NEW AMERICAN TINEINA.

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The following seven species of *Tineina* were part of a large and well-preserved collection of *Microlepidoptera*, recently received for determination from *Mr. Henry Engel, Pittsburg, Pennsylvania*, who has presented the types, together with many other specimens of other species, to the U. S. National Museum.

Five of the following species have previously been collected around Washington, D. C., by the writer.

Anacampsis nonstrigella, new species.—Antennæ black, with silvery-white annulations. Labial palpi bright deep ochreous, tips of terminal joints slightly shaded with black. Eyes dark red. Face white, iridescent, gradually mixed with the darker colour of the vertex. Head and thorax dark olive brown, iridescent. Basal two-thirds of fore wings dark olive, apical part deep blackish brown, with a few golden-brown scales just before apex. Hind wings dark purplish fuscous, with dorsal cilia white. Abdomen above dark purplish brown, with each joint tipped with silvery-white, the entire body below shining straw yellow. Legs straw-coloured, with broad black bars on the exterior side.

Alar expanse, 15 mm.

Habitat: Oak Station, Pennsylvania, July. U. S. Nat. Mus. Type No. 9792.

This species is nearest to *Anacampsis tristrigella*, Walsingham, and very similar to it in size and colour, but is devoid of all the prominent white apical lines characteristic of that species.

Trichotaphe Washingtoniella, new species.—Antennæ serrate, deep blackish brown, without lighter annulations. Labial palpi with smoothly appressed thickening of the second joint, blackish brown, colour on the inner side of second joint and on the terminal joint slightly mixed with ochreous. Head and thorax dark purplish brown, face a shade lighter. Fore wings dark purplish brown; on the fold are two connected, round, velvety black blotches, the outer one extending up in the middle of the wing, and containing a few ochreous scales. At the end of the cell is a somewhat larger aggregation of ochreous scales, forming two small indistinct moon-shaped spots, separated and partly surrounded by velvety black scales. Just before apex is a transverse velvety black fascia, outwardly nearly straight and parallel with the edge of the wing, inwardly

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sharply angulate, the point indistinctly connected by black scales with the second discal spot. At the base of the apical cilia is a velvety black line. Cilia concolorous with the wing. Hind wing light fuscous, darkest towards the tip. Abdomen and legs dark purplish fuscous, tips of each tarsal joint ochreous.

Alar expanse, 16 mm.

Habitat: District of Columbia; Pittsburg, Pennsylvania, June; St. Louis, Missouri, August. U. S. Nat. Mus. Type No. 9793.

The larva feeds in a narrow fold on the edge of the leaf of *Eupatoria*, sp., and pupates in a similar fold.

The species is nearest *T. juncidella*, Clemens, but larger, more broad-winged, and at once distinguished by the dark labial palpi. In this respect it resembles *T. Levisella*, Fyles, which is also quite near, but *Levisella* is a still larger species, with pointed wings, while the present has apex evenly rounded as in *juncidella*.

Trichotaphe trinotella, new species.—Antennæ dark purple, without colour-annulations. Labial palpi light ochreous. Face ochreous. Head and thorax dark brown. Fore wings dark brown, with three prominent light ochreous dots, one on the middle of the wing, another smaller one just below it on the fold, and the third and largest at the end of the cell. At the beginning of the costal cilia are a few ochreous scales. Hind wings dark fuscous, cilia a shade lighter. Abdomen dark bronzy fuscous above, under side fuscous, sprinkled with ochreous. Legs blackish externally, each joint of tarsi and the spurs tipped with ochreous.

Alar expanse, 15 mm.

Habitat: Pittsburg, Pennsylvania, May. U. S. Nat. Mus. Type No. 9794.

Quite close to *T. juncidella*, Clemens, and to *T. leuconotella*, Busck, but easily distinguished by the ornamentation.

Gelechia fondella, new species.—Antennæ dingy ochreous, with black annulations. Labial palpi whitish ochreous, sprinkled with black. Face, head and thorax whitish ochreous. Fore wings whitish ochreous, with each scale darker at the tip, and with a faint roseate tinge. Two large conspicuous black costal spots, one at basal third outwardly oblique, and the other at apical third inwardly oblique, both reaching the middle of the wing. Extreme apical part of wing dusted with black. Hind wings light ochreous fuscous. Legs whitish ochreous, with black bars and spots on the exterior side.

Alar expanse, 13-14 mm.

Habitat: Plummer's Island, Maryland; Pittsburg, Pennsylvania; June. U. S. Nat. Mus. Type No. 9795.

Nearest in general habitus and coloration to the group of *G. mediofuscella*, Clemens; *Pennsylvanica*, Dietz, etc., but quite distinct in design.

Mompha stellella, new species.—Antennæ unicoloured, dark brown. Labial palpi whitish ochreous, sprinkled with black scales, and with a black annulation just before the tip of terminal joint. Face silvery-white. Head and thorax light ochreous. Fore wings light ochreous, mottled with brown and black scales, costal edge evenly mottled with black, and entire apical part of the wing sprinkled with sparse black scales, two oblique, ill-defined and indistinct shades of light brown stretch across the wing, one from the base, the other from the middle of costa. There are six tufts of raised ochreous scales in two longitudinal rows, one through the middle of the wing, the other below the fold. The central of the latter tufts, which is found just before the tornus, is the largest of them, and is terminated by and followed by intense black scales, the most conspicuous marking on the rather evenly mottled wing. Abdomen ochreous, legs ochreous, mottled with black.

Alar expanse, 11-12 mm.

Habitat: Pennsylvania, District of Columbia, August. U. S. Nat. Mus. Type No. 9796.

The larvæ feed in the base of the flowers of *Evening Primrose* (*Oenothera*, sp.). The insect has long been in the Museum collection, and was passed upon already in 1886 by Lord Walsingham as *Laverna*, n. sp.

It is nearest and quite similar to the other *Oenothera*-feeder, *Mompha brevivittella*, Clemens, but lacks the longitudinal black streaks on the fore wings, and is at once recognized by the black tornal patch.

Mompha Engelella, new species.—Antennæ dark purplish brown, with silvery-white tips. Labial palpi golden yellow, tip of terminal joint shaded with purple. Face, head and thorax dark purplish brown, iridescent. Basal part of fore wings concolorous with thorax, and limited outwardly by a narrow oblique fascia of bluish metallic scales, beginning just before the middle of costa, and reaching the dorsal edge at basal third. Apical fourth of the wing is of this same dark purple colour, and the intervening middle part of the wing is bright golden. On this

metallic golden part are four spots of raised scales, one large, black on the fold at the middle of the wing, another smaller one above it in the cell is white, edged with black, and at the end of the cell are two more or less confluent spots of iridescent bluish scales edged with black. Between the yellow central part of the wing and the dark apical part is a small triangular silvery-white spot. Hind wings dark purplish brown. Abdomen dark brown above, silvery white on the under side. Legs purplish brown, with the tips of the spurs and of the tarsal joints white.

Alar expanse, 9-10 mm.

Habitat : Pittsburg, Pennsylvania, May; District of Columbia, June. U. S. Nat. Mus. Type No. 9797.

It gives me pleasure to name this exquisite little insect in honour of *Mr. Henry Engel*.

The species belong to the group of small metallic *Mompha*, which contains *Schranckella*, Hübner, and *terminella*, Westwood, of Europe, and is, in fact, very nearly identical in coloration with the latter.

Rebel retains in his Cat. Eur. Lepid. the separate genus *Psacaphora* for these two species, but does not include the other metallic species as *Raschiella*, Zellar. The more logical way is to retain them all in *Mompha*, as does Meyrick in his Handbook British Lepid., though eventually this genus may profitably be divided into two groups, the one represented by these small metallic species with smooth palpi and legs, the other to include the dull-coloured species with more or less shaggy palpi and legs.

Epermenia imperialella, new species. — Antennæ ciliated, dark fuscous; basal joint reddish, with pecten. Labial palpi reddish ochreous, shaded with black exteriorly. Face, head and thorax ochreous. Fore wings light yellow, overlaid on costal and apical part with reddish ochreous. On the middle of the wing is an ill-defined broad oblique darker grayish ochreous fascia, widest at the costal edge, gradually narrowing to the dorsal edge, which it reaches at basal third; it is there continued into a dark ochreous dorsal scale tuft. The reddish coloration increases in intensity towards apex. Cilia just below apex short, then suddenly very long, giving the wing the appearance of being falcate. Cilia reddish ochreous, with a marginal black line below and around apex, and with a white space outside this line, just below apex. Hind wings dark bronzy fuscous; cilia ochreous. Abdomen ochreous. Legs reddish.

Alar expanse, 19 mm.

Habitat: Pittsburg, Pennsylvania, June. U. S. Nat. Mus. Type No. 9798.

This is by far the largest and most conspicuous species of the genus known to me, totally unlike the other American species described at present, nearest to *E. Illigerella*, Hübner, of Europe, but larger and more striking than that species. It has a notable colour resemblance to *Gracilaria Murtfeldtella*, Busck.

THE TYPE OF THE GENUS COCCUS.

BY MRS. M. E. FERNALD, AMHERST, MASS.

In the CANADIAN ENTOMOLOGIST, Vol. xxxiv, page 232 (1902), I gave the reasons for adopting *hesperidum* as the type of *Coccus*, which adoption caused such radical changes in the classification of the *Coccidæ* that I am free to say I hesitated to make them in my Catalogue of the *Coccidæ* of the World, published in 1903. The main difficulty was to give a proper interpretation to the action of Geoffroy, in his *Histoire Abrégée des Insectes*, Vol. I (1762), where he removed a part of the Linnæan species from *Coccus*, and placed them in the genus *Chermes*, thus using this genus in a different sense from that of Linnæus, the original founder, and placing *adonidum*, *phalaridis* and his new species *ulmi* under *Coccus*. Of these three species only *phalaridis* was given by Linnæus under the genus *Coccus*, in his *Systema Naturæ*, ed. x (1758), and no one has ever been able to positively identify this insect. Linnæus himself was not able to determine whether it was a *Coccus*, an *Aphis* or a *Chermes*. Under these circumstances, it did not seem wise to make use of the restriction of Geoffroy, but I adopted the type established in the next oldest work known to me at that time, which was *hesperidum*, fixed as the type of *Coccus* by Latreille in his *Hist. Nat. Crust. Ins.*, Vol. iii, page 267 (1802).

Mr. G. W. Kirkaldy, who has given us some exceedingly valuable Biographical and Nomenclatural Notes on the Hemiptera in "The Entomologist," Vol. xxxvii, p. 254 (1904), objects to the use of *hesperidum* as the type of *Coccus*, and states that he cannot find that the type of *Coccus* has ever been fixed, or that any species but the true Linnæan *cacti* is available.

I have now before me a copy of Sulzer's *Die Kennzeichen der Insekten*, published in 1761. In this work Sulzer gives, for those times, a

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