is remotely allied to *Ph. pterodactylus* of Europe, but differs decidedly in the costal divisions of the fore wings, being much more acutely produced. Besides these I have received, through Mr. Edwards, two other species of this genus from California, but too imperfectly preserved for description.

---

XXIV.—*Notes on some Pyralidae from New England, with Remarks on the Labrador Species of this Family.*

By A. S. PACKARD, JR.

Read January 6, 1873.

AMONG the specimens of this group, in the Museum of the Peabody Academy of Science, are several species which occur frequently in New England, and are so well marked that I have ventured to describe them, without waiting for more material from other localities.

I am unable, so far in my studies on this group, to find any valid characters separating the "Phycidae" from the family Pyralidae, whether we regard the larval or imaginal characters. They seem to me to be intimately related on one hand to the lower Pyralids, such as *Botys* and *Scopula*, and on the other to the Crambi. Certainly the "Phycidae" should not rank as a family, but take their place as a subordinate group.

*Aerobasis rubrifasciella*, n. sp.—8♂ 7♀. Antennae of ♂ with the usual tuft on basal joint; the palpi slender, pointed, ascending vertically. Body and fore wings slate-ash, glistening; thorax tinged with reddish-brown,

and with the head giving off faint metallic colors; palpi blackish on the outside. Fore wings rather broad; just within the basal third a straight line of raised scales, extending from the inner edge and stopping short of the subcostal vein, conspicuously black externally, concolorous with the wing within; the black line bordered externally with bright vermilion (sometimes wanting), which usually reaches the costal edge. Base of wing slightly paler than middle of the wing. A light, triangular, paler shade in the costal region of the middle of the wing, enclosing two small, conspicuous, twin black dots. A submarginal faint, pale, narrow line curving outward in the middle and with four or five acute scallops. Fringe concolorous with the rest of the wing. Hind wings pale, glistening, cinereous. Beneath, fore wings quite dusky, with no markings; hind wings much paler, growing darker towards the costa. Legs dark ash, paler at the ends of the joints, especially the hind tibiae, which have a whitish band around them; hind legs whitish within.

Length of body ♂, .40, ♀, .40 of an inch; of fore wing ♂, .38-.40, ♀, .40 of an inch. Orono, Maine. (Packard.)

This species is at once recognized by the broad bright-red transverse stripe just within the middle of the wing. This stripe varies much, being sometimes not present, at others not reaching the costal edge. In one additional specimen from Maine, the fore wing has scattered reddish scales at base and beyond the middle, while the dark transverse stripe is wanting, and the red portion forms a broad transverse bright-red band. The larva lives in June and early in July between the leaves of the alder, where it makes a horn shaped case of black cylindrical pellets of excrement, arranged regularly in circles, the additions being made around the mouth of the case. The case is about an inch and a half long; its mouth a quarter of an inch in diameter. Within it is densely lined with white silk. The pupa is of the usual color, mahogany brown, the end of the abdomen rounded, with six hairs projecting from a transverse supraanal projecting ridge. On each abdominal segment is a dorsal dusky transverse stripe, widest on the basal segment. The larva was not described in my notes. The pupa state lasts about two weeks, the moth which I reared appearing July 24th, the larva having been found July 6th.

The Museum of the Peabody Academy of Science also contains ten specimens of this moth reared by Mr. J. H. Emerton. The larvae were found feeding on the Sweet Fern (*Comptonia asplenifolia* Alt.), July 7, 1866, at Hamilton, Mass., the moth appearing July 20th. The case is quite different in form from that previously described, being regularly oval cylindrical; .55 inch long and .35 inch in diameter. It is constructed in the same manner as those found on the alder. This striking difference in the form of the case may possibly be due to the difference in the form of the leaves of the food plant, the large broad leaves of the alder inducing the larva to build a horn-like, much elongated case; while the narrow smaller leaves of the Sweet Fern may have led to the formation of a short, oval case. These differences are such as we would ordin

C. S. Henry 306

arily regard as specific, but neither do the pupæ or adults reared from the two plants differ appreciably.

*Myelois albipogonella*, n. sp.—2♂. Body long and slender, palpi large and quite long, wings long, with the outer edge of primaries unusually oblique. Dull cream or whitish buff, head and palpi whitish buff. Fore wings pale buff color with a single long broad white stripe extending from the base of costa to the apex, the extreme outer  $\frac{1}{3}$  of costa being buff; lower edge of the white band slightly dusky, and the wing along the middle is deeper buff than along the inner margin. Fringe a little paler than the wing. Hind wings whitish. Abdomen white. Beneath both wings are uniformly pale whitish buff. Body and legs of an intenser white.

Length of body, .57 of an inch; of fore wing .55 of an inch. New Hampshire, May and June (C. A. Walker).

This is quite different from *Myelois grossularie* Pack. (described in the "Guide to the Study of Insects," page 331, under the name *Pempelia grossularie*), and which, as suggested by Prof. P. C. Zeller, may prove on comparison to be identical with the European *Myelois concolutella*, Hübn. (See Entom. Zeitung Stettin 1871, p. 177) which preys on the gooseberry. The present species differs much from *M. grossularie* in having a longer body and wings, and much larger palpi; and in the style of markings. It may be at once known by the single long broad white line along the costal edge of the fore wings.

*Pempelia ovalis*, n. sp. 1♂. Palpi large and broad; antennæ tufted at base as usual; fore wings oblong, not very long, outer edge less oblique than usual. Body and fore wings ash, being covered with whitish and brown scales. Fore wings with a short curved dark line at base on the median vein. On inner third of wing a very broad brown band, directed obliquely outward from the costa to the inner edge, and enclosing a large distinct, regularly oval (longitudinal), ochreous spot between the median and submedian veins. Two obscure black discal points situated as usual; the outer one is enclosed in a dusky shade crossing the wing obliquely and limited beyond by the usual submarginal white zigzag line; this line is curved inward below the costa; from the middle of the wing to the inner margin it is exactly parallel to the outer edge, terminating in an angle directed outwards. Between this line and the edge is a series of dusky bars, the interspaces cinereous. A marginal black line. Fringe cinereous. Hind wings pale smoky. Beneath fore wings dusky. A whitish costal spot near the apex, but no line. Hind wings slightly paler. Abdomen concolorous with the hind wings. Legs dull ash ringed with whitish.

Length of body .40 of an inch; of fore wing .40 of an inch. Maine, (Packard).

Easily known by the oval ochreous spot on the inner third of the fore wings.

*Nephoteryx latifasciatella*, n. sp.—1♀. Of the usual cinereous color. Fore wings rather oblong, the outer edge being less oblique than in *N. Ed-*

C. A. Walker, 1876

*mandsi* Pack. and other allied species; base of wing pale whitish ash, beyond a broad dark shade crosses the wing, limited externally by a white distinct zigzag line which is directed obliquely outward towards the inner edge; the line has an acute narrow point running inwards on the median vein, and a broader angle directed inwards on the submedian vein, the line directed outwards at its termination on the inner edge. A costal dark shade on the outer edge of this line. In the middle of, and extending across, the shade is a long ochreous spot. The two discal black dots are more obscure than usual. The submarginal white line is very distinct, consisting of three scallops, the middle one forming a grand curve extending from the subcostal vein around to the submedian, the curve is well rounded not angulated as in *N. Edmondsii*. This line has a dark shade on both sides, distinctly on the costa. A marginal row of distinct black dots. Fringe concolorous with the rest of the wing. Hind wings of the usual shade. Fore wings dusky beneath, with a costal submarginal pale line. Legs cinereous, hind tibiae with a dark ring, tarsi ringed with whitish.

Length of body .35 of an inch; of fore wing .38 of an inch. Maine, (Packard).

This species may be known by the broad dusky shade on the inner third of the fore wings, enclosing an ochreous patch. It is of about the same size as *N. Edmondsii*.

*Nephopteryx rosatella*, n. sp.—2 ♂. With the same cut of the wings and almost exactly repeating the coloration of the European *Peupelia semirubella*, it has all the structural characters of *Nephopteryx*. The palpi are larger and less ascending than usual; antennæ without the tuft of scales with short broad joints, well ciliated beneath. Front with longer scales, than usual. Head and palpi reddish. Costa of fore wings conspicuously white, the band not reaching the apex, the rest of the wing dull roseate; inner edge whitish, the band not reaching the inner angle. Hind wings whitish. Beneath fore wings a little dusky; hind wings same as above. Two hind pairs of legs reddish externally.

Length of fore wing .37 of an inch. Dorchester, Mass. (F. G. Sanborn).

In one specimen the roseate color on the wings has apparently faded out into a pale drab, but the head is red. Though the antennæ are without the usual tuft of scales, and the palpi are longer than usual, I should judge that it was a *Nephopteryx*.

#### REMARKS ON CERTAIN LABRADOR PYRALIDÆ.

In Lis Beiträge zur Schmetterlings Fauna von Labrador (Entomologischer Zeitung, Stettin, 1870, p. 371), Herr H. B. Möschler makes some interesting remarks on the moths described by American writers from Labrador. As soon as I

can obtain specimens from Europe with which to compare the species I have described as new, I shall give the results of the comparison and refer to Herr Möschler's valuable remarks.

*Botys inquinitalis* Zeller. Having received two specimens of this species from Lapland, through the kindness of Dr. Standinger, and observed how much the two specimens differ from each other, I am disposed, with Dr. Standinger (Catalog., etc.) and Herr Möschler, to refer my *Scopula glacialis* (l. c. 52) to the above species.

My specimens differ from the two others, in being paler in the middle of the fore wings, with the outer line consequently much more distinct. On the under side the same line is repeated with more distinctness, while the five black costal spots are smaller and consequently farther apart than in the Lapland examples. Otherwise the species agree with those from Lapland.

*Pempelia fusca* (Haworth). Möschler regards my *Eudorea? frigidella* (Proc. Bost. Soc. Nat. Hist., 1866, p. 53) as identical with *E. centuriella* S. V. I fear Herr Möschler has been misled by my doubtful reference of this species to *Eudorea*. Having since received four specimens from Lapland and Iceland, of *Pempelia fusca* (Haworth), I find that my specimens belong undoubtedly to that species. I have also specimens from Orono, Augusta and Brunswick, Maine, captured in July and August. These differ in no respect from the Labrador and European examples.

*Scoparia albissinatella* (*Eudorea? albissinatella* Pack. l. c.). As regards the identity of this form with *S. centuriella*, I should hesitate to decide until I have specimens from Europe with which to compare my example.



