

This article was downloaded by: [York University Libraries]
On: 04 January 2015, At: 05:28
Publisher: Taylor & Francis
Informa Ltd Registered in England and Wales Registered Number:
1072954 Registered office: Mortimer House, 37-41 Mortimer
Street, London W1T 3JH, UK



Annals and Magazine of Natural History: Series 5

Publication details, including instructions
for authors and subscription information:
<http://www.tandfonline.com/loi/tnah11>

XLVII.—Notes on the Lepidoptera of St. Helena, with descriptions of new species

Mrs. T. Vernon Wollaston
Published online: 15 Oct 2009.

To cite this article: Mrs. T. Vernon Wollaston (1879) XLVII.—Notes on the Lepidoptera of St. Helena, with descriptions of new species , *Annals and Magazine of Natural History: Series 5*, 3:18, 415-441, DOI: [10.1080/00222937908562413](https://doi.org/10.1080/00222937908562413)

To link to this article: <http://dx.doi.org/10.1080/00222937908562413>

PLEASE SCROLL DOWN FOR ARTICLE

Taylor & Francis makes every effort to ensure the accuracy of all the information (the "Content") contained in the publications on our platform. However, Taylor & Francis, our agents, and our licensors make no representations or warranties whatsoever as to the accuracy, completeness, or suitability for any purpose of the Content. Any opinions and views expressed in this publication are the opinions and views of the authors, and are not the views of or endorsed by Taylor & Francis. The accuracy of the Content should not be relied upon and should be independently verified with primary sources of information. Taylor and Francis shall not be

liable for any losses, actions, claims, proceedings, demands, costs, expenses, damages, and other liabilities whatsoever or howsoever caused arising directly or indirectly in connection with, in relation to or arising out of the use of the Content.

This article may be used for research, teaching, and private study purposes. Any substantial or systematic reproduction, redistribution, reselling, loan, sub-licensing, systematic supply, or distribution in any form to anyone is expressly forbidden.

Terms & Conditions of access and use can be found at <http://www.tandfonline.com/page/terms-and-conditions>

XLVII.—Notes on the Lepidoptera of St. Helena, with Descriptions of new Species. By MRS. T. VERNON WOLLASTON.

[Continued from p. 343.]

Fam. VII. Tineidæ.

Genus 32. EUPLOCAMUS, Latr.

Euplocamus ursella.

Tinea ursella, Walk. in Melliss's St. Hel. 190 (1875).

Expanse 11–13 lines. With the fore wings of a rich velvety mottled brown, and having a very glossy or silken appearance on the first emergence of the insect from the chrysalis, which, however, the mere fact of flight (more so, perhaps, in this particular group than in any other) tends greatly to destroy. Most frequently, indeed, it is captured of a palish brown hue, dappled more or less with very dark velvety brown, a dark blotch on the inner margin being then *generally* the most permanent marking, although sometimes it is altogether absent. Along the outer margin is a row of five or six remote yellowish spots, more or less apparent in different specimens, being sometimes conspicuous and at others nearly absent. Hind wings of a pale glossy subhyaline whitish cinereous, gradually becoming more smoky towards the apex, and with the extremely long fringe of the same hue as the rest of the surface. Thorax concolorous with the anterior wings, body with the posterior ones.

Var. β with the basal article of the antennæ thicker than in those of the type. Indeed I should have been inclined almost to have considered it even a distinct species, had not Prof. Zeller (who has kindly examined my specimen) pronounced it to be merely a variety of the present species. The fore wings are certainly of a more uniform brown (or less clouded with coarse black scales) throughout and more rounded at the apex; the fringe too of the posterior wings is appreciably darker. On measuring a series of the typical one (although varying greatly, which, indeed, is quite characteristic of this group), it does not in any instance exceed 15 lines, whereas the var. β is exactly 17 lines when expanded. Unfortunately, however, I only met with a single example, the chrysalis of which, I believe, I secured from the interior of a rotten log of the "cabbage-tree" wood.

Var. γ with the fore wings somewhat narrower and of a

paler or more freckled hue than the type, and having a few distinct blackish dots below the costa.

The *Euplocamus ursella* is one of the most universal moths throughout the intermediate and lofty districts of the island, though I have no evidence that it exists below the altitude of Plantation. It appears, I think, to belong more especially to the "cabbage-tree" fauna, in the wood of which (particularly, though by no means always, when in a rotten or decomposed condition) I have repeatedly found the larva. The latter is of a dirty whitish hue, extremely unattractive in appearance, and most active if disturbed; when fully fed it spins a firm and somewhat silken cocoon, generally immediately under the loosened outer bark of the "cabbage trees." The chrysalis is reddish brown, having the five posterior segments, on the upperside, armed at their base with a row of minute closely set spinules, the apex itself being furnished above with two strong recurved hooks, and below with two shorter and obtuse spine-like tubercles.

Euplocamus anticella.

Cerostoma anticella, Walk. in Melliss's St. Hel. 192 (1875).

Expanse 8-12 lines. With the fore wings of a glossy bronzy brown, and quite free from any spots or markings whatever; but the fold is rather darker, so that in worn specimens it has somewhat the appearance of being a dark longitudinal streak. Hind wings glossy greyish cinereous. Thorax rather paler than the anterior wings; body concolorous with the fringe of the posterior ones.

Var. β with the fore wings of a pale golden orcheous, gradually paler and duller towards the base, and entirely without markings. This is a very beautiful insect when fresh; but it is more often captured as a mere whitish and insignificant-looking moth. Hind wings glossy cinereous, with a very faint iridescent tinge. Thorax concolorous with the anterior wings, body with the posterior ones. Mr. Barrett informs me that this variety is very close to the British *Tinea pallecentella*, nevertheless without the characteristic irregular longitudinal line of that species. To me it appears as if it might eventually prove to be a distinct species from the typical *anticella*; however, as I am extremely unwilling to multiply species, which, after a more careful research on the spot, may possibly turn out to be but varieties of a single variable species, I have considered it better to treat this particular form merely as an albino variety of Mr. Walker's *anticella*.

E. anticella is not uncommon throughout the intermediate districts of St. Helena, ascending occasionally to the

central ridge. I think, however, that it is probably more strictly a member of the aster and gumwood fauna than of the cabbage trees; otherwise it possesses in the larva state the same characteristics as the *E. ursella*.

I can only partly conjecture that this is in reality the species indicated by Mr. Walker's *Cerostoma. anticella*; but, judging from the few types only which I have been able to examine of the St.-Helena Lepidoptera on which Mr. Walker erected his descriptions, I can only feel surprised that he was able from such mutilated exponents to draw descriptions with any degree of accuracy.

Euplocamus sanctæ helenæ.

Gelechia sanctæ helenæ, Walk. in Melliss's St. Hel. 192 (1875).

Gelechia ligniferella, id. ibid. 192 (1875).

Expanse 10-14 lines. With the fore wings pale brownish cinereous, dusted (especially exteriorly) with minute blackish scales. The wings are very uniform throughout, their only marking being a small black postmedian spot; the female, however, does not retain this marking, and is on the whole less irrorated with minute black scales. Hind wings glossy cinereous and slightly iridescent. Thorax in the female concolorous with the anterior wings, but in the male of a rather darker hue. Body concolorous with the posterior wings.

This is certainly one of the commonest members of the group, and better defined perhaps by its pale dusted surface, and its general absence of obscure blotches or markings, than by any positive character which is immediately conspicuous. The male, however (in examples which are fresh and un-rubbed), has a distinct blackish spot towards the apex of its anterior wings. I possess a single variety of this species in which the costa and inner margin of the fore wings are of a much paler, indeed almost yellowish, tint, giving the latter at first sight a somewhat longitudinally striped appearance; and there is also a small blackish blotch on the inner margin near the base.

E. sanctæ helenæ occurs in intermediate and lofty altitudes; in fact it is abundant throughout those regions which are more or less clothed with the arborescent Compositæ.

Genus 33. *TINEA*, Linn.; Staint.

Tinea flavofimbriata, E. Woll.

Expanse 3 lines. With the maxillary palpi developed but very slender and thread-like; the labial palpi are prorected

horizontally, with spine-like hairs beneath the second joint. The fore wings are of a pale whitish yellow, with two conspicuous transverse fasciæ, the first one of which is basal and the second median; the exterior edge of the second fascia is adjoined in the middle by a curved longitudinal blotch-like marking which unites it to a blackish hind-marginal border; the fringe is a little yellower than the rest of the surface, and, moreover, concolorous throughout, there being no indication of the blackish scales which are so apparent in the following species at the base; nevertheless there is usually a very diminutive blackish speck immediately beyond the extreme apex of the wing. Hind wings silken cinereous. Thorax brownish. Body pale yellowish cinereous.

Although this species and the following one are very similar, yet, on the average, *Tinea flavofimbriata* is decidedly the smaller of the two; the uniformly *immaculate* yellow fringe of its anterior wings will suffice to distinguish it (even at first sight) from *T. bicolor*. There is also a much more decidedly yellow shade about the pale portions of its surface; and its transverse fasciæ, as stated in the description, are conspicuously less oblique. It was chiefly at Plantation that I obtained this minute moth—and, moreover, very sparingly, my few specimens having been captured for the most part after showers. I cannot recall meeting with it on the high central ridge, where *T. bicolor* is so abundant; and I am inclined therefore to think that it may perhaps occupy a slightly lower range (as regards its *habitat*) than that species.

Tinea bicolor, E. Woll.

Expanse 4–4½ lines. With the maxillary palpi scarcely discernible; the labial palpi are very slightly deflexed, divaricating, and with a few distinct longish hairs beneath the second joint. The fore wings are white (sometimes with a faint tinge of yellow), with three very oblique transverse dark-brown or blackish fasciæ, the first of them (the costal half of which is broadest) being at the base, the second (which is very oblique to the anal angle, where it joins a line of black scales along the outer margin) being median, and the third one (which is very narrow, and sometimes represented by merely a small spot on the costa) subapical. The second fascia being very oblique from the costa to the anal angle, and the hind marginal line of dark scales being oblique in exactly the contrary direction, give to that region of the wing the appearance of having a curved blackish line or inverted arch-shaped marking, with a black spot in the centre, the latter being constituted by the ill-defined and abbreviated third

fascia. Hind wings dark smoky cinereous. Thorax brownish. Body concolorous with the posterior wings.

This elegant little *Tinea*, the black-and-white fore wings of which give it so conspicuous an appearance, is decidedly common in the higher altitudes of *St. Helena*, where I used principally to meet with it, resting on the lichen on the more or less perpendicular faces of the rocks, along the "Cabbage-tree Road," below *Actæon* and *Diana's Peak*. Nevertheless, although much less abundantly, it occurs occasionally as low as *Plantation* (some 1800 feet above the sea), where I have not unfrequently obtained it. During the early part of our visit to the island it seemed to be extremely rare; but as the summer approached (about the end of December) it became very plentiful in the loftier portions of the great central ridge, even its brightly ornamented black-and-white surface rendering it, however, by no means easy to detect (that is, in a state of repose) on the many-coloured lichen to which it is specially fond of adhering. The chrysalis of *Tinea bicolor* is of a very pale yellowish white, enveloped in a narrow and somewhat parallel-sided cocoon, which is a good deal flattened, so as to cause either edge to be sharply angular. The cocoon is almost white, being very little concealed or obscured by earthy particles.

Tinea pulveripennis, E. Woll.

Expanse $3\frac{1}{2}$ – $4\frac{1}{2}$ lines. With the fore wings narrow and about equally speckled with scales of a dark brown and an ochreous white (the latter having a slightly golden tinge). In general appearance, however, the darker portions seem to take the form of ill-defined and somewhat mottled or fragmentary transverse fasciæ (about four in number); but the whole wing is so completely irrorated with lighter or darker scales, that it becomes difficult to define for certain the exact pattern that they respectively assume. The fringe is of a pale straw-colour, with a few darker scales intermingled. Hind wings silvery grey, but with the fringe rather paler.

This pretty little species, remarkable for the narrowness of its speckled and somewhat ochreous-tinted fore wings, is, I should say, perhaps the most abundant of all the *Tineidæ* which are found at a lofty elevation. Like its congeners, it is accustomed to rest during the daytime (exposed to full view) upon the moss and lichen which more or less clothe the rocks; and it is not uncommon also on the trunks of trees. I do not remember, however, to have met with it at a much lower altitude than *Plantation*; but on the high central ridge it absolutely swarms.

Tinea aureomarmorata, E. Woll.

Expanse 5–5½ lines. With the fore wings of a pale whitish straw-colour, but much suffused or mottled with pale yellowish brown and somewhat gilded, broken up, exceedingly fragmentary fasciæ. Until closely examined, the general appearance of the species is that of a very pretty little yellow *Tinea* with slightly darker markings. The cilia quite at the apex of the fore wings are more or less marked with a blackish wavy line, more distinct in some specimens than in others; and there are also a few blackish scales (in highly-coloured examples) towards the apex of the wing. Hind wings of a smoky grey. Thorax concolorous with the anterior wings; body with the posterior ones.

A not very uncommon little species throughout St. Helena, at high and intermediate altitudes. I constantly met with it at Plantation, and likewise at West Lodge, resting upon the trunks of the gumwoods and of the aborescent asters, generally in the most exposed and windy spots. When disturbed, it is very apt to simulate being dead by lying motionless upon its back, under which circumstances it is difficult to secure without injuring the wings. The prettily but rather *lightly* marbled upper wings, which seem at first sight to be faintly shot with a somewhat golden-yellowish gloss, will sufficiently distinguish *T. aureomarmorata* from its immediate allies.

These three species (viz. *Tinea piperata*, *T. aureomarmorata*, and *T. pulveripennis*) perhaps more naturally belong to the small true *Tineæ* than any of the other species; they apparently possess very similar habits, being found in the same localities; and, except that the very thin palpi in *T. pulveripennis* help to distinguish it from its congeners, they otherwise depend upon their specific characters for their identification.

Tinea piperata, E. Woll.

Expanse 4–5½ lines. With the fore wings of a dull, mottled, obscure buff (dusted everywhere with minute brown scales), and having some irregular, small but unequal and ill-defined spots (which are generally placed both on the costa and the inner margin) of a dark brown. In one of my examples the spots towards the apex form two somewhat arrow-shaped fasciæ. No two specimens, however (taken from a tolerably good series which is now before me), seem to be exactly similar in the precise position of the darker spots and the more or less condensed irrorated scales. Hind wings silvery grey, the

cilia paler. Thorax concolorous with the anterior wings; body much paler.

This obscure little moth is a plentiful species in the island, becoming gradually more abundant as we ascend towards the central ridge, though its mottled hue renders it by no means easy to detect on the moss- or lichen-covered rocks amongst which it principally resides.

The following species (viz. *pulverulenta*) differs from the above in having its labial palpi rather arched and more densely covered with long bristle-like hairs (except the basal joint, which is bare, short, and slender), and the second joint with a long protruding bunch of scales, which extends beyond the terminal joint and gives the palpi a very brush-like appearance; anterior wings, too, with their apex most curiously curved back in the male, thus causing the hind margin to seem blunt or somewhat *Tortrix*-like.

Tinea pulverulenta, E. Woll.

Expanse 4-4½ lines. With the fore wings recurved at the apex in the male (though *not* in the female), but in a less degree than those of *Elachista recurva*, and of a speckled or irrorated (or somewhat powdered) appearance, the most distinct markings being alternate pale and dark (but usually ill-defined) oblique dashes from the costa. The darker portions are very much intermingled or suffused, giving to the whole surface a somewhat *pulverose*, but at the same time rather mottled aspect. Hind wings narrow and of a dark smoky hue, being generally a little blacker at the *extreme* tip. Head and thorax concolorous with the anterior wings; body the same as the posterior ones.

This somewhat obscure little moth is exceedingly abundant in the higher elevations of the island, descending also, though more sparingly, into the intermediate districts; and there can be no doubt that it is a truly indigenous member of the fauna. On the lofty central ridge, towards Diana's Peak and Actæon, the faces of the rocks are often thickly studded with its flat, oblong, earthy cocoons, which are lined with a strong, whitish, silken substance; but the imago, common as it is, is less easy to be observed, not merely on account of its minute size, but from its wonderful resemblance in colour to the rocks and mottled lichen on which it is accustomed to settle. The coarse scales (of dark brown and yellowish white) with which its fore wings are everywhere dusted, and which are so intermingled as to shape-out markings which are exceedingly ill-defined, render it a difficult species to secure in a perfect condition; for there is scarcely any moth which is so fragile

and easily rubbed as *T. pulverulenta*, the very act of impaling often rendering it totally unfit for inspection.

Tinea ferruginella, Hübner.

Expanse $5\frac{1}{2}$ – $6\frac{1}{2}$ lines. With the fore wings of a brownish tinge mottled with paler scales, the basal portion being slightly darker. The inner margin is of a pale yellowish white; and there is likewise a rather conspicuous spot on the disk of the same pale hue; the fringe is concolorous with the inner margin, but interrupted with blackish scales. Hind wings cinereous, the fringe being of the same tint. Thorax concolorous with the anterior wings, except the centre, which is of a pale yellowish white.

This little *Tinea* is not at all abundant in the island. The few specimens I met with do not appear in any way to differ from those in my British collection, except that the fore wings are less glossy and without the purplish tinge of the latter, though this may, indeed, be partly owing to my St.-Helena examples not being in very good condition.

Tinea pellationella, Linn.

Expanse 5 – $6\frac{1}{2}$ lines. With the fore wings of a dull pale brownish hue, and having near to the middle of the disk two rather longitudinally placed dark brown spots, which are generally more or less distinct; there is also a third, more conspicuous and likewise more rounded, dark brown, postmedian spot. On close inspection it will be observed that there are numerous cinereous scales throughout the wing, intermingled with the pale brownish ones; in fact the number of each is perhaps well nigh equal; the cilia are also cinereous. Hind wings of a pale (rather brownish) cinereous throughout.

As I only met with two examples of this little *Tinea*, I conclude that it must be a somewhat scarce species in the island, and perhaps even only recently introduced. Especially might this, I think, be the case, as it was not observed by Mr. Melliss. So far as I can judge from merely two specimens, it does not appear to differ much from the European type, though possibly, on the whole, it may be a trifle *darker* than the ones with which I have compared it in my British collection.

Tinea binotatella.

Tinea binotatella, Walk. in Melliss's St. Hel. 191 (1875).

Expanse 7 – 9 lines. With the fore wings of a dull and opaque dark cloudy brown, more or less besprinkled with blackish scales. Some specimens, however, are darker, and

have a small palish triangular spot or obscure blotch on the inner margin at the extremity of the fold. Hind wings of a glossy silken cinereous, rather darker at the apex. Thorax concolorous with the anterior wings. Body somewhat paler.

It was chiefly at Plantation that I met with this species, where it abounds; indeed it is much too abundant, as in the caterpillar-state it is most destructive to the potato-crops. Mr. Melliss observes, "The larva of this moth is well known in the island as the potato-worm. It is a small, translucent, maggot-like creature, of a dirty whitish hue, marked with four longitudinal rows of small brown spots, and having a few long hairs on its body. In length it varies from a half to three quarters of an inch. The head is hard, and of a chocolate-brown colour; and the little creature moves backwards quite as easily as it does forwards. It abounds in the island, and is a thorough pest to the potato-crops. Either the eggs are laid in the potatoes, or the larva enters them in an early stage of its growth, and, through its depredations, renders them quite unfit for food. When changing to the pupa-state it wraps itself up in a strong web, in the form of a close, tough envelope; and the chrysalis is of a light mahogany colour, with the positions of the wings and legs, even in its early stage, strongly marked longitudinally down the outside of the case or skin." It would therefore appear to be only in the more cultivated parts of the island that this species has established itself; and on rapping the trunks of trees in such situations the imagos fly off in showers; nevertheless they very quickly settle again.

Tinea compositarum, E. Woll.

Expanse 5-6 lines. With the maxillary palpi rather long, though folded and concealed; the labial ones are projected horizontally, divaricating, and gradually thickened towards the apical joint; the head is rough, but having the face somewhat globose and covered with imbricated scales. The fore wings are of a suffused greyish cinereous, densely irrorated with darker scales; the costal margin is somewhat paler, below which (particularly on the basal half) there are usually a few minute blackish specks. The whole surface, however, very obscure and rather variable, and has often the costal margin uniform with the rest of the wing. At the apex there is a small and somewhat wedge-shaped marking composed of a few blackish scales; and the fringe is also intermingled with similar ones. Hind wings smoky cinereous, but having the fringe slightly paler. Thorax concolorous with the anterior wings, body with the posterior ones.

If extreme inconspicuousness and the want of a definite character could form the distinctive feature of any moth, this obscure little *Tinea* ought certainly to be easy of recognition; yet, although it undoubtedly cannot be referred to any thing else in the St.-Helena list, it seems next to impossible to describe it in any manner which must make it at once intelligible. The almost uniformly dull subcinereous brown of its upper wings (which, however, are more properly defined as densely covered with dark scales on a rather paler base) is at first sight only relieved by a few somewhat black ones at the apex and occasionally on the inner margin. It was chiefly about the trunks of the old gumwoods, at intermediate elevations, that I obtained this obscure little moth.

The following species chiefly differs from the *compositarum* in having the posterior wings narrower than in the latter.

Tinea congenera, E. Woll.

Expanse $5\frac{1}{2}$ lines. With the fore wings of a dull brownish or blackish hue, slightly suffused with pale yellowish or straw-coloured scales, which are more conspicuous along the costa and the inner margin than on any other portion of the surface. The posterior wings are narrower than in the preceding species, which otherwise it very closely resembles. It is not, however, of quite so uniform a tint as *T. compositarum*, or of such a silken or shiny surface. Hind wings pale silvery cinereous. Thorax concolorous with the anterior wings; body somewhat paler.

I should almost have looked upon this little moth as merely a variety of *T. compositarum*, had not Professor Zeller (who has most kindly examined my specimens) pronounced it to be a distinct species. Unfortunately I only obtained two examples, one of which is very much darker than the other, indeed almost black.

Tinea brunneo-marmorata, E. Woll.

Expanse 7 lines. The fore wings of a griseous straw-colour, but densely and conspicuously suffused with brown scales. There are also several small dark brown or almost blackish blotches, the most conspicuous of which are two or three on the inner margin, and a third near to the apex, the extreme apex itself being black, and one or two smaller and more variable ones along the costa. The fringe is concolorous with the lighter portions of the surface, and very sparingly besprinkled with blackish or brownish scales. Hind wings smoky cinereous, with the fringe rather paler.

Thorax dark brown. Body concolorous with the posterior wings.

The dark brown scales and fragmentary markings of this *Tinea* are rather more conspicuous and defined than in some of the allied species, giving to the upper wings (the straw-coloured ground of which is nearly concealed by these obscure portions) a somewhat marbled appearance. Moreover the presence of usually two or three indistinct but nevertheless rather larger and blacker blotches imparts a still more freckled aspect to the whole. Although not always easily traceable, the small and irregular darker patches are placed, two of them on the inner margin and a third near to the (more blackened) apex, not to mention one or two, which are generally more obsolete, along the costa.

Tinea vilis, E. Woll.

Expanse 5–6 lines. The fore wings of an obscure brownish or dingy cinereous, and very much speckled or suffused with blackish scales, which more or less form broken-up and very indistinct transverse fasciæ. On the inner margin there is generally at least one blackish blotch which is rather larger than the rest and very irregular, and which is often supplemented by a second; but the one at the anal angle is almost always the most distinct, as well as the most permanent. Hind wings silvery cinereous. Thorax concolorous with the darker portions of the anterior wings; body somewhat paler.

This inconspicuous, dingily speckled, but nevertheless interesting little moth is not uncommon throughout those regions of St. Helena where the remains of the gumwood-thickets are still lingering; and there cannot, I think, be much doubt that the species is a thoroughly indigenous one. Like its congeners, it is generally to be met with resting upon the old trunks, the dingy and rough surface of which it so closely resembles that when its wings are folded closely over its body (as is its custom), and its head a little raised it might well be mistaken for a portion of the bark.

Tinea fasciculata, E. Woll.

Expanse 10–11 lines. The fore wings of an unequal griseous or pale cinereous brown, but densely crowded with ill-defined darker markings, especially along the costa, and having small longitudinal streaks or broken-up lines near the base. About the middle of the wing (arising from the inner margin and extending across the fold) is a narrow transverse line of raised palish scales; and near to the costa (slightly

more towards the base) is often a second batch or elongated fascicle of them. The whole surface is much suffused with blackish scales, and is of a very uneven appearance, varying somewhat in different specimens. Near to the apex are two small, curious, but not conspicuous folds, extending obliquely from the costa to nearly halfway across the wing; the latter is *fringed* anteriorly from the apex to nearly a third of the distance to the base. Hind wings of a glossy greyish cinereous, with a slight metallic lustre. Thorax rather paler than the anterior wings. Body concolorous with the fringe of the posterior ones.

The only examples which I have seen of this distinct and very interesting species were captured by myself at an intermediate elevation on the south-eastern or *inner* side of the great Sandy-Bay crater, and below the central ridge—namely, amongst the old gumwoods in Peak Gut, and, under similar circumstances, between Peak Dale and Lufkins. We may be almost certain, therefore, that the species is a member of the original gumwood fauna. The variegated nature of the upper wings (which, although pale cinereous, are crowded with irregular little patches and short line-like markings of a darker hue), in conjunction with the tufts of transverse fascicles of raised scales on the disk, and the fact of the costa being fringed with long hairs from the apex to nearly a third of the distance to the base, will suffice to separate *Tinea fasciculata* at once quite easily.

Tinea subaneella.

Tinea subaneella, Walk., in Melliss's St. Hel. 191 (1875).

Expanse 6–8 lines. With the fore wings very variable in the intensity of their hue, some specimens approaching almost to fuscous brown, while others, again, are comparatively pale. But the general surface (of whatever tint it be) appears at first sight to be almost plain and uniform throughout, being scarcely suffused with either darker or paler scales; but below the fold there are nevertheless often obsolete indications (barely traceable) of a few indistinct paler blotches. The fringe is more or less concolorous with the rest of the wing, except that its base is sparingly besprinkled with blackish scales. Hind wings silvery cinereous. Thorax concolorous with the anterior wings; body slightly darker than the posterior ones.

Plentiful as is this inconspicuous little species at intermediate elevations in St. Helena, yet, from their sluggish habits and from the trick which they possess of feigning to be dead when captured in a net, it is not one that is very readily taken. My examples I got principally from the kitchen-garden at

Plantation. It might be easily mistaken for *T. binotatella* (especially as they abound in the same localities), which it very much resembles both in size and colour; however, a glance at the palpi will at once show that it is in reality quite distinct.

Tinea scalaris, E. Woll.

Expanse $5\frac{1}{2}$ lines. The fore wings of a dull brown, but adorned with transverse abbreviated cinereous blotch-like fasciæ, which are a good deal elevated or raised, the first one being before the middle of the wing, and the second one almost median. These markings, however (which are sometimes confluent), do not quite reach to the fold, but adjoin a small cluster of slightly darker scales (not always very traceable) which extends beyond the fold to the inner margin. There is also a third transverse fascia, which is similar to these two, but postmedian in position. The whole of the outer marginal area is suffused with somewhat coarse cinereous scales (which are a little more concentrated into an obscure spot-like marking on the costa), the apex being defined by a few blackish ones. Hind wings dark smoky cinereous. Thorax yellowish brown; body rather paler.

This would appear to be a somewhat local or scarce species in St. Helena, the few examples which I have seen having been captured by myself at Thompson's Wood. They were concealed beneath the loose stones on the top of a low wall encircling the gradually diminishing cluster of native gumwood trees, which I believe to be about the oldest remaining ones of that kind in the island. *T. scalaris* is therefore most likely a member of the gumwood fauna, though until further material has been obtained I would not wish to state this with any certainty.

Tinea helencæ, E. Woll.

Expanse $8\frac{1}{2}$ lines. The fore wings of a dirty yellowish white, but much streaked towards the apex with minute longitudinal blackish lines formed of closely-packed subiridescent scales; and along the fold are others which are more conspicuously darkened. Hind wings of the same colour as the anterior ones, but without markings. When examined through a powerful lens this is a most beautiful little moth, all the wings being richly adorned with metallic scales (which are scarcely visible to the naked eye), those on the fore wings being composed of a variety of tints, whilst on the hind wings opaline ones prevail. Thorax concolorous with the anterior wings, body with the posterior ones.

This most interesting little moth, which is well distinguished from any of the other species (except, of course, *T. helenæoides*) by its narrow, pointed, lanceolate wings, and by its pale straw-coloured glossy surface (which on the fore wings is slightly variegated anteriorly, and within the fold, with a few irregular and more or less diffused subconfluent longitudinal streaks, composed of densely-packed darkish scales), is in all probability a gumwood species, and therefore truly indigenous in the island. At any rate the only spot in which I remember to have met with it is in Thompson's Wood, where I captured it amongst loose stones on an old wall which was overhung by the branches of *Commidendron robustum*, which grows to so large a size in that remote and somewhat inaccessible locality.

Tinea helenæoides, E. Woll.

Expanse 7 lines. With the fore wings of a very pale straw-colour, having small, longitudinal, brownish, fragmentary, diffused streaks throughout, more especially at the apex; along the fold there is a short disjointed blackish streak. As in *T. helenæ*, there is an iridescent tinge, but considerably fainter. Hind wings glossy cinereous, but when viewed beneath a powerful lens having an opaline lustre. Thorax concolorous with the anterior wings; body somewhat paler.

Having but a single example of this interesting little species from which to judge, I am unable to say whether its anterior wings are always so much marked as in the type now before me with longitudinally-disposed and somewhat broken-up brownish lines; nevertheless I do not think it can possibly be looked upon as a diminutive and highly-coloured variety of *T. helenæ*. Apart from the peculiarity of its coloration, it is very much smaller than the preceding species, and also less resplendent (when viewed beneath a high magnifying-power) with opaline and iridescent scales. I am not absolutely certain where my unique specimen was obtained; but I feel almost sure that I captured it at Thompson's Wood; and if this was the case, the species is, in all probability, another member of the old gumwood fauna.

I am glad to be able to add that since the above was written I have been satisfactorily confirmed in my opinion regarding this moth by Prof. Zeller, who looks upon it as a new and distinct species.

Tinea apicalis, E. Woll.

Expanse 5-6 lines. The fore wings of a yellowish-white or straw-colour, and powdered almost uniformly, yet sparsely,

with minute brownish scales. At the extreme apex (intermingled with the fringe) there are a few scales which are of a darker brown or nearly black, and which form a somewhat wedge-shaped ill-defined spot, the only distinct marking that the wing possesses. Hind wings of a glossy or silken cinereous, with the fringe rather paler. Thorax yellowish white; body concolorous with the anterior wings.

It was chiefly from the trunks of the few remaining gumwoods at Plantation that I obtained this interesting little *Tinea*; and from the fact of its appearing to belong to those singular arborescent Compositæ, which are now so fast dying out, I have little hesitation in citing it among the species which are truly indigenous. I think, moreover, that it may be reckoned as one of the commonest Lepidoptera which are strictly aboriginal.

Apart from its small size, *T. apicalis* may usually be recognized without much difficulty by the simplicity of the colour of the fore wings, which are more or less of a pale straw or yellowish white, but sparingly dusted over with a few diminutive brownish scales, a little cluster of darker or blackish ones at the extreme apex (which have a tendency to form a small and somewhat wedge-shaped, ill-defined spot) being almost the only marking that gives to the surface a character which is tolerably appreciable.

Tinea irrorata, E. Woll.

Expanse 9 lines. The fore wings of a pale brownish or straw-coloured tinge, and speckled with numerous irregular black dots (particularly on the basal half), each composed of a few dark scales, those near the costa having a faint tendency to be placed *somewhat* in transverse pairs. The apex and outer margin are speckled more minutely, as is also the fringe. Hind wings pale glossy cinereous, and, when viewed beneath a high magnifying-power, with a pearly and somewhat opaline lustre. Thorax slightly darker than the anterior wings; body much the same as the posterior ones.

The only examples which I have seen of this moth I captured, I believe, at Thompson's Wood; but whether the species is in any way connected with the gumwoods I have no means of deciding. At any rate there is no reason to suspect that it is otherwise than truly indigenous in the island. The rather dotted, or *speckled*, surface of its upper wings will be sufficient to distinguish it from its more immediate allies.

Tinea atlantica, E. Woll.

Expanse 4-5 lines. The fore wings of an extremely pale ochreous, being very uniform in colour throughout, though just perceptibly darker towards the outer margin; the cilia are whitish, except quite at the apex, where it is concolorous with the surface of the wing. Hind wings glossy cinereous. Thorax of the same hue as the anterior wings; body slightly paler.

A few specimens of this species I met with which are of a pure white throughout all the wings, as well as rather smaller than the type.

Tinea atlantica is not particularly scarce in St. Helena at intermediate and lofty elevations; nevertheless I did not succeed in obtaining many examples, chiefly owing, I believe, to the fact of this little moth being more especially attached to the arborescent asters (or "little gumwoods"). And as the latter abound mostly in the less sheltered parts of the island, where the wind is invariably blowing violently, it renders the capture of all such small and inconspicuous species as the present one often well nigh impossible.

Tinea fasciolata, E. Woll.

Expanse 3-3½ lines. The fore wings of a dull smoky cinereous. There is an indistinct oblique broken-up fascia of dark scales near the base, a second one (rather more conspicuous) antemedian, and a third one postmedian; but they are nearly always so much interrupted, or broken into, before the fold as to constitute mere isolated (although irregular) markings or spots, three of which are costal and three on the inner margin. There are two other small tufts of the same kind of dark scales, one of which is generally large and conspicuous, and placed at a little distance before the apex; the second is smaller and placed at the extreme apex itself. The fringe is concolorous with the rest of the surface, and sprinkled minutely with blackish scales, a little tuft of which latter is often conspicuous (adjoining the dark patch) at the anal angle; but the ornamentation is more or less variable, some specimens being much paler and with the first fascia-like marking hardly traceable. Hind wings smoky cinereous. Thorax brown; body concolorous with the anterior wings.

This is a better-defined little moth than many of the preceding ones, its pale cinereous fore wings, which are rather conspicuously adorned with about eight irregular darker markings made up of clusters of blackish scales, giving it a

somewhat ornate or variegated appearance. Much depends, however, as I need scarcely add, on the state of the examples inspected; for when in a worn or rubbed condition, some portion of the spots or blotches are pretty sure to be absent. It is evidently one of the commonest of the St. Helena Microlepidoptera, particularly at intermediate and rather lofty altitudes. At Plantation it simply swarmed, the small, brown, somewhat cylindrical, fusiform cases of the larva often covering the walls and trunks of the trees to a perfectly marvellous extent.

Tinea minutissima, E. Woll.

Expanse 3 lines. The fore wings of a pale cinereous hue, and very much suffused with dark brown scales, the latter usually forming somewhat indistinct transverse oblique fasciæ, though becoming more blotch-like towards the outer margin; the cilia are also interrupted by dark brown scales. Hind wings smoky cinereous and very deeply fringed.

At first sight this little moth might well be mistaken for *T. fasciolata*; however, on closer examination, it will be found to be a decidedly smaller species than the above one; the anterior wings, too, are of a much paler cinereous hue, besides having their surface seemingly smoother or with less appearance of being tufted by the dark brown scales.

So far as I can recollect, I obtained *T. minutissima* in the same situations as the preceding species, but much more sparingly, although this might probably be accounted for by my not distinguishing at first between the two.

Tinea divisa, E. Woll.

Expanse 4-5 lines. The fore wings distinctly and broadly marked with brown throughout the costal region, the posterior edge of the brownish portion being usually more or less jagged; the rest of the surface is of a creamy whitish buff; so that the wings are pretty equally divided (as it were) into two longitudinal compartments, or narrowish line-like spaces—namely, a dark costal one, and an inner marginal palish one. The fringe is thickly speckled with black along its base, at the outer margin of the wing—which causes the latter to appear terminated by an oblique, black, powdery line, the most apparent and the least variable of all the markings. Between the fold and the inner margin there are generally a few minute raised blackish tufts of scales. The female is rather more uniform in colour throughout, it being of a rather yellower or more gilded hue, and with the costal and inner marginal divisions more blended into each other.

Hind wings of a silvery white, and, in the male, having a dark cinereous blotch at the base. Thorax yellowish; body somewhat paler.

This pretty little moth is very abundant in most parts of the island, but especially at intermediate altitudes. Near West Lodge, which is situated at a less elevated part of the great central ridge, it is exceedingly plentiful amongst the native arborescent asters; nevertheless the majority of my specimens were beaten out of a single hedge in the kitchen garden at Plantation—a hedge which was formed almost exclusively of overgrown masses of the common passion-flower (*Passiflora cærulea*), and must have been at least two yards in thickness. I do not imagine, however, that the moth was in any way actually dependent on that particular plant, more especially as there were the remains of some native gumwood trees a little distance off.

Tinea flavotincta, E. Woll.

Expanse 4–5 lines. The fore wings of a pale gilded yellowish buff, which is more or less uniform throughout, except on the inner margin, where there are two somewhat triangular whitish blotches, the first of which is placed about the middle and extends over the fold, and the second one near to the anal angle. Towards the apex of the costa there are *occasionally* rather faint traces of a third whitish, oblique, indistinct blotch. The fringe is white, sparingly speckled with gilded scales. Hind wings silvery cinereous. Thorax white.

This pretty little moth is not uncommon in many localities throughout St. Helena, especially at intermediate altitudes. I found it principally at Plantation and at West Lodge. In the latter locality they were generally adhering to the trunks of the native aster trees, in the very eye of the strong and boisterous trade-winds; and although the latter seemed to have wonderfully little effect on them, they nevertheless made them extremely difficult to capture, on account of the sandy soil, which was so blown into one's eyes as well nigh to blind one. It is marvellous, however, how these and other equally minute moths are able to withstand the tempestuous atmosphere of those elevated regions, the almost constant and violent breeze appearing to have no power to destroy even their finest scales.

Tinea actæon, E. Woll.

Expanse 4–5 lines. With the fore wings of a dark blackish brown, and conspicuously adorned with two rather broad yel-

lowish-white bands, the first of which is somewhat oblique and antemedian, and the second postmedian; between these two bands, on the inner margin, there is a large and usually somewhat triangular yellowish-white blotch; and the apex also is relieved by a few pale scales immediately before the extreme point. The fringe has the slightly yellowish tinge rather more pronounced than the other portions of the surface, and it is nearly, or even quite, immaculate. Hind wings smoky cinereous. Thorax brownish. Body concolorous with the anterior wings.

This somewhat scarce little *Tinea* I obtained on the highest portions only of the great central ridge, principally about the summit of Actæon; and it would seem, therefore, to be not only rare but local. It is quite a summer species there; indeed, so far as I can recollect, it did not make its appearance before the end of December or the beginning of January.

In the conspicuous black and yellowish ornamentation of its fore wings *Tinea actæon* has a good deal in common, at first sight, with *T. flavofimbriata*; nevertheless the pattern of its markings is quite different, and it is also appreciably larger in stature. Moreover it is very much scarcer than the other, and, so far as my present experience would imply, is confined to the loftiest altitudes. Indeed I only met with it a few times, and then invariably on the summit of the ridge called Actæon.

Tinea niveopicta, E. Woll.

Expanse $3\frac{1}{2}$ – $4\frac{1}{2}$ lines. The fore wings of a clear snowy white, which extends to about a third of the distance from the base and there ends abruptly. The remaining portion of the surface is of a yellowish buff, the latter, however, being interrupted above the anal angle by an obscure transverse line of minute blackish scales (which are seldom altogether absent); and the apex has a few scattered whitish ones. The white basal region has often a few very faint buffish scales towards the costa. The fringe is of a yellowish white, entirely immaculate. Hind wings greyish cinereous, with the fringe slightly paler. Thorax white; body concolorous with the posterior wings.

There is no single moth at St. Helena which is better defined and more truly remarkable in its ornamentation than this beautiful little *Tinea*—the extreme *coarseness* of the scales with which its fore wings are clothed, and which are of a clear snowy white on the basal area, but of a pale yellowish buff on the remaining two thirds of the surface, giving it a most

extraordinary appearance. Nevertheless, although these two compartments of the wing are suddenly and abruptly marked out by the unusual colours to which I have just called attention, the latter, when closely inspected, will be seen to be not *quite* uniform throughout; for the buff (or larger) portion is more or less dusted with a few minute blackish scales above the anal angle, which have a tendency to arrange themselves in a small transverse fascia, whilst the white (or smaller) one has generally faint traces of a certain number of very obscure buffish scales towards the costa. Its limbs, too, are of a snowy white, with the extreme tips of the feet generally of a deep black. It is at intermediate and lofty altitudes that *T. niveopicta* particularly abounds, especially, perhaps, the former; and since I met with it more than elsewhere within the cultivated districts, it at once struck me that it might perhaps be introduced. Nevertheless, as I cannot ascertain that it is known elsewhere, I have ventured to describe it as new. Throughout the grounds of Plantation this quaint little moth is universal; and when adhering to the walls and pillars of gateways, to which it might constantly be seen attached, there are few moths of so small a size which would be so readily discerned or more pleasing to the eye. From an old hedge in the kitchen-garden at Plantation I used to beat it out in prodigious numbers.

Genus 34. PLUTELLA, Schr.

Plutella xylostella, Hübn.

This little European moth, which is also found at Madeira, and which possesses a very wide acquired range, is tolerably abundant at St. Helena, where, in all probability, it was originally imported from higher latitudes along with its principal food-plant, the common honeysuckle (*Lonicera periclymenum*, Linn.), which grows commonly enough on many parts of the island.

Genus 35. CECOPHORA, Zell., Staint.

Cecophora splendidula, E. Woll.

Expanse 4-4½ lines. With the labial palpi reflexed, slender, somewhat divaricating, and rather longer than the head; head smooth; antennæ of moderate length, and ciliated in the male. The fore wings are of a brownish tint, with an elongate yellowish antemedian spot, which extends from the costa to the fold, between which and the apex there is a second one, which is smaller and shorter, but more distinctly defined, than

the other ; between these two costal patches there is a broad median fascia of a pale opaline metallic lustre ; parallel with the outer margin there is a brilliant fascia composed of large iridescent, reddish coppery scales. Hind wings narrow and of a glossy greyish hue. Body concolorous with the posterior wings. Antennæ and head dull testaceous.

This most brilliant little moth, which seems to reflect on its fore wings all the prismatic colours (though its chief *markings* are two yellowish costal patches and a median iridescent band between them), appears to have much the same habits as *Æcophora pictipennis* ; and it is certainly quite as rare as that species—indeed, perhaps, somewhat rarer. My few specimens, from which the above description has been drawn out, I captured on the great central ridge, in the vicinity of Diana's Peak ; but unfortunately I did not meet with it in any of its earlier stages.

Æcophora pictipennis, E. Woll.

Expanse $4\frac{1}{2}$ –5 lines. With the fore wings very shiny, and chiefly of an iridescent leaden bronze, but containing two transverse golden bands, the first one of which is just before the middle of the wing, and the second (which is broader and more distinctly defined) parallel with the outer margin, but attenuated towards the anal angle. This latter fascia is bordered on either side with a dark line, as is likewise the antemedian one exteriorly. The outer margin is of a very metallic bronze, with the cilia towards the apex of the wing yellow, but towards the anal angle darker and much more metallic. Hind wings glossy grey and very pointed. Thorax and body brownish.

This pretty little moth, which appears to be somewhat scarce, is confined, so far as I am aware, to the highest districts, it having been captured on our first arrival in the island on Diana's Peak, and subsequently a little below the extreme ridge on the Cabbage-Tree Road. It seems probable that there are two broods of it in the course of the year ; for our first specimens were found in September, after which we did not find any more until about the following January ; yet in both instances they were quite fresh, as though just emerged from the chrysalis. Although searching constantly in that particular locality, we did not observe any traces of it during the interim. It is rather quick and peculiar in its flight, concealing itself again very rapidly, after being disturbed, among the long grass and vegetation which clothe the banks at the sides of the pathways.

Ecophora pseudopretella, Staint.

This exceedingly commonplace European *Ecophora* has all the appearance of being but an introduced species at St. Helena, where it occurs principally at intermediate elevations, about houses, and more particularly about unused and empty outhouses. The dull tawny-brown surface of its anterior wings, which are minutely dusted with darker scales and have two somewhat rounded blackish blotches (accompanied occasionally by a smaller and more streak-like additional one) on the disk, will serve sufficiently to recognize it.

Genus 36. GLYPHIPTERYX, Hübn.

Glyphipteryx semilunaris, E. Woll.

Expanse $3\frac{1}{2}$ –4 lines. With the labial palpi divaricating, somewhat curved or arched, and acute at the apex; antennæ about the same length as the body; head covered with shining imbricated scales. The fore wings are of a rich golden and iridescent bronze, with an indistinct fascia about the middle (rectangular and almost disjointed in the centre), which is much thickened (or abruptly expanded) towards the inner margin, and contains a white semilunate dash, which is the most conspicuous marking that the species possesses. The apical half of the costa is more or less ornamented with minute alternate white and black oblique dashes, the latter being somewhat the longer of the two. The space above the anal angle is usually more coarsely sprinkled with iridescent scales than the rest of the surface. Hind wings of a dark smoky leaden colour. Thorax of the same iridescent bronze as the anterior wings; body of a rather duller hue, but at the same time (unlike the hinder wings) slightly metallic.

This very interesting little *Glyphipteryx* is one of the prettiest of the St.-Helena moths, the bright iridescent reddish-bronze hue of its anterior wings, which are elegantly marked with a narrow semilunate patch of white just before the middle of their inner margin, and have the apical half of their costa ornamented with oblique abbreviated alternate darker and palish stripes or dashes, gives it a very beautiful appearance. Indeed, when the insect is at rest, the white submedian spot unites at its base with the corresponding one of the opposite wing, forming a distinct crescent-shaped marking which is very conspicuous.

Glyphipteryx semilunaris is exceedingly abundant at a high elevation and in many parts of the island, occurring

more especially along the great central ridge. I have met with it on the Cabbage-Tree Road, below Diana's Peak and Actæon, and in still greater profusion at Cason's, flying over the foliage, more especially of the common bramble. With its previous states, however, I am not acquainted, though constantly on the look-out for the unmistakable signs of mines on the adjacent foliage (whatever it happened it be); and I am inclined therefore to think that it may be a seed-infesting larva.

Genus 37. STAGMATOPHORA, H.-S.

Stigmatophora trifasciata, E. Woll.

Expanse $3\frac{1}{2}$ -4 lines. With the labial palpi divergent, somewhat arched, and having the terminal joint longer than the second one; head covered with coarse imbricated coppery scales. The fore wings are of a rich velvety brown, with three large, conspicuous, transverse fasciæ formed of brilliant metallic scales (in which silvery or coppery tints prevail); the first fascia is at the base, the second (which is straight and much more *elevated* or gibbose) just before the middle, and the third one (which is more arcuated or internally scooped out) parallel with and near to the outer (truncated) margin. Even the dark portion of the wing between the fasciæ is dusted with a few coarse metallic and more or less coppery scales. Hind wings of a dull, smoky, blackish brown and quite free from metallic lustre. Thorax of the same dark metallic hue as the upper wings. Body smoky black, but more or less sprinkled with paler scales. Antennæ long and black, the extreme apex being of a pure white.

It was only on the highest portion of the central ridge that I obtained this extremely beautiful *Stigmatophora*; and, indeed, so remarkably circumscribed was it in its range that, although we constantly visited that particular region during our six months' residence in the island, I was never able to meet with it except on the precipitous declivities on the mountain known as Actæon. On the northern slopes it was extremely rare; but on the southern side (overlooking the great Sandy-Bay crater) I found it quite abundantly, especially along a damp and rocky pathway which leads up to the side of the ridge immediately before arriving at the place called Newfoundland; and it was out of the tangled bushes of the common bramble that I principally beat it.

There is no fear of confounding *S. trifasciata* with any thing else that has hitherto been observed at *St. Helena*, the three brilliantly metallic bands with which the rich coppery brown

of its anterior wings is adorned, added to the pure white apices of its long and black antennæ, giving it a character which it is impossible to mistake.

Genus 38. ENDROISIS, Hübn.

Endrosis lacteella, Staud.

This common European species has become naturalized in St. Helena; notwithstanding, we did not observe it there in any very great abundance.

Genus 39. COSMOPTERYX, Hübn., Staint.

Cosmopteryx flavofasciata, E. Woll.

Expanse $3\frac{1}{2}$ – $4\frac{1}{2}$ lines. With the labial palpi much curved, very divergent, and pointed at the apex; head smooth and having the forehead convex. The fore wing nearly black, but ornamented with a broad and conspicuous yellow postmedian fascia, which is bordered on either side with bright silvery metallic scales. Within the fascia, on either extremity, there are usually two or three minute black specks. The antemedian portion of the wing contains several white, or silvery, excessively minute, thread-like longitudinal lines; and on the costa, towards the apex, there is a small white line, as well as a similar but more oblique and larger one from the apex. Hind wings very narrow and of a blackish smoky hue. Head and thorax black, but marked with a few minute longitudinal white lines.

A most elegant little moth, easily recognized by the fact of its narrow blackish fore wings being brightly ornamented with a transverse yellow band, edged (on either side) with scales of a shiny silvery hue. It is decidedly a common species at St. Helena, particularly at intermediate altitudes, though ascending also to the central ridge. Most of my examples were captured at Plantation, where it was abundant in grassy places and amongst herbage; but I also met with it at Cleugh's Plain, which is at least 500 feet lower than Plantation.

Mr. Stainton observes of this species that it comes very near to the European *C. scribarella*, Zell.

Genus 40. ELACHISTA, Treit., Staint.

Elachista recurva, E. Woll.

Expanse $3\frac{1}{2}$ –4 lines. With the maxillary palpi nearly as long as the labial ones, but thread-like and very much con-

cealed or folded; the labial palpi are divergent, slightly curved, and scarcely attenuated towards the apex; antennæ about the same length as the anterior wings, having a distinct longish basal joint, and alike in both sexes. The fore wings are of a pale fawn hue up to about the middle, the remaining portion being of a deep velvety black, but divided from the former by a conspicuous transverse white line; and there are also a few white specks or scales towards the apex, almost forming a second, broader (though, at the same time, broken-up and fragmentary) white line. The chief characteristic, however, of this moth, is the singularly attenuated and upwardly recurved apex of the fore wings, which is turned back like a ciliated black-and-white hook. Hind wings narrow and of a blackish smoke-colour. Thorax fulvous; body somewhat paler.

This extremely curious little *Elachista* (so remarkable for the apically recurved fore wings) is exceedingly local, and appears to be a true native of St. Helena. I found it tolerably plentiful (although within a very circumscribed area) on Actæon and the high ridge which connects that mountain with Diana's Peak, particularly on the loftiest points; and, singularly enough, it does not seem to descend lower than a few dozen feet at the utmost. I could not detect it in any of its previous stages; nor was the imago particularly attached (so far as I could tell) to any particular plants; for I usually captured it flying indiscriminately over the fuchsias, cabbage trees, and ferns through which we were compelled to scramble (as best we could) along the precipitous sides and acclivities by which alone the summit of Actæon can be reached. Although free from strictly *metallic* tints, *Elachista recurva* is nevertheless one of the most brightly marked and beautiful of the Microlepidoptera of the island.

Genus 41. LITHOCOLLETIS, Zell.

Lithocolletis aurifascia.

Lithocolletis aurifascia, Walk., in Melliss's St. Hel. 192 (1875).

This exceedingly pretty and peculiarly marked little *Lithocolletis* is a somewhat difficult species to describe accurately, not only on account of its minute size, but likewise from its slightly variable markings, especially towards the apex, where the characteristic fasciæ are much broken up and confused. Nevertheless the first two or three alternate paler and darker oblique markings are generally quite distinct throughout the width of the wing. As this was the only member of the present genus which we met with after a most careful search,

I conclude that it must be the same species which Mr. Walker recorded from the island; and the following is his description:—"Steel-colour, silvery beneath fore wings, with a broad silver-coloured band beyond the middle." He adds that the state of the specimen recorded will not allow a more minute description.

Lithocolletis aurifascia is one of the rarest of the St.-Helena Tineidæ. Indeed we only met with it sparingly in one locality, which was at Thompson's Wood, where we found it occasionally concealed under the loose stones of a wall encircling probably the oldest gumwood trees in the island, or still more rarely flying over the foliage of the trees themselves, the leaves of the latter being abundantly mined by the larvæ.

Genus 42. CEMIOSTOMA, Zell.

Cemiostoma auronivea.

Cemiostoma auronivea, Walk., in Melliss's St. Hel. 193 (1875).

This is one of the very few of the native moths, which have as yet been discovered, that we did not meet with—indeed the only already described member of the Tineidæ from the island that we did not succeed in obtaining. Although I possess no evidence to point to such a conclusion, still I cannot help thinking that the present species may be found in those regions which are characterized by the "scrubwood" (*Aster glutinosus*, Roxb.), one of the aboriginal arborescent Compositæ which we had no opportunity of investigating, and which (although once so abundant that large tracts of a comparatively low altitude towards the coast were literally covered with it) is becoming year by year more scarce. Nevertheless I only offer this as a probable conjecture, and partly to account for our not having detected any trace of it amongst the other Compositæ which we were always so constantly searching.

Fam. VIII. Pterophoridæ.

Genus 43. ADACTYLA, Curt.

Adactyla sanctæ helenæ, E. Woll.

Expanse 9–9½ lines. With the fore wings not cleft or divided, and of a pale greyish cinereous, the costa and inner margin being rather paler, which gives the central area (which is large, elongate, and wedge-shaped) a somewhat darker appearance. Hind wings greyish cinereous, being

uniform in tint throughout, except the inner margin, which is slightly paler.

This species, so far as I could ascertain, appears to be exceedingly rare; and I only met with three examples of it—one of which I captured at Plantation, the other two being found in a very remote and inaccessible part of the island, namely amongst some gumwood trees between Peak Dale and Lufkins.

Genus 44. PLATYPTILUS, Hübn.

Platyptilus subnotatus.

Platyptilus subnotatus, Walk., in Melliss's St. Hel. 193 (1875).

During our sojourn in St. Helena we did not meet with this scarce little moth.

Mr. Walker's description was taken from a unique example which was found in the island by Mr. Melliss at the Hermitage.

Genus 45. OXYPTILUS, Zell.

Oxyptilus rutilans, Walk.

The present *Oxyptilus* seems to have been first described by Mr. Walker (who regarded it as a *Pterophorus*) in 1863, from examples which had been received from Natal; and as it is especially throughout the cultivated districts that it occurs in St. Helena, there seems every reason to conclude that it may have been imported originally into the island, perhaps amongst the quantity of plants which must from time to time have been introduced from South Africa. Although principally abounding at intermediate altitudes, such as Plantation, Oakbank, Cleugh's Plain, and elsewhere, it ascends likewise, though more sparingly, to the lower parts of the great central ridge, being exceedingly common at West Lodge. But around Plantation it may be said often to swarm; and I have frequently observed several examples at the same time on a single flower at rest, with the fore wings spread horizontally so as to conceal the under ones (after the manner of the genus), and, moreover, so sluggish that one might pick them easily from the flowers and grass on which they happened to be settled.