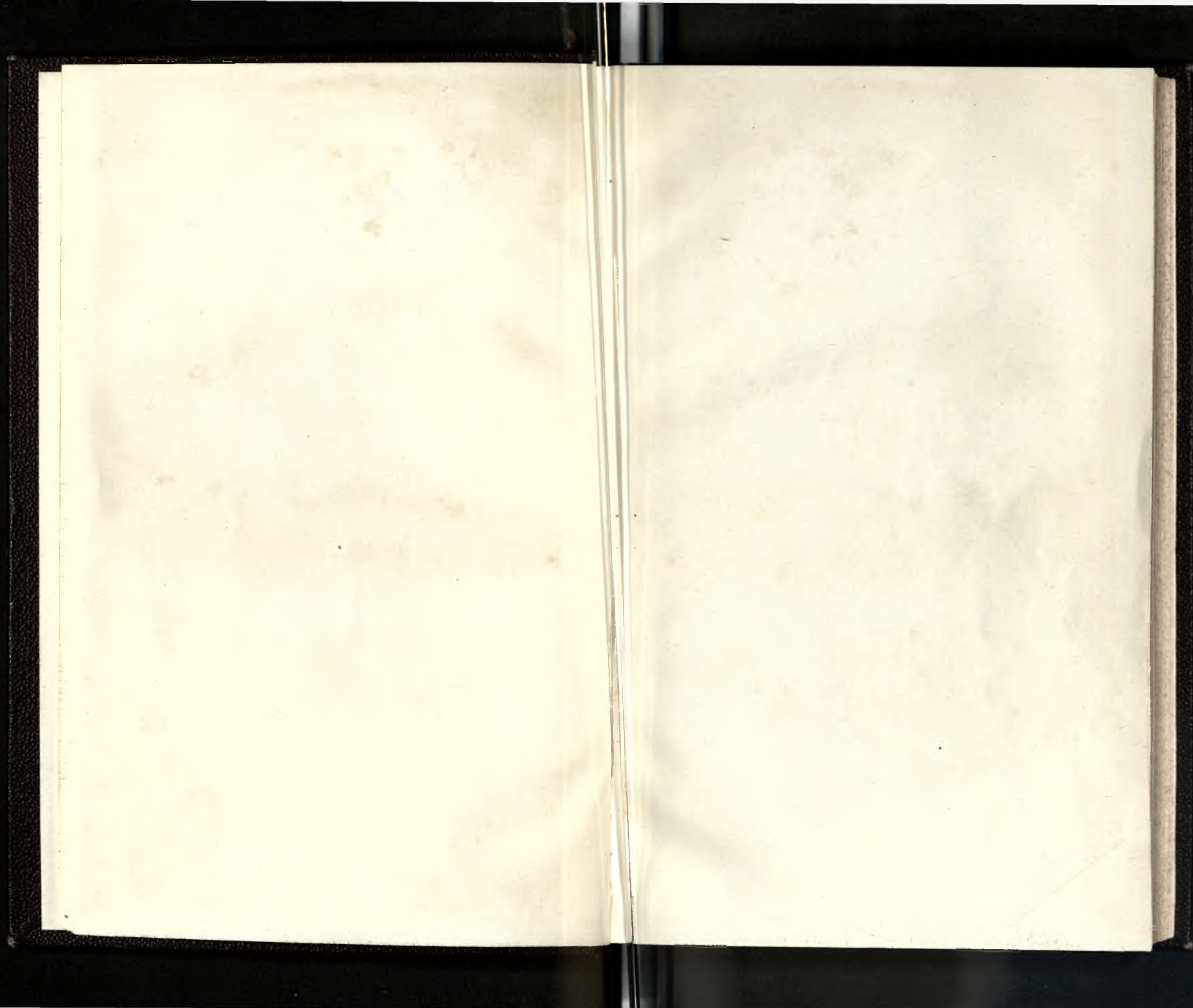
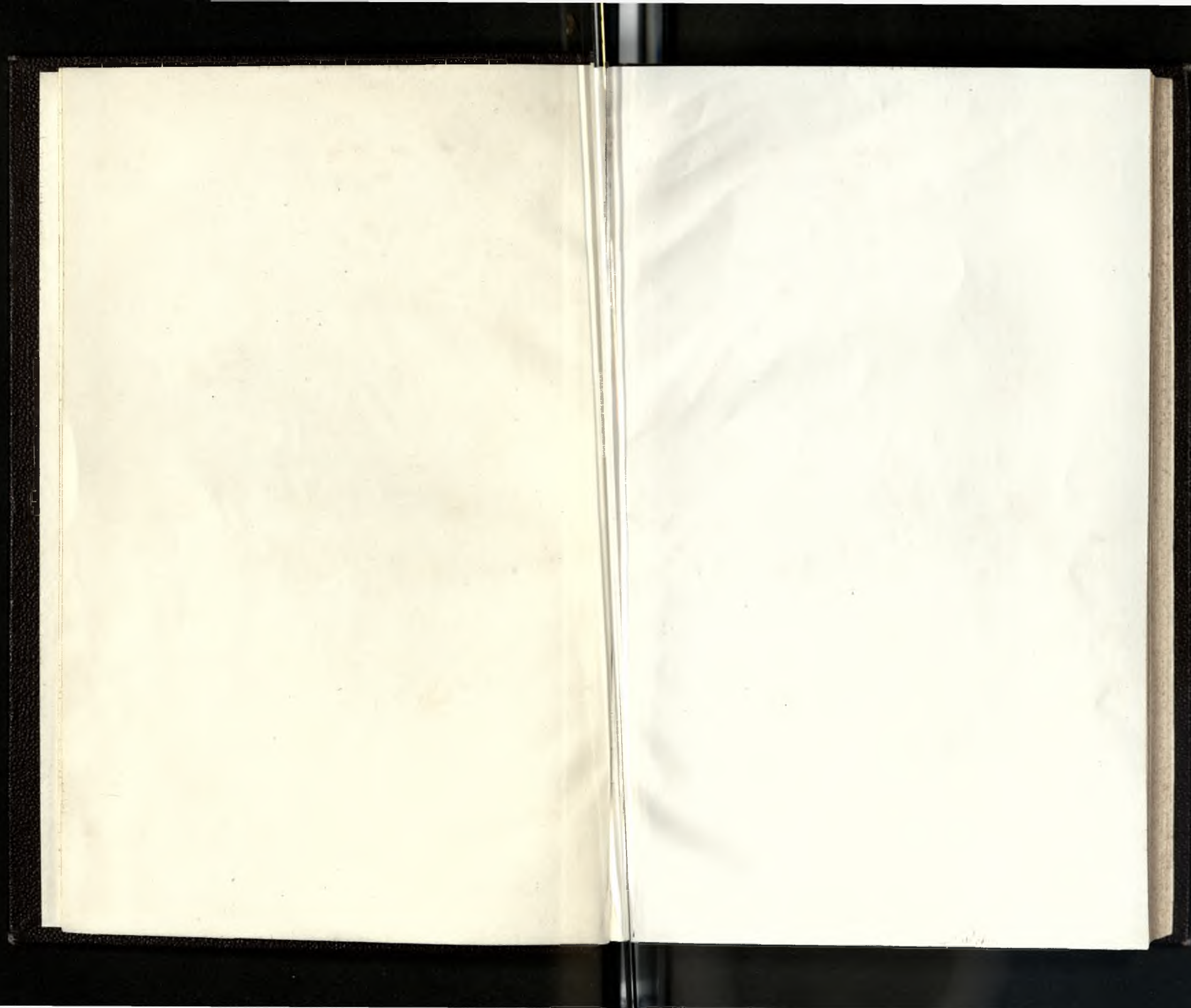
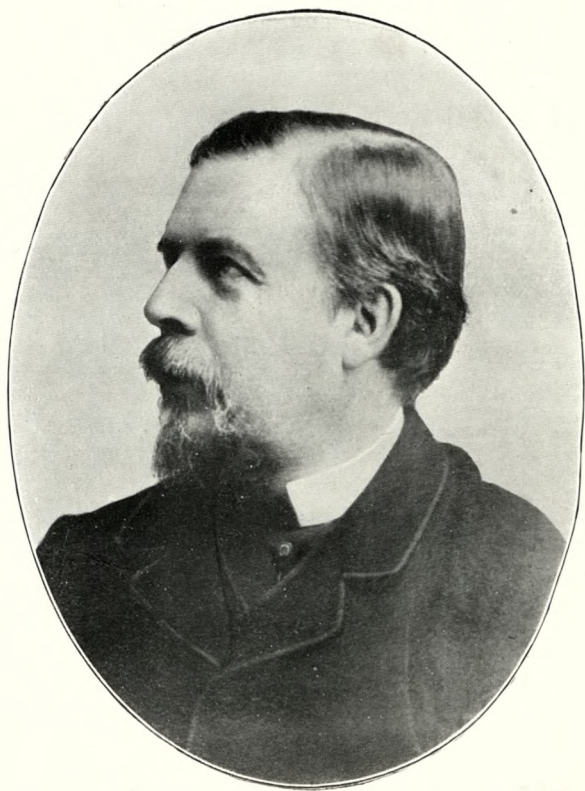


57'32

Wheatson
Lt. Col







Yours truly
John Robson

A CATALOGUE
OF
THE LEPIDOPTERA

OF
NORTHUMBERLAND, DURHAM,
AND
NEWCASTLE-UPON-TYNE.

BY
JOHN E. ROBSON, F.E.S., LONDON.

HON. MEMBER OF THE LANCASHIRE AND CHESHIRE ENT. SOC. ;
AND OF THE CITY OF LONDON ENT. SOCIETY.

VOL. II. MICRO-LEPIDOPTERA.

BEING ¹⁵
VOL. XV.

OF THE
NATURAL HISTORY TRANSACTIONS
OF
NORTHUMBERLAND, DURHAM AND NEWCASTLE-UPON-TYNE.

PRINTED FOR THE NATURAL HISTORY SOCIETY OF NORTHUMBER-
LAND, DURHAM AND NEWCASTLE-UPON-TYNE.

1905- 1913.

Part 1 1905
p 1 - 106

Part 2 1913
p 107 - 289

THE UNIVERSITY OF CHICAGO

THE UNIVERSITY OF CHICAGO

THE UNIVERSITY OF CHICAGO

THE UNIVERSITY OF CHICAGO

THE UNIVERSITY OF CHICAGO

THE UNIVERSITY OF CHICAGO

THE UNIVERSITY OF CHICAGO

THE UNIVERSITY OF CHICAGO

THE UNIVERSITY OF CHICAGO

THE UNIVERSITY OF CHICAGO

THE UNIVERSITY OF CHICAGO

THE UNIVERSITY OF CHICAGO

THE UNIVERSITY OF CHICAGO

INTRODUCTION.

The present part completes Robson's "Catalogue of the Lepidoptera of Northumberland, Durham and Newcastle-upon-Tyne," and forms the second and concluding part of the second volume, the Micro-lepidoptera.

Several circumstances have combined to delay its publication. In the first place Mr. Robson had to spend a considerable amount of time and labour in sifting and arranging the various records which had been supplied to him—the going through Sang's diary alone was no light matter; then again, owing to his admittedly slight knowledge of the Tineina, it was necessary for him to be in constant communication with Mr. Bankes, who had practically to go over and revise every sheet of the manuscript; this also took up a great deal of time. Then when the first sheets were ready for the press—in fact a few pages of proof had been printed—Mr. Robson's health began to fail, and after a comparatively short illness his death took place on February 28th, 1907, in the 75th year of his age. That he did not live to see the completion of his work, more especially as he had carried it so nearly to a conclusion, is much to be regretted.

After this unfortunate event took place it was suggested to Mr. Bankes by the writer, that as the whole of the manuscript, upon which he had already spent a great deal of time and study, had been through his hands, no one was in so good a position as himself to see it through the press if he would undertake to do so. To this he very generously agreed, and the Society gladly accepted his help.

Mr. Bankes, who was never a strong man, and had frequently to cease from his labours owing to attacks of illness, had the manuscript in his hands for nearly three years, during which time he had made critical notes on the whole of it as prepared for this concluding part (Mr. Robson had written out

rough sheets for all the species recorded with the exception of the Pterophorids), when, owing to the state of his health, he in December, 1910, sent to the Council of the Society the following letter :

“ With reference to the concluding volume of the Robson Catalogue of Lepidoptera of Northumberland and Durham, it is with the greatest regret that I write to ask if your Council will kindly relieve me of my undertaking to edit the volume in question and see it through the press.

“ As you know, I have been hoping for a long time past that my health might be sufficiently restored to enable me to carry out my promise, but I fear that this is not to be, for the temporary improvements that have taken place now and then have not been maintained, and I am now suffering from another nervous breakdown. This necessitates complete rest and change, and I am therefore leaving home next week.

“ During Mr. Robson's lifetime I supplied him with my critical notes on the whole of the manuscript that he had prepared for the volume (which manuscript was complete except for the Pterophorids, and Mr. J. Gardner has since supplied the omission). He did not live to make use of these notes, but they are available for anyone who sees the work through the press.

“ Mr. J. Gardner is a lepidopterist and much interested in the completion of the Robson Catalogue. I have not of course approached him on the subject, but perhaps he would be willing to undertake the work if your Council saw fit to ask him.”

The Council, acting upon Mr. Bankes' suggestion, invited me to undertake the work, and under the circumstances I felt that I could do no less than accede to their request.

It might seem from the foregoing that there remained now very little to do but to place the manuscript in the printer's hands. I found, however, that there was a great deal more to do before this could take place. In the first place, as before stated, a few sheets had already been printed off but not

corrected. The remainder of the manuscript was just as it had come from Mr. Robson's pen, a loose sheet being devoted to each species. Mr. Bankes, as stated in his letter to the Council, had written critical notes upon the whole of the manuscript prepared for this part of the catalogue during Mr. Robson's lifetime, but these the latter did not live to use. These notes, which were very numerous and in some cases of considerable length, it was necessary to incorporate with the manuscript. This has been done to the best of my ability, full justice being done to Mr. Bankes, and at the same time interfering as little as possible with the original manuscript, which Mr. Bankes himself was always careful to do. In many instances the inclusion of these notes entailed the entire re-writing of the sheets to which they referred.

As previously stated, neither manuscript nor records for the plume moths (Pterophorids) were forthcoming at the time of Mr. Robson's death, and I am therefore responsible for this little group.

A short supplement appears at the end containing additional species to record, species requiring to be struck out, notes upon, and additional records for, many species mentioned in previous portions of the catalogue. In connection with the latter I have to thank Mr. J. W. H. Harrison, late of Birtley, for a list of species occurring in that neighbourhood, as well as for notes of a few species found in other parts of our two counties.

I am much indebted to my friend Dr. C. O. Trechmann for compiling the index and errata, and have also to thank him for kind and willing assistance during the progress of this work; he went over every sheet before it was sent to the printer, and assisted in correcting every sheet of proof which came from the printer. His advice upon any doubtful matter was also always at my service.

I have also to thank your Curator, Mr. E. Leonard Gill, for his ever ready help in correcting proof and looking after the typography generally.

I would also wish to acknowledge the deep debt of gratitude which the Society owes to Mr. E. R. Bankes for the valuable services he has rendered towards the compilation of this volume. His cessation from active work, and the cause thereof, is a matter of deep regret, for his contributions to entomology, which have been great and many, can be badly spared.

The total number of species now recorded for our counties is 1169, being 56·7 per cent. of the total number of British species, which Meyrick gives as 2061.

Mr. Porritt, in his list of Yorkshire Lepidoptera, gives 1379 species as occurring in that county, being 66·9 per cent. of the British species according to Meyrick. As the area of Yorkshire is more than double that of Northumberland and Durham combined, we may congratulate ourselves that our lepidopterous fauna compares so favourably with that of the neighbouring county. That the list will be increased when the high moorlands of both counties are worked by competent collectors is to me almost a matter of certainty—but to do this thoroughly requires the collector to be resident from year's end to year's end in such a locality. A visit of two or three weeks during the summer months cannot be expected to reveal the entire fauna of a district; moreover, a stranger could not collect after dark over such difficult ground in the same manner as a resident collector would be able to do, and it must be borne in mind that many species of both Macro- and Micro-lepidoptera are never on the wing before darkness sets in.

And now a word of advice to young collectors. Do not collect Macros only, but Micros as well; the setting of the latter will soon come easy, and more advanced collectors will always be willing to assist in naming specimens.

J. GARDNER.

Laurel Lodge, Hart,

December 20th, 1912.

CATALOGUE.

CLASS INSECTA.

Order. LEPIDOPTERA.

SEC. II. *HETEROCERA*.

NOCTURNI.

GROUP. PYRALIDINA.

Following the arrangement of Stainton's "Manual," we now arrive at the PYRALIDINA. This is the first of those groups that have generally been called MICRO-LEPIDOPTERA. Very many Lepidopterists collect no further than the last group. A few collect the PYRALIDINA, though many only take the DELTOIDES, which, indeed, are now often included with the NOCTUINA. These do not collect the PYRALIDES, the TORTRICINA, the TINEINA, nor the PTEROPHORINA. This neglect of the smaller species prevents us having so many records of their appearance, and we consequently have less knowledge generally of their distribution. In this district, however, a few well qualified entomologists have collected the whole of the Lepidoptera, and our knowledge of them here, though very deficient in localities, is probably not so in species. Less is known of the north-west of both counties than of the other portions. Especially is this the case with Northumberland, the north and north-west of which is scarcely known.

Modern arrangements have departed in many ways from the sequence in which groups and genera were made to follow each other, and also, to some extent, as to the group in which certain genera and individual species should be placed. Thus several species included by Stainton in the PYRALIDINA have been moved elsewhere by more recent writers, whilst the PTEROPHORINA, which Stainton placed last of all, has now been incorporated with this group. Some species, included here by Stainton, have already been given where they are placed by Barrett. To avoid any misunderstanding I will enumerate all those occurring in the district, in the order in which they appear in the "Manual," referring for details to the page in the former volume, when they have already been included there.

Newman's work ceased at the end of the Macro-Lepidoptera, and also that giving coloured figures of the larvæ by Owen Wilson. These two therefore fall out of our list of references. I will include Stainton's "Manual," and Meyrick's "Hand-book" as before, for the imagines, and Buckler's figures of the larvæ. I will add reference to "The British Pyralides," by the late J. W. Leech. This work contains fairly good figures of all the British species, and of the Plumes (PTEROPHORINA), which most modern writers include with this group. These figures may be of considerable assistance to beginners.

DELTOIDES, Latr.

HYPENIDÆ, H.-Schr.

HYPENA, Sch.

1. *Hypena proboscidalis*, Linn. THE SNOOT.

- | | |
|-------------------------------|---|
| <i>Hypena proboscidalis</i> . | Staint. Man., vol. ii., p. 127. |
| " " | Barr. Lep. Brit. Is., vol. vi., p. 319. |
| " " | Leech, British Pyralides, p. 7. |
| " " | Meyr. Hdbk. Brit. Lep., p. 151. |

IMAGO. Leech, pl. i., fig. 2.

LARVA. Buck., vol. ix., pl. clxviii., fig. 1.

See vol. i., p. 194. The broad wings and long palpi are not very like those of the typical *Noctua*. This insect is common wherever there are nettles, and though it is generally found in open places, I have taken it regularly in Castle Eden Dene among the spindled nettles that grow under trees.

HERMINIDÆ, Dup.

RIVULA, Gn.

2. *Rivula sericealis*, Scop. STRAW DOT.

- Rivula sericealis*. Staint. Man., vol. ii., p. 130.
 „ „ Barr. Lep. Brit. Is., vol. vi., p. 323.
 „ „ Leech, Brit. Pyr., p. 1.
 „ „ Meyr. Hdbk. Brit. Lep., p. 169.

IMAGO. Leech, pl. i., fig. 9.

LARVA. Buck., vol. ix., pl. cxlviii., fig. 4.

A wood insect, generally plentiful where it occurs, and likely to be found in most parts of both counties, but only one capture has come to my knowledge. This Mr. Gardner took in Hezleden Dene in 1899. It ought to have been given in vol. i., after *Proboscidalis*, but I did not know of its occurrence till after that sheet was printed off. The species is plentiful in many places in the adjoining counties. The larva feeds on *Brachypodium sylvaticum*, which is a common grass in both counties.

HERMINIA, Latr.

3. *Herminia barbalis*, Linn. FAN-FOOT.

- Herminia barbalis*. Staint. Man., vol. ii., p. 131.
 „ „ Barr. Lep. Brit. Is., vol. vi., p. 291.
Pechypogon „ Leech, Brit. Pyr., p. 5.
Herminia „ Meyr. Hdbk. Brit. Lep., p. 149.

IMAGO. Leech, pl. i., fig. 11.

LARVA. Buck., vol. ix., pl. cxlviii., fig. 6.

Mr. Patterson records this species from Corbridge, in South-West Northumberland. These counties appear to be rather

beyond its range. The nearest locality on this side of the island that I know of is York, which is quite a hundred miles south of Corbridge. The insect appears to occur at Carlisle. Its appearance at Corbridge is therefore in harmony with its range on the west, and the district in the upper ranges of the Tyne is also suitable for it. Still it is desirable to have the record confirmed, as it may be an error for *Nemoralis*. *Barbalis* is a wood insect, the larva feeding on birch catkins and on oak. It should be looked for in the perfect state from June to August. This species and the next were accidentally omitted from volume i., where Mr. Barrett's arrangement was followed.

4. *H. nemoralis*, Fab. SMALL FAN-FOOT.

- Herminia nemoralis*. Staint. Man., vol. ii., p. 131.
 „ *grisealis*. Barr. Lep. Brit. Is., vol. vi., p. 298.
Zanthoclogna „ Leech, Brit. Pyr., p. 2.
Æthia nemoralis. Meyr. Hdbk. Brit. Lep., p. 148.

IMAGO. Leech, pl. i., fig. 1.

LARVA. Buck., vol. ix., pl. cxlviii., fig. 8.

Mr. Meyrick limits the northward range of this species to York, but it certainly extends much further, and is no doubt common in all the woods and denes of both our counties. It is recorded for Newcastle, Meldon Park, &c., in 1834 in Stephens' Illustrations (Haustellata, vol. iv., p. 17). Mr. Finlay found it still in Meldon Park, and generally common in that neighbourhood. I have taken it freely in Castle Eden Dene, often sitting exposed on the upper side of the low herbage. It is equally common in Hezleden Dene. Leech says the larvæ feed on oak; Meyrick "*Sisymbrium*, &c."; Mr. Doubleday found a larva on willow; and Mr. Buckler reared the species on *Polygonum aviculare* (knot grass). I have never reared it, but feel certain it occurs on low plants.

PYRALIDÆ, Gn.

PYRALIS, Linn.

5. *Pyralis costalis*, Fab. GOLD FRINGE.

Pyralis costalis. Staint. Man., vol. ii., p. 134.

„ „ Leech, Brit. Pyr., p. 11.

„ „ Meyr. Hdbk. Brit. Lep., p. 427.

IMAGO. Leech, pl. ii., fig. 5.

This is rather a southern insect, but it is recorded more than once for York. It is in the Twizell list, which I thought must surely be an error, though the species is a very distinct one, but I find it has also been taken at Newcastle by the late W. Maling (see Entom. ix., p. 19), "one specimen of the pretty little *Pyralis fimbrialis*." Leech says the larva feeds on "stacked clover, preferring the lower and moister parts, living in a web." Other writers do not appear to know anything of the larva, and Mr. Buckler never figured it.

6. *P. farinalis*, Linn. MEAL MOTH.

Pyralis farinalis. Staint. Man., vol. ii., p. 134.

„ „ Leech, Brit. Pyr., p. 12.

„ „ Meyr. Hdbk. Brit. Lep., p. 427.

IMAGO. Leech, pl. ii., fig. 6.

LARVA. Buck., vol. ix., pl. cxlix., fig. 2.

A very common species in its peculiar haunts, flour mills, meal warehouses, stables, &c., occasionally in houses. The larva, which is said to live two years, feeds in a silken tube among flour and meal refuse. It is frequently found on ledges or projections in these places where dust accumulates, and does not disdain straw, for I have bred the insect from larvæ found in a paillasse. The imago varies greatly in size, probably from a plentiful or spare supply of food. The perfect insect comes to sugar, and Mr. Gardner took a single specimen in this way in Hezleden Dene, but is more generally seen in stables and

places where it has fed, sitting on the walls with its abdomen erected in a peculiar manner. Recorded for Newcastle in Stephens' Illustrations, vol. iv., p. 26.

7. *P. glaucinalis*, Linn. DOUBLE-STRIPED.

Pyralis glaucinalis. Staint. Man., vol. ii., p. 135.

„ „ Leech, Brit. Pyr., p. 12.

„ „ Meyr. Hdbk. Brit. Lep., p. 427.

IMAGO. Leech, pl. ii., fig. 7.

LARVA. Buck., vol. ix., pl. cxlix., fig. 3.

Mr. Gardner took a single specimen of this insect at sugar in Hezleden Dene on 5th October, 1898. This appears to be a very late date for the species, whose northward range Mr. Meyrick limits to York, and I do not think the occurrence of a solitary specimen can be taken as opposing that view. The larvæ should be looked for on those "nest like bunches of twigs which may often be observed growing at the ends of branches of birch trees." Lord Walsingham first found it in such a place, and he noted that on the 13th June he had "larvæ, pupæ, and imagines of *Glaucinalis* all alive at the same time." From one of these knots of twigs he bred 40 specimens.

AGLOSSA, Latr.

8. *Aglossa pinguinalis*, Linn. TABBY.

Aglossa pinguinalis. Staint. Man., vol. ii., p. 135.

„ „ Leech, Brit. Pyr., p. 9.

„ „ Meyr. Hdbk. Brit. Lep., p. 428.

IMAGO. Leech, pl. ii., fig. 8.

LARVA. Buck., vol. ix., pl. cxlix., fig. 4.

This insect is attached to stables and similar habitats, and will, no doubt, be found in such places over the entire district; more particularly when they have been used as such for many years. At present I have but few records.

The earliest is in Stephens' Illustrations (Haustellata, vol. iv., p. 23), where he says that George Wailes reported it as occurring at Newcastle. Recent collectors apparently have not met with it there, but certainly because they have not sought it where alone it may be found. Mr. Corder got it at Sunderland, Mr. Gardner has taken it at Great-ham, and we have both found it at Hartlepool. Stainton, copying some continental writer, says the larva feeds on greasy horse-cloths, but Buckler, who devoted some time to studying the habits of the insect, states that the larva lives in comparative darkness among the chaffy rubbish on which they feed. They spin a silken sheath, or gallery, and never leave it until full-fed. Then they sometimes ascend the walls and pupate in the interstices of the bricks. They will not touch the greasy foods continental writers attribute to them, and in one case, where a larva was under a cloth with a piece of lard upon it, the larva was found there dead on the third day, having neither eaten the lard nor the greasy cloth.

LURIDÆ, Gn.

PYRAUSTA, Schr.

9. *Pyrausta punicealis*, Linn. PURPLE AND GOLD.

Pyrausta punicealis. Staint. Man., vol. ii., p. 137.

„ *aurata*. Leech, Brit. Pyr., p. 22.

„ „ Meyr. Hdbk. Brit. Lep., p. 414.

IMAGO. Leech, pl. ii., fig. 11.

LARVA. Buck., vol. ix., pl. cl., fig. 1.

This pretty little species is widely distributed in Britain, but is generally very local, and is much less frequent in the north. Dr. Ellis does not record it for Cheshire, and only for two localities in Lancashire, in one of which it is very scarce. Mr. Porritt gives six localities for the large county of Yorkshire, but marks it as common in only two of them. The "Manual" gives Darlington as a place where it occurs, but the specimens

were taken at Richmond in Yorkshire. The only habitat I know of in these counties is Hezleden Dene, in some parts of which it is very abundant, generally on the slopes of dry banks not covered with trees, but sometimes on low open ground. The larvæ feed here on *Origanum vulgare*, but in some places it feeds on *Nepeta cataria* (cat-mint). That, however, is rare in these counties as a hedge side plant. *Punicealis* seems to prefer a place where there is an abundance of its food. It evidently likes the company of its kind.

10. *P. purpuralis*, Linn. CRIMSON AND GOLD.

Pyrausta purpuralis. Staint. Man., vol ii., p. 138.
 „ „ Leech, Brit. Pyr., p. 23.
 „ „ Meyr. Hdbk. Brit. Lep., p. 413.

IMAGO. Leech, pl. ii., fig. 12.

Another pretty little day-flying species of similar habit to the last, but occurring in open ground at Black Hall Rocks, on banks facing the sea. The "Manual" gives Darlington as a locality for it, but the specimens were taken at Richmond, Yorkshire.

11. *P. ostrinalis*, Hub. YELLOW-BANDED PURPLE.

Pyrausta ostrinalis. Staint. Man., vol ii., p. 138.
 „ „ Leech, Brit. Pyr., p. 24.

IMAGO. Leech, pl. ii., fig. 13.

It seems more than doubtful whether this is truly distinct from the preceding species. They are nearly always found together, the larvæ are not distinguishable, and feed on the same plant. The chief differences in the imagines are that in *Purpuralis* the band is broken into spots, while in *Ostrinalis* it is continuous. *Ostrinalis* too is always smaller, and it may be the reduced size causes the spots to run together. The differences are very well shown in Leech's figures, but they do not seem enough to constitute two distinct species. *Ostrinalis* occurs at Black Hall Rocks, near Hartlepool, with *Purpuralis*.

The "Manual" says it occurs at Darlington, but as in the preceding species Mr. Sang's specimens were taken at Richmond, Yorkshire.

HERBULA, Gn.

12 *Herbula cespitalis*, W.V. DINGY PURPLE.

Herbula cespitalis. Staint. Man., vol. ii., p. 139.

" " Leech, Brit. Pyr., p. 25.

Pyrausta " Meyr. Hdbk. Brit. Lep., p. 414.

IMAGO. Leech, pl. iii., fig. 2.

LARVA. Buck., vol. ix., pl. cl., fig. 2.

This is common at Black Hall Rocks and elsewhere along the coast. I have no records for it beyond our own district, but I would expect it to be found all along the coast of both counties. It is double brooded, and flies in the sun; it loves the top of a dry bank, but I have found it in rough pastures a mile or two from the coast flying with *Miana captiuncula*. The larvæ feed in a web below the leaves of plantain.

ENNYCHIA, Tr.

13. *Ennychia cingulalis*, Linn. SILVER-BARRED SABLE.

Ennychia cingulalis. Staint. Man., vol. ii., p. 139.

" " Leech, Brit. Pyr., p. 25.

Pyrausta cingulata. Meyr. Hdbk. Brit. Lep., p. 413.

IMAGO. Leech, pl. iii., fig. 3.

This species is given in the "Manual" as occurring at Darlington. I do not know whether Sang took this or not, but we have not met with it about Hartlepool as yet. The larva feeds on wild sage, *Salvia verbenaca*. This is not a common plant in these counties, but grows abundantly in Hezleden Dene, Hawthorn Dene, and other smaller ravines in the limestone of the Durham coast, and I have so little doubt that it will eventually be found that I have included it here from the "Da" of the "Manual." It extends to Perthshire on the west of the island.

14. *E. octomaculata*, Fab. EIGHT-SPOTTED SABLE.*Ennychia octomaculata*. Staint. Man., vol. ii., p. 140.

" " Leech, Brit. Pyr., p. 26.

Pyrausta " Meyr. Hdbk. Brit. Lep., p. 412.

IMAGO. Leech, pl. iii., fig. 5.

LARVA. Buck., vol. ix., pl. cl., fig. 4.

One of the more recent additions to our fauna. The first specimen that I know of was taken at Dipton Wood on 22nd June, 1898, by Mr. D. Rosie, of Newcastle-on-Tyne. Strange to say it was taken again the next day, 23rd June, 1898, near Hexham, by Mr. G. Nicholson, also of Newcastle. It is an interesting addition, and quite likely to be found elsewhere. The larva is said to feed on *Solidago virgaurea*, which is not a rare plant in either county.

CATACLYSTA, H.-Sch.

15. *Cataclysta lemnata*, Linn. SMALL CHINA MARK.*Cataclysta lemnata*. Staint. Man., vol. ii., p. 144.

" " Leech, Brit. Pyr., p. 47.

" " Meyr. Hdbk. Brit. Lep., p. 402.

IMAGO. Leech, pl. vi., fig. 6.

LARVA. Buck., vol. ix., pl. cli., fig. 1.

This species appears barely to reach our southern boundary, though on the western side of the island it occurs as far north as the Clyde. I took it once on palings at Hartlepool, and have met with it occasionally at Greatham. Mr. Sibson took it at Stockton-on-Tees; and Mr. Sang met with it at Hell Kettles, near Darlington. These are all on the extreme south of Durham. The imago comes to light, and I have taken it at night on the windows of Greatham Railway Station. The larva is aquatic, feeding below the surface of the water on duckweed, a plant which floats about with its roots not attached to the soil. Duckweed is common in small ponds and wet ditches, and near such places *Lemnata* should be looked for.

HYDROCAMPA, Latr.

16. *Hydrocampa nymphaeata*, Linn. BROWN CHINA MARK.*Hydrocampa nymphaeata*. Staint. Man., vol. ii., p. 145.

" " Leech, Brit. Pyr., p. 48.

" " Meyr. Hdbk. Brit. Lep., p. 403.

IMAGO. Leech, pl. vi., fig. 8.

LARVA. Buck., vol. ix., pl. cli., fig. 3

Another species with an aquatic larva, but much commoner than the last. It is recorded in Stephens' Illustrations by Mr. Wailes from "Meldon Park, Prestwick Carr, Marsden, &c.," and by Mr. Hewitson from Newcastle (see Step. Illust., vol. iv., p. 39). Mr. Hewitson's specimens were probably taken in Jesmond Dene, where Mr. Henderson took it more recently. Mr. Maling got this species on the boggy part of Newbiggin Moor (see Trans., vol. v., p. 145). Mr. Finlay found it at a lake to the west of Netherwitton, but does not mention Meldon where Wailes took it so long before. Mr. Patterson got it at Chopwell. It is recorded "among rushes in ponds near Durham" in Ornsby's work. Mr. Gardner and I have taken it about Greatham. I also took it at Throston Carrs before this place was drained, and I have seen it sitting on palings close to the town. More recently I have taken it in damp hollows at Black Hall Rocks, not near any pond. Mr. Jeffrey found the larva would spin up on *Myosotis*, and it has been shown they would eat almost any water plant. I cannot but think they will be found to live on plants growing in damp places as well as on true water plants. The insect is common and widely distributed, and is certain to occur all over both counties.

17. *H. stagnata*, Don. BEAUTIFUL CHINA MARK.*Hydrocampa stagnata*. Staint. Man., vol. ii., p. 145.

" " Leech, Brit. Pyr., p. 49.

Nymphula " Meyr. Hdbk. Brit. Lep., p. 402.

IMAGO. Leech, pl. vi., fig. 9.

LARVA. Buck., vol. ix., pl. clii., fig. 1.

This is generally a very common insect, but it does not appear to be so plentiful in our counties as the last species. Stephens' (Haust. iv., 39), on the authority of the late George Wailes, says that it occurs at "Meldon Park, Prestwick Carr, Marsden, &c." Prestwick Carr has since been drained. Mr. Finlay took it at a lake west of Netherwitton, and Mr. Maling got it on boggy ground on Newbiggin Moor. Durham records are no more numerous. Marsden, named above, is in Durham. Mr. Sang took it in August, 1860, on a gas lamp at Darlington; Mr. Gardner and I have taken it about Greatham brick ponds, but not elsewhere. The larva appears to feed on *Sparganium*, though other food plants are given by various writers.

BOTYDÆ, Gn.

BOTYS, Latr.

18. *Botys lupulina*, Clk. HOP PEARL.

Botys lupulina. Staint. Man., vol. ii., p. 148.

„ *nubilalis*. Leech, Brit. Pyr., p. 32.

Pyrausta „ Meyr. Hdbk. Brit. Lep., p. 416.

IMAGO. Leech, pl. iv., fig. 4.

Mr. Gardner took a specimen of this exceedingly scarce species behind the ropery at Hartlepool. This sheltered nook has given us quite a number of rare insects—alas! it is now quite destroyed by the extension of the town. Mr. Meyrick thinks this is but a casual immigrant. It is difficult to accept this, and equally difficult to suggest another explanation of the facts. The larva feeds in the stems of hop, and it would be expected the insect would occur where hop is cultivated. This is not so. I am not aware it has ever been taken in such a locality. It has occurred, always singly I believe, at places so wide apart as Hartlepool, Manchester, and Sandown in the Isle of Wight.

19. *B. verticalis*, W.V. MOTHER OF PEARL.*Botys verticalis*. Staint. Man., vol. ii., p. 149.,, *ruralis*. Leech, Brit. Pyr., p. 35.*Notarcha* ,, Meyr. Hdbk. Brit. Lep., p. 406.

IMAGO. Leech pl. iv., fig. 8.

LARVA. Buck., vol. ix., pl. cliii., fig. 3.

Generally a common insect, found in June among nettles. It is recorded in Stephens' Illustrations (vol. iv., p. 45) for "Newcastle, Gibside, &c." Mr. Henderson got it at Jesmond. Mr. Corder found one in a garden at Sunderland, and Mr. Sang got it about Darlington. Around Hartlepool it has occurred sparingly among nettles in most places. It will be found much more generally distributed than these few records imply. Collectors do not trouble to collect around farm houses, or places where nettles abound.

20. *B. fuscalis*, W.V. DINGY PEARL.*Botys fuscalis*. Staint. Man., vol. ii., p. 149.

,, ,, Leech, Brit. Pyr., p. 35.

Phlyctania ,, Meyr. Hdbk. Brit. Lep., p. 410.

IMAGO. Leech, pl. iv., fig. 9.

LARVA. Buck., vol. ix., pl. cliii., fig. 5.

Generally a common insect. The larva feeds on cow-wheat (*Melamprium pratense*), or yellow-rattle. It forms a cocoon in August, but does not change to a pupa till the following spring. It is given in the Twizell list. Mr. Finlay found it common in Meldon Park; Mr. Wailes recorded it from Newcastle and Gibside (Step. Illust. Haust., vol. iv., p. 39); Mr. Henderson took it at Jesmond; Mr. Brady at Sunderland; Mr. Sibson at Stockton-on-Tees; and Mr. Sang at Darlington. We find it common about Hartlepool, and have taken it in most places where we collect.

21. *B. urticata*, Linn. SMALL MAGPIE.*Botys urticata*. Staint. Man., vol. ii., p. 150.*Eurrhynx* ,, Leech, Brit. Pyr., p. 28.

,, ,, Meyr. Hdbk. Brit. Lep., p. 407.

IMAGO. Leech, pl. iii., fig. 8.

LARVA. Buck., vol. ix., pl. cliii., fig. 8.

Meyrick limits the range of this species to York, but it is common all over Durham and in South Northumberland, and I expect it will be found over the greater part of that county wherever nettles grow freely. It is recorded for Newcastle-on-Tyne by Mr. Wailes in Stephens' Illustrations (Haust. iv., p. 44) as far back as 1834, a record that Mr. Meyrick has evidently overlooked. More recently Mr. Henderson found it about Jesmond; Mr. Corder got it commonly around Sunderland; it is given in Ormsby's "Durham"; and Mr. Sibson found it at Stockton. It is common enough around Hartlepool wherever there are plenty of nettles, except in the immediate precincts which it has deserted as the town extended.

EBULEA, Gn.

22. *Ebulea crocealis*, Tr. OCHREOUS PEARL.*Ebulea crocealis*. Staint. Man., vol. ii., p. 151.

,, ,, Leech, Brit. Pyr., p. 37.

Phlyctenia ,, Meyr. Hdbk. Brit. Lep., p. 408

IMAGO. Leech, pl. iv., fig. 12.

LARVA. Buck., vol. ix., pl. cliv., fig. 1.

This species is marked "Da" in the "Manual," and Mr. Sang appears to have taken it near Darlington on 29th July, 1874, which is long after the publication of that work. There is only one entry in Sang's Diary, but I would suppose it occurred regularly. It occurs commonly on the Durham coast, among *Inula dysenterica* (flea-bane), from Black Hall Rocks, where we take it regularly, to Sunderland, where Mr. Corder has met with it. The imago flies before dusk, and I think should be taken in many other places in both counties.

23. *E. sambucalis*, W.V. ELDER PEARL.

- Ebulea sambucalis*. Staint. Man., vol. ii., p. 151.
 " " Leech, Brit. Pyr., p. 38.
Phylctænia " Meyr. Hdbk. Brit. Lep., p. 410.
 IMAGO Leech, pl. v., fig. 2,
 LARVA. Buck., vol. ix., pl. cliv., fig. 4.

These counties appear to be rather beyond the range of *Sambucalis*, which Meyrick limits to York. Mr Sang used to take it at Hell Kettles, near Darlington, which is within a mile of the Yorkshire boundary. I took a single specimen behind the ropery, Hartlepool, flying in the sun, late in the afternoon, and Mr. Gardner took another in Hezleden Dene in 1902. The larva feeds on elder (*Sambucus*), and Stainton adds convolvulus. There was no elder within some miles of the place where I took it, but plenty of convolvulus. There is a great deal of elder in Hezleden Dene.

PIONEA, Gn.

24. *Pionea forficalis*, Linn. GARDEN PEBBLE.

- Pionea forficalis*. Staint. Man., vol. ii., p. 152.
 " " Leech, Brit. Pyr., p. 42.
Mesographe " Meyr. Hdbk. Brit. Lep., p. 425.
 IMAGO. Leech, pl. v., fig. 8.
 LARVA. Buck., vol. ix., pl. cliv., fig. 5.

Common everywhere in gardens and elsewhere.

(*Psamotis pulveralis*, Hb., is recorded in Stephens' (Illustr. Haust., vol. iv., p. 55) as having been taken at Meldon Park by Mr Wailes. No other specimen has been taken there, and Stephens subsequently concluded that the specimens taken as above, and at Darenth Wood, were but varieties of *Botys fuscalis*. Neither Stainton nor Doubleday recognised *Pulveralis* as a British species, and it was not really taken in Britain till 1869, when Mr. E. G. Meek introduced it (see Ent. Mo. Mag., vol. vi., p. 141). The only reliable captures that I know of have been at Folkestone and in the Isle of Wight, with the exception

of a single specimen taken at Ranworth by Mr. Barrett. A figure is given in Wood's "Index Entomologicus" from a specimen taken at Darenth Wood, but this, like the Meldon Park example, was subsequently considered to be but a variety of *Fuscalis*. In the 1854 edition of this work, edited by Westwood, the nomenclature underwent very strict revision by Stephens himself and H. Doubleday, and altered names were placed in brackets below the original name. Under *Pulveralis*, the name [*Fuscalis*, var.] is added, so that there can be no doubt what the recorded specimen really was. It is necessary, however, to give these details, as the record might be more difficult to put right in after years).

SPILODES, Gn.

25. *Spilodes sticticalis*, Linn. DIAMOND PEARL.

Spilodes sticticalis. Staint. Man., vol. ii., p. 153.

" " Leech, Brit. Pyr., p. 40.

Loxostege " Meyr. Hdbk. Brit. Lep., p. 418.

IMAGO. Leech, pl. v., fig. 4.

LARVA. Buck., vol. ix., pl. cliv., fig. 8.

A single specimen of this insect was taken by Mr. Gardner on the railway side at Hartlepool. Meyrick limits its range to York, but it appears to be very widely distributed, though not very common anywhere. It has been taken at Redcar, on the south side of Hartlepool bay.

SCOPULA, Sch.

26. *Scopula lutealis*, Haw. FULVOUS PEARL.

Scopula lutealis. Staint. Man., vol. ii., p. 154.

" " Leech, Brit. Pyr., p. 29.

Phlyctania " Meyr. Hdbk. Brit. Lep., p. 408.

IMAGO. Leech, pl. iii., fig. 10.

This is much too plentiful in July and August, and appears to occur everywhere. All lists that include this group say *Lutealis* is abundant.

27. *S. olivalis*, W.V. OLIVE PEARL.*Scopula olivalis*. Staint. Man., vol. ii., p. 154.

" " Leech, Brit. Pyr., p. 30.

Pyrausta " Meyr. Hdbk. Brit. Lep., p. 415.

IMAGO. Leech, pl. iii., fig. 11.

LARVA. Buck., vol. ix., pl. clv., fig. 2.

Generally distributed and common in both counties. Meyrick limits its range to York, which is a great mistake, for it extends into Scotland even on the east coast. It is given in the Twizell list, and Mr. Wailes recorded it for Newcastle in Stephens' Illustrations (Haust., vol. iv., p. 59). Mr. Patterson found it at Chopwell; Messrs. Brady and Corder at Sunderland; and about Hartlepool it occurs everywhere, and generally so abundant as to be quite a nuisance.

28. *S. prunalis*, W.V. DUSKY PEARL.*Scopula prunalis*. Staint. Man., vol. ii., p. 155.

" " Leech, Brit. Pyr., p. 30.

Phlyctenia " Meyr. Hdbk. Brit. Lep., p. 409.

IMAGO. Leech, pl. iii., fig. 12.

LARVA. Buck., vol. ix., pl. clv., fig. 3.

As yet only recorded by Mr. Finlay from the Morpeth district, and by Mr. Gardner and myself at Hartlepool, but it is certain to occur all over both counties. The larvæ are not at all particular in their food, and can find what will suit them everywhere.

29. *S. ferrugalis*, Hub. IRON GREY.*Scopula ferrugalis*. Staint. Man., vol. ii., p. 155.

" " Leech, Brit. Pyr., p. 31.

Phlyctenia " Meyr. Hdbk. Brit. Lep., p. 409.

IMAGO. Leech, pl. iv., fig. 1.

LARVA. Buck., vol. ix., pl. clv., fig. 4.

Meyrick says this species extends to the Clyde, and Stainton says it occurs at Carlisle, but its range on the east coast appears considerably restricted. Only two localities are given

for Yorkshire, and I have only casual occurrences for Durham and none for Northumberland. Mr. Corder took a single specimen in a garden at Sunderland. Mr. Gardner has taken two or three on the railway side at Hartlepool near the Cemetery, and Mr. Sang took it at street lamps in Darlington on 29th September, 1859. It is no food difficulty that prevents its appearance here, as the larva feeds on common plants. I think these counties are beyond its range in the east.

STENOPTERYX, Gn.

30. *Stenopteryx hybridalis*, Hub. UBIQUITOUS.

Stenopteryx hybridalis. Staint. Man., vol. ii., p. 155.

Nomophila noctuella. Leech, Brit. Pyr., p. 21.

" " Meyr. Hdbk. Brit. Lep., p. 410.

IMAGO. Leech, pl. vii., fig. 2.

LARVA. Not figured, but described by Porritt, Buck., vol. ix., p. 181.

Generally distributed, and no doubt occurring in all suitable places in both counties. Mr. Finlay found it on the moors north and west of Morpeth; Mr. Henderson got it at Jesmond. Mr. Sang took it at street lamps at Darlington; and Mr. Sibson found it at Stockton-on-Tees. About Hartlepool it is very common, especially on the sandhills. It is very easily disturbed in the day time, when it flies wildly away for a few yards and then settles again.

NOLIDÆ, Gn.

31. *Nola cuculatella*, Linn. SHORT CLOAKED.

Nola cuculatella. Staint. Man., vol. ii., p. 156.

" " Newm. Brit. Moths, p. 25.

" " Barr. Lep. Brit. Is., vol. ii., p. 133.

" " Meyr. Hdbk. Brit. Lep., p. 33.

LARVA. Buck., vol. iii., pl. xliii., fig. 3.

For particulars of this species see vol. i., p. 60, where it is already given. Stainton is the only writer who places the Nolidæ among the Pyralides.

32. *N. cristulalis*, Hub. LEAST BLACK ARCHES.*Nola cristulalis*. Staint. Man., vol. ii., p. 157.

,, ,, Newm. Brit. Moths, p. 25.

,, *confusalis*. Barr. Lep. Brit. Is., vol. ii., p. 187.*Roeselia* ,, Meyr. Hdbk. Brit. Lep., p. 33.

LARVA. Buck., vol. iii., pl. xliii., fig. 7.

See vol i., p. 60, for this species.

CHORENTIDÆ.

SIMAETHIS, Leach.

33. *Simaethis fabriciana*, Linn. NETTLE-TAP.*Simaethis fabriciana*. Staint. Man., vol. ii., p. 158.

,, ,, Meyr. Hdbk. Brit. Lep., p. 707.

This is generally distributed and plentiful wherever it occurs. Though records are few, it is certain to be found abundantly throughout both counties, wherever there is nettle. It is in the Twizell list, Mr. Finlay found it generally distributed and common about Morpeth. Mr Maling records it for the Newcastle district in the Transactions of the Society for 1875, p. 281. About Hartlepool it swarms everywhere. Stainton followed Stephens in placing these insects among the *Pyralides*, but more recent writers have transferred them to the *Tortricina*. It flies in the afternoon in the sun, and the larva feeds on nettle, concealing itself in a white web.

34. *S. pariana*, Linn. SCARCE NETTLE-TAP.*Simaethis pariana*. Staint. Man., vol. ii., p. 158.

,, ,, Meyr. Hdbk. Brit. Lep., p. 706.

A much scarcer species than the last, though generally abundant where it occurs. It appears later in the year too, and the imago hibernates, depositing its eggs in spring. It has been found plentifully in thatch when hiding for the winter. The larva feeds on hawthorn and apple. Mr. Sang took it in Castle Eden Dene on 28th September, 1862, and Mr. Gardner got a good series there some six or seven years ago.

CHOREUTES, Hb.

35. *Choreutes scintillulana*, Hb.

Choreutes scintillulana. Staint. Man., vol. ii., p. 159.

„ *myllerana*. Meyr. Hdbk. Brit. Lep., p. 705.

The only record I have of this species is that Mr. Sang took larvæ on August 5th, 1874, at Hell Kettles, near Darlington. It ought to occur elsewhere.

Like the two preceding insects, this has been moved by more recent writers from the Pyralides. Mr. Meyrick places it among the Tineina, following the genus *Glyphipteryx*.

EUDOREA, Curt.

36. *Eudorea cembræ*, Haw. LARGE GREY.

Eudorea cembræ. Staint. Man., vol. ii., p. 161.

Scoparia „ Leech, Brit. Pyr., p. 13.

„ „ Meyr. Hdbk. Brit. Lep., p. 423.

IMAGO. Leech, pl. xiv., fig. 1.

I have no doubt this insect is common wherever there is plenty of coltsfoot, on the roots of which, and on *Picris hieracioides*, the larvæ feed. The late John Sang took it at Castle Eden and around Darlington, and Mr. Lofthouse found it on the Greatham salt marshes. It is common about Hartlepool, and I once found it swarming by the side of a newly made road among the docks, the loose banks of which were covered with coltsfoot. As the business purposes for which the road was made gradually developed, the coltsfoot was trodden out of existence, and the insect disappeared there, but it is still plentiful elsewhere, especially where there is abundance of coltsfoot on new made ground. I have no records for Northumberland, but do not doubt it will be found there.

37. *E. ambigualis*, Tr. SMALL BROWN GREY.*Eudorea ambigualis*. Staint. Man., vol. ii., p. 161.*Scoparia* „ Leech, Brit. Pyr., p. 14.

„ „ Meyr. Hdbk. Brit. Lep., p. 423.

IMAGO. Leech, pl. xiv., fig. 5.

A generally distributed insect, abundant almost everywhere. Mr. Finlay says it is very common in his district. It is equally so about Hartlepool, and though I have no further records I expect it will be found in every part of both counties. The larva is said to feed on moss growing on trees, and the imago certainly sits on tree trunks. It must feed on other mosses, for I have met with the insect in abundance far away from trees.

38. *E. ulmella*, Knaggs (Dale, M.S.) LICHEN GREY.*Scoparia conspicalis*. Leech, Brit. Pyr., p. 15.„ *ambigualis*. Meyr. Hdbk. Brit. Lep., p. 423.

IMAGO. Leech, pl. xiv., fig. 8.

On the 13th July, 1844, the late J. C. Dale took three specimens of a *Scoparia* from the trunk of a wych elm in a wood at East Meon. He believed it to be new, and gave it the manuscript name of *Ulmella*, but it was not until March, 1867, that any publication was made of the discovery. Then (see E. M. M., vol. iii., p. 217) Dr. Knaggs introduced it as "an hitherto unacknowledged species of *Scoparia*." A very good woodcut by Mr. E. C. Rye accompanies the article. No more specimens appear to have been taken, and these three (one of which was given to Mr. Curtis, and went to Australia with his collection) were the sole representatives of the species for some thirty years. Then the late J. B. Hodgkinson introduced as new, a *Scoparia* which he had taken for a year or two previously in the Cumberland Lake District. From its conspicuous appearance as it sat on the tree trunks he proposed to name it *Conspicalis*. Within a year or two it was found at Burton-on-

Trent by the late John Sang, at York by the late W. Prest, Mr. Porritt recognised it as an insect he had taken at Edlington Wood near Doncaster, and I discovered it in great abundance in Hezleden Dene near Hartlepool, and the following year at Edder Acres, a wood near Thornley Station, and closely connected with the upper end of Castle Eden Dene. In the dene itself Mr. E. R. Bankes found it "plentiful on tree trunks, and very conspicuous." Shortly afterwards it was found to be the same insect that had been taken by Mr. Dale and named *Ulmella* so long before. The new name, *Conspicualis*, ought to have been dropped, but both names had been placed on our lists, and still appear on some. This long explanation will prevent future confusion.

For these counties I have no records except from the woods and denes around Hartlepool, but the insect is so plentiful in these that it must occur elsewhere, and if collectors will examine the tree trunks in rather open woods in the latter half of July and the beginning of August I will be surprised if they do not turn up *Ulmella*.

Mr. Meyrick merges *Ulmella* with *Ambigualis*, but those who have given special study to the group have no hesitation in pronouncing them distinct species.

39. *E. basistrigalis*, Knaggs. MOTLEY GREY.

Scoparia basistrigalis. Leech, Brit. Pyr., p. 14.

„ *ambigualis*. Meyr. Hdbk. Brit. Lep., p. 423.

IMAGO. Leech, pl. xiv., fig. 4.

This is another insect introduced since the publication of Stainton's Manual. It was first announced in the Entomologist's Monthly Magazine, vol. iii., p. 1, and in the Entomologist's Annual for 1867, p. 140. This also has been "lumped" with *Ambigualis*, but it appears to have strong claims to distinctness. It is larger and more robust looking, with broader forewings and more rounded costa. I never saw it alive myself, but those who have tell me it is noticeably distinct as it sits on the trees. There is also in *Basistrigalis* a thickening of the first line at

the costa, that is absent in *Ambigualis*. Another, and to my mind an important point is that *Basistrigalis* has a tendency to darken, almost to the production of melanic forms, a peculiarity in which it is not followed by *Ambigualis*. The only local record I have met with is that Mr. Finlay found it generally distributed about Morpeth, but always scarce. It is certain to occur elsewhere.

40. *E. pyralella*, Hb. HOARY GREY.

Eudorea pyralella. Staint. Man., vol. ii., p. 261.

Scoparia dubitalis. Leech, Brit. Pyr., p. 16.

„ „ Meyr. Hdbk. Brit. Lep., p. 423.

IMAGO. Leech, pl. xiv., fig. 9.

This is one of the commonest species of the genus. It is said to occur in damp places, and the larva to feed on moss, on oak and beech, but it is common on the dry railway banks at Hartlepool, miles away from any trees. I expect it will be found in all parts of both counties.

41. *E. truncicolella*, Sta. SERRATED GREY.

Eudorea truncicolella. Staint. Man., vol. ii., p. 161.

Scoparia „ Leech, Brit. Pyr., p. 16.

„ „ Meyr. Hdbk. Brit. Lep., p. 422.

IMAGO. Leech, pl. xiv., fig. 11.

This species is only recorded from Upper Teesdale by Mr. Gardner, who found it scarce there. I think it will be found generally in the western parts of both counties, and possibly in places on or towards the coast also.

42. *E. cratægella*, Hub. HAWTHORN GREY.

Eudorea cratægella. Staint. Man., vol. ii., p. 161.

Scoparia „ Leech, Brit. Pyr., p. 18.

„ „ Meyr. Hdbk. Brit. Lep., p. 422.

IMAGO. Leech, pl. xv., fig. 4.

Rather a scarce species, and though found on the Durham moors, it has not hitherto been recorded for Northumberland. Mr. Sang took it in several places near Darlington, from July to August in 1860, 1869, and 1871. Mr. Gardner has taken it in Teesdale, but always found it scarce.

43. *E. frequentella*, Sta. COMMON GREY.

Eudorea frequentella. Staint. Man., vol. ii., p. 162.

Scoparia mercurella. Leech, Brit. Pyr., p. 18.

„ *frequentella*. Meyr. Hdbk. Brit. Lep., p. 422.

IMAGO. Leech, pl. xv., fig. 3.

LARVA. Buck., vol. ix., pl. clv., fig. 6.

Mr. Sang recorded this insect from a lane near Darlington, and Mr. Gardner has met with it on walls in Upper Teesdale, where it is far from plentiful. It is generally a common species, but appears to be much scarcer in the north. Mr. Porritt gives only three localities for it in Yorkshire, and Dr. Ellis two in Cheshire and two in Lancashire. It appears to reach the south-west of Scotland, and is even recorded from Perthshire, but I doubt if it will be found in many places with us on the east coast. Mr. Porritt's localities are all westward.

44. *E. murana*, Curt. WALL GREY.

Eudorea murana. Staint. Man., vol. ii., p. 162.

Scoparia „ Leech, Brit. Pyr., p. 17.

„ „ Meyr. Hdbk. Brit. Lep., p. 421.

IMAGO. Leech, pl. xv., fig. 1.

This appears to be a northern and western species generally. It is widely distributed in Scotland, and in the west of England, but appears almost to avoid the east coast. All the Yorkshire localities for it are in the west of that extensive county, and in our district its habits appear to be much the same. In Northumberland Mr. Finlay found it generally distributed on the moors towards the Cheviots, and in Durham it is fairly common on the moors in the west, in Upper Weardale

and Upper Teesdale, but I know of no habitat on or approaching the coast. Perhaps the habit of the larva to live on moss on old walls may partly explain this, and the insect should be looked for wherever stone walls take the place of hedges.

45. *E. lineola*, Curt. LINE GREY.

Eudorea lineola. Staint. Man., vol. ii., p. 162.

Scoparia ,, Leech, Brit. Pyr., p. 19.

,, ,, Meyr. Hdbk. Brit. Lep., p. 421.

IMAGO. Leech, pl. xv., fig. 6.

LARVA. Buck., vol. ix., pl. clv., fig. 7.

A very local insect, and not abundant in the north of England. Ellis does not record it either for Lancashire or Cheshire, and Porritt only gives two localities for Yorkshire. One of these, Redcar, is only a mile or two from the south-east extremity of Durham. The only record I have for these counties is Hoffall Wood near Durham, where Mr. Backhouse met with it. The larva apparently prefers lichen to moss, and has been reared on lichen growing on palings.

46. *E. augustea*, . NARROW GREY.

Eudorea augustea. Staint. Man., vol. ii., p. 163.

Scoparia ,, Leech, Brit. Pyr., p. 20.

,, ,, Meyr. Hdbk. Brit. Lep., p. 421.

IMAGO. Leech, pl. xv., fig. 7.

LARVA. Buck., vol. ix., pl. clv., fig. 8.

This species is of somewhat similar habit to *Murana*. The larva prefers moss growing on old walls. Its distribution seems similar also, being commoner in the north and west than in the south and east. It does not, however, avoid the east coast so strictly, and though it is more plentiful in West Yorkshire, it occurs at Scarborough and Redcar. So in Durham we have taken it about Hartlepool, and in Hezleden Dene, but it is far from common.

May I add a note here respecting the members of this genus. Those who desire to obtain a fine series should take a killing bottle with them when they expect to capture any *Scoparia*. They are so restless when confined in small boxes that they soon spoil their appearance, and in an hour or two may be almost unrecognisable.

APHOMIA, Steph.

47. *Aphomia colonella*, Linn.

- Aphomia colonella*. Staint. Man., vol. ii., p. 164.
 „ *sociella*. Leech, Brit. Pyr., p. 109.
 „ „ Meyr. Hdbk. Brit. Lep., p. 385.

IMAGO. Leech, pl. xiii., fig. 3.

LARVA. Buck., vol. ix., pl. clvi., fig. 2.

The sexes of this insect differ so much that Linnæus thought they were different species, and gave them separate names, describing the ♂ first as *Sociella*, and the ♀ subsequently as *Colonella*. The rule, which appears to be a perfectly proper one, is that when both sexes have been named, the name of the male takes priority. In this case too the male was named first, and the species undoubtedly should be, and is now generally known as *Sociella*. The difference in the sexes is so great that Curtis placed them under different genera. The larva of this species is said to feed in beehives, which I think very doubtful, and in nests of humble bees. This may be so, but it is certain that they live in wasps nests, eating the papery substance composing the cells. Wasp's nests are generally common, and this insect is widely distributed and not at all rare. Mr. Maling says, "I met with several specimens of this moth in July near Hexham, the larva of which feed in beehives" (Trans., vol. v., p. 280). Mr. Finlay took it occasionally in Meldon Park. These are all the records I have of it for Northumberland, and in Durham I only know of a solitary specimen I took myself on the sand banks just beyond Hartlepool Cemetery, on the 17th July, 1874. I see no reason for this apparent scarcity, and expect it will be found widely distributed over both counties.

ANERASTIA, Hb.

48. *Anerastia lotella*, Hb.

Anerastia lotella. Staint. Man., vol. ii., p. 168.

„ „ Leech, Brit. Pyr., p. 87.

„ „ Meyr. Hdbk. Brit. Lep., p. 363.

IMAGO. Leech, pl. x., fig. 3.

LARVA. Buck., vol. ix., pl. clvi., fig. 4.

An insect only to be found on sandy sea shores, and, so far, only recorded from Hartlepool for these counties. Mr. Meyrick limits its range to Yorkshire, possibly there has been no published record of its occurrence here. It is rather common on the sandhills among marram-grass (*Ammophila arenaria*), and I took it among *Elymus arenarius* in 1891. Mr. Buckler reared it from larvæ feeding on marram, but it is known to eat other grasses also. It lives in a silken case or gallery on or below the surface of the sand. I see no reason why it should not occur on the sand dunes of both counties.

EPHESTIA, Zell.

49. *Ephestia ficulella*, Barr.

Ephestia ficulella. Leech, Brit. Pyr., p. 95.

„ „ Meyr. Hdbk. Brit. Lep., p. 373.

IMAGO. Leech, pl. xi., fig. 6.

I introduce this species with considerable doubt. The only notice of its occurrence that I have met with is that Mr. Sang records having bred a specimen on 29th June, 1858, from a *growing* hazle nut, found at Barnard Castle on 7th October, 1857. There is evidently some error, as the larva of *Ficulella* feeds on *dried* fruits, figs, currants, &c., and the imago is generally found in wholesale grocers' warehouses. It is a likely species to occur anywhere, and Sang was particularly careful, but there is an error somewhere, and I merely make the record, and leave the correction to the future. The insect was introduced to the British list in 1875.

50. *E. interpunctella*, Hb.*Ephestia interpunctella*. Staint. Man., vol. ii., p. 169.*Plodia* „ Leech, Brit. Pyr., p. 98.

„ „ Meyr. Hdbk. Brit. Lep., p. 372.

IMAGO. Leech, pl. xi., fig. 11.

LARVA. Buck., vol. ix., pl. clvi., fig. 8.

This has no doubt been correctly transferred to the genus *Plodia*, Gn. The larva feeds on grain and seeds, as well as on dried fruits, but it does not appear to be particular in its food, for Mr. Sang found it in a tea warehouse at Darlington, where, apparently, it could only have tea dust to live upon. Mr. Finlay has found the imago in Meldon Park in the open air, but never very common, and he makes no suggestion as to the food. Mr. Gardner got a specimen in a grocer's shop at Hartlepool. Mr. Buckler reared the larvæ on locust beans, and Mr. Porritt on dried figs. It evidently has considerable choice of food.

51. *E. kuehniella*, Zeller.*Ephestia kuehniella*. Meyr. Hdbk. Brit. Lep., p. 374.

A specimen of this insect was taken by Mr. Gardner at Middle Thorp, near Hartlepool, three or four years ago, and he took another last year. It is one of the more recent additions to the British fauna. The larva feeds on flour. I had larvæ brought me from a flour warehouse at Stockton that I expected to produce this insect, but they never appeared.

HOMŒOSOMA, Curt.

52. *Homœosoma nimbella*, Zell.*Homœosoma nimbella*. Staint. Man., vol. ii., p. 169.

„ „ Leech, Brit. Pyr., p. 91.

„ „ Meyr. Hdbk. Brit. Lep., p. 377.

IMAGO. Leech, pl. x., fig. 12.

LARVA. Buck., vol. ix., pl. clvii., fig. 3.

The only Northumberland record I have for this insect is from the west of the county, where Mr. J. B. Hodgkinson met with it. Mr. Sang took it at South Shields on 23rd July, 1871.

Mr. Gardner has reared it from larva found at Hartlepool feeding on the flowers and seeds of *Anthemis*. At one time it was not uncommon about Hartlepool, but I have not seen it in recent years. Those that occurred here are probably the variety (?) *Saxicola*, introduced as a new species by the late Howard Vaughan, but now considered only to be a form of *Nimbella*.

53. *H. senecionis*, Vaughan.

Homæosoma senecionis. Leech, Brit. Pyr., p. 93.

„ *cretacella*. Meyr. Hdbk. Brit. Lep., p. 377.

IMAGO. Leech, pl. xi., fig. 2.

LARVA. Buck., vol. ix., pl. clvii., fig. 5.

This was introduced by the late Howard Vaughan in the Entomologist's Monthly Magazine, vol. vii., p. 131, as a species new to science. It was subsequently found that it had been described in 1866 by Dr. Rössler and named *Cretacella*. It is not very uncommon among ragwort about Hartlepool, and Mr. Gardner has reared it from larvæ found in the stems and flower heads of ragwort. It was at one time rather plentiful between the Ropery and the railway, a place often referred to, but now destroyed entomologically. I also took it freely in an enclosure outside the Cemetery between 1884 and 1887, but the sea has spoiled this place, and I have not seen *Senecionis* for some years. I have no record of its occurrence elsewhere. It has not been recorded from Yorkshire, and Meyrick limits its northward range to Gloucester and Norfolk.

PHYCILIDÆ, Rag.

The number of species in this group that are recognised as British have been nearly doubled in number since the publication of Stainton's Manual, but only two of the additional species have been taken in these counties. The arrangement of genera and the nomenclature have also been much modified in recent years. I have followed Stainton in both respects, and trust no confusion will follow from the difference between old and new names and position.

ACROBASIS, Zell.

54. *Acrobasis tumidella*, Zinck.*Acrobasis tumidella*. Staint. Man., vol. ii., p. 171.*Rhodophæa* „ Leech, Brit. Pyr., p. 108.*Acrobasis zelleri*. Meyr. Hdbk. Brit. Lep., p. 382.

IMAGO. Leech, pl. xii., fig. 15.

Meyrick limits the range of this species to York, but it reaches the south of Durham at least, as both Mr. Gardner and I have taken it in Hezleden Dene. It is not common there, however, and I know of no other locality. Mr. Gardner took one at sugar in July, 1899, and another in 1902.

MYELOIS, Hb.

55. *Myelois advenella*, Zine.*Myelois advenella*. Staint. Man., vol. ii., p. 173.*Rhodophæa* „ Leech, Brit. Pyr., p. 106.*Eurhodope* „ Meyr. Hdbk. Brit. Lep., p. 380.

IMAGO. Leech, pl. xii., fig. 12.

Mr. Sang records that he took this on the railway banks at Croft, near Darlington, on 26th August, 1865. I have no further knowledge of it here. It is rather a local species, but reaches Scotland. The larva feeds on hawthorn in May or June, and I see no reason why the species should not occur elsewhere in either county.

HYPOCHALCIA, Hb.

56. *Hypochalcia ahenella*, W.V.*Hypochalcia ahenella*. Staint. Man., vol. ii., p. 174.*Onocera* „ Leech, Brit. Pyr., p. 108.*Hypochalcia* „ Meyr. Hdbk. Brit. Lep., p. 369.

IMAGO. Leech, pl. xiii., fig. 1.

The late J. B. Hodgkinson reports having met with this species in Northumberland. I do not know the exact locality, but it was in the extreme west of the county. Mr. Gardner and I have taken it occasionally about Black Hall Rocks,

generally flying off disturbed in a morning, but we never learned enough of its habits to take it except singly. In Yorkshire it is only recorded from Huddersfield, which Mr. Porritt thought was an error, but he now announces that the specimens were correctly named. I agreed with his earlier remarks that the locality was an unlikely one. It should be looked for in hilly places where wild thyme grows freely. I would expect the cliffs along the Yorkshire coast might produce it. It has been taken in the south-east of Scotland.

NEPHOPTERYX.

DIORYCTRIA, Zell.

57. *Dioryctria splendidella*, H. S.

Dioryctria splendidella. Meyr. Hdbk. Brit. Lep., p. 369.

This species is only given in Meyrick's Handbook, who speaks of it as having been recorded only from Norfolk and Cheshire, but as probably overlooked. Mr. Gardner took a single specimen flying behind the Ropery at Hartlepool in 1891. It is very difficult to explain the occurrence of solitary specimens like this. The larva feeds beneath the bark of *Pinus sylvestris*, "causing a lump of resinous exudation." The insect itself is the largest and finest of the group, and Mr. Gardner's specimen is as fine as bred. Insects that must have crossed the sea are sometimes in beautiful condition, and we may imagine them carried in an upper stratum of the air absolutely without injury. There is a fir wood a few miles west of where this specimen was taken, but if it was bred there, we would expect to have got more than a single specimen.

NEPHOPTERYX.

58. *Nephoptyx roborella*, Zine.

Nephoptyx roborella. Staint. Man., vol. ii., p. 175.

„ *spissicella*. Leech, Brit. Pyr., p. 103.

Phycita „ Meyr. Hdbk. Brit. Lep., p. 370.

IMAGO. Leech, pl. xii., fig. 6.

LARVA. Buck., vol. ix., pl. clviii., fig. 9.

Not an uncommon species, but more abundant in the south than in the north. Meyrick indeed limits its range to York, which is not very far wrong, so far as I know, as the only record I have of its appearance beyond that county is that Mr. Sang found larvæ at Darlington, the extreme south of Durham, on August 13th, 1874. The larvæ feed on oak, and apparently spin the leaves together for concealment.

PEMPELIA.

59. *Pempelia dilutella*, Hb.

Pempelia dilutella. Staint. Man., vol. ii., p. 176.

Phycis subornatella. Leech, Brit. Pyr., p. 101.

Pempelia dilutella. Meyr. Hdbk. Brit. Lep., p. 364.

IMAGO. Leech, pl. xii., figs. 2 and 3.

LARVA. Buck., vol. ix., pl. clix., fig. 3.

It would appear that the *Adornatella* and *Subornatella* of Leech, plate 12, figs. 2 and 3, are now considered to be one species. *Dilutella* is given in Stainton's Manual with four localities, including Bristol and Edinburgh. *Subornatella* was introduced as a new species in the Entomologist's Annual for 1869 as taken "last season" by Mr. Greening, of Warrington. The only claim the insect has to appear here is that Mr. Sang records having taken it on 27th June, 1859, near Darlington. The curious point is that in his Diary it appears as "*Subornatella*," a name not apparently applied to it as a British insect till nine years afterwards.

60. *Pempelia fusca*, Haw.

Pempelia fusca. Staint. Man., vol. ii., p. 176.

Phycis „ Leech, Brit. Pyr., p. 100.

Salebria „ Meyr. Hdbk. Brit. Lep., p. 366.

IMAGO. Leech, pl. xii., fig. 1.

This insect is rather common about Hartlepool in July, occurring not only at Black Hall Rocks, where there is a little heather, but on the sand hills and levelled ballast, where there

is none. Meyrick says the larva feeds on *Erica*, and Leech that it will eat sawfly in captivity, but it must feed on low plants as well, for there is neither one nor the other in places where we take it. It comes frequently to sugar, and may often be taken from the flowers of *Hieracleum sphondylium*. The only additional record I have is that Mr. Sang took it at Wolsingham on 28th June, 1874, and Mr. Gardner tells me it is common in Teesdale.

61. *Pempelia betulæ*, Gn.

Pempelia betulæ. Staint. Man., vol. ii., p. 177.

Phycis „ Leech, Brit. Pyr., p. 100.

Salebria „ Meyr. Hdbk. Brit. Lep., p. 366.

IMAGO. Leech, Brit. Pyr., pl. 11, fig. 14.

LARVA. Buck., vol. ix., pl. clviii., fig. 10.

A single specimen of this insect was taken in Upper Teesdale by Mr. Gardner. It is not a very uncommon species in Yorkshire, and may probably be turned up in other parts of these counties when these smaller species are more collected. The Derwent Valley and the Hexham district appear to me to be likely places for its occurrence.

62. *Pempelia davisellus*, Newman.

Nephopteryx genistella. Leech, Brit. Pyr., p. 104.

„ „ Meyr. Hdbk. Brit. Lep., p. 371.

IMAGO. Leech, pl. xii., fig. 8.

LARVA. Buck., vol. ix., pl. clix., fig. 2.

Mr. Sang records that he took larvæ of this species (which he calls *Genistacolella*) at Waskerley, in the west of Durham, on 12th April, 1874; at Wolsingham on 7th June, 1878, and imagines there on 27th May, 1884. He does not give the food plant or any further particulars. The larva, so far as I know, feeds on *Ulex campestris*, and it is very desirable to have these records confirmed, as otherwise the insect appears to be confined to the extreme south of England.

CRAMBIDÆ, Gn.

CRAMBUS, Fab.

(*Crambus cerussellus*. Mr. Sang enters "*Cerussella*" as occurring in several places about Darlington from the middle of June to the first week in July. As he never gave even the initial of the generic name, I have been puzzled as to this entry, the date of which agrees with the time of the occurrence of *Crambus cerussellus* or *cerussella*. *Elachista cerussella* is given in the "Manual" as occurring at Darlington, but this insect appears on the wing in May, and again in August, while Sang's entries are as above, June and early July. The larva of the *Elachista* too feeds on *Phalaris arundinacea*, which is not very likely to occur in the lanes around Darlington. On the other hand *Crambus cerussellus* is not recorded for Yorkshire, though it reaches Lancashire on the west. In Sang's diary the name is given with only one *s* in every case, and I can only leave the matter with these remarks, and wait for elucidation in the future).

63. *Crambus pratellus*, Linn? Ck.

Crambus pratellus. Staint. Man., vol. ii., p. 180.

" " Leech, Brit. Pyr., p. 75.

" " Meyr. Hdbk. Brit. Lep., p. 391.

IMAGO. Leech, pl. viii., fig. 5.

Abundant everywhere.

64. *C. hamellus*, Thunb.

Crambus hamellus. Staint. Man., vol. ii., p. 181.

" " Leech, Brit. Pyr., p. 77.

" " Meyr. Hdbk. Brit. Lep., p. 389.

IMAGO. Leech, pl. viii., fig. 9.

Meyrick limits the range of this species to Lancashire in the west, but does not give it in the east. I took it several years ago at Hartlepool, but have no recent knowledge of it. It has been taken at Scarborough.

65. *C. pascuellus*, Linn.*Crambus pascuellus*. Staint. Man., vol. ii., p. 181.

" " Leech, Brit. Pyr., p. 77.

" " Meyr. Hdbk. Brit. Lep., p. 390.

IMAGO. Leech, pl. viii., fig. 10.

This species frequents wet meadows and boggy places. Mr. Wailes recorded it from Prestwick Carr in Stephens' Illustrations (Haust., vol. iv., p. 321), and I took a single specimen myself near Angerton Station, on the North British Railway, when with the late Mr. Finlay. These are all the Northumberland records. In Durham I only know that both Mr. Gardner and I have taken it in a few boggy places around Hartlepool, and that Mr. Backhouse got it near Darlington. It extends locally into Scotland, and even reaches the Shetlands, so it is likely to occur in suitable places in both counties.

66. *C. uliginosellus*, Zell.*Crambus uliginosellus*. Staint. Man., vol. ii., p. 182.

" " Leech, Brit. Pyr., p. 77.

" " Meyr. Hdbk. Brit. Lep., p. 390.

IMAGO. Leech, pl. viii., fig. 11.

This is a southern species, and rather local there, but it is recorded in the Transactions of the Society in "Notes on the occurrence of Lepidoptera in Northumberland and Durham in 1874, by William Maling." "*Crambus uliginosellus* (a very local species).—One of my best captures during the season. It is generally taken singly" (vol. v., p. 145).

The late J. B. Hodgkinson, of Preston, kindly marked a list of species he had met with in Northumberland, and the only *Crambus* there is the present species.

I had grave doubts of the correctness of Mr. Maling's record until I saw the species also named by Mr. Hodgkinson. Mr. Maling is wrong in supposing it to be generally taken singly, but the insect does not appear to range beyond Norfolk, and as the death of both gentlemen prevents enquiry being made, it is very desirable that some of the Northumberland collectors

should find the species and record the locality. Both captors collected in the west of the county, Mr. Maling also about Newbiggin and Cullercoats.

67. *C. hortuellus*, Hub.

Crambus hortuellus. Staint. Man., vol. ii., p. 182.

" " Leech, Brit. Pyr., p. 86.

" " Meyr. Hdbk. Brit. Lep., p. 391.

IMAGO. Leech, pl. x., fig. 1.

Recorded for Newcastle in Stephens' Illustrations, vol. iv., p. 322, and in all MS. lists including the group. It is a common species occurring almost everywhere, and found in all parts of both counties.

68. *C. culmellus*, Linn.

Crambus culmellus. Staint. Man., vol. ii., p. 182.

" " Leech, Brit. Pyr., p. 85.

" " Meyr. Hdbk. Brit. Lep., p. 391.

IMAGO. Leech, pl. ix., fig. 12.

LARVA. Buck., vol. ix., pl. clx., fig. 4.

This is one of the very few *Crambi* in the Twizell list, and it is generally distributed and very common in both counties, as in all other parts of Britain.

69. *C. geniculeus*, Haw.

Crambus geniculeus. Staint. Man., vol. ii., p. 183.

" " Leech, Brit. Pyr., p. 84.

" " Meyr. Hdbk. Brit. Lep., p. 394.

IMAGO. Leech, pl. ix., fig. 11.

LARVA. Buck., vol. ix., pl. clx., fig. 7.

At present this is only recorded from the Hartlepool district. Mr. Sang found it at Seaton Carew, and it occurs fairly commonly at Hartlepool, chiefly in sandy places, especially if a little sheltered, such as behind the Ropery in the old days, behind Warren Farm, and in the enclosure formerly between the cemetery and the sea. I see no reason why it should not occur elsewhere, especially on the sandy shores.

70. *C. selasellus*, Hub.

- Crambus selasellus*. Staint. Man., vol. ii., p. 183.
" " Leech, Brit. Pyr., p. 81.
" " Meyr. Hdbk. Brit. Lep., p. 395.

IMAGO. Leech, pl. ix., fig. 6.

LARVA. Buck., vol. ix., pl. clx., fig. 9.

A local and rather scarce insect, and so closely resembling the next, which is a very common species, that I have found it necessary to make careful investigation of the records, most of which proved to be the commoner species. By the kindness of Mrs. Pattison, of Forest Hall, I am able to confirm the Northumberland captures of the late W. Pattison, which, so far, are the only specimens taken in that county to be relied upon. In Durham it appears equally scarce. Mr. Sang took it at Hell Kettles, near Darlington, and Mr. Gardner and I have taken a very few, which are all I can rely upon. Meyrick limits its range to Lancashire. It occurs at Scarborough and other places in Yorkshire, but it is very far from common in the north of England, and I would be glad to hear of additional localities. It is best distinguished from *Tristellus* by its rather smaller size, and by a dark line above the white streak, which is more distinctly four-branched.

71. *C. tristellus*, W.V.

- Crambus tristellus*. Staint. Man., vol. ii., p. 183.
" " Leech, Brit. Pyr., p. 82.
" " Meyr. Hdbk. Brit. Lep., p. 395.

IMAGO. Leech, pl. ix., fig. 7.

This, one of the largest of the grass moths, is common everywhere in both counties. In Leech's work, referred to above, the figure of this insect on plate 9 (fig. 7), is named *C. pratellus* in error. The reference on p. 82 gives the name correctly.

72. *C. margaritellus*, Hb.

- Crambus margaritellus*. Staint. Man., vol. ii., p. 183.
 " " Leech, Brit. Pyr., p. 78.
 " " Meyr. Hdbk. Brit. Lep., p. 393.
 IMAGO. Leech, pl. viii., fig. 13.

Mr. Sang took this pretty *Crambus* at Wolsingham, Upper Weardale, on 9th August, 1874. It is met with in the Lake District, so its occurrence in the western part of Durham is what might be looked for. I have no other records as yet.

73. *C. perlellus*, Scop.

- Crambus perlellus*. Staint. Man., vol. ii., p. 184.
 " " Leech, Brit. Pyr., p. 80.
 " " Meyr. Hdbk. Brit. Lep., p. 393.
 IMAGO. Leech, pl. ix., fig. 4.
 LARVA. Buck., vol. ix., pl. clx., fig. 13.

The only locality I know of in these counties for this species is a meadow adjoining the churchyard at Monk Hesleden, near Hartlepool. The meadow slopes down to the top of the dene, and the lower part is much grown over with stunted birch, whin, and such like growth, the soil scarcely covering the limestone rock. Here, of course, the grass is not cut, and *Perlellus* occurs in abundance. The specimens are nearly always silvery white, though it sometimes has darker streaks. They are also distinctly larger than the Greatham specimens of *Warringtonellus*.

74. *C. warringtonellus*, Stainton.

- Crambus warringtonellus*. Staint. Man., vol. ii., p. 184.
 " " Leech, Brit. Pyr., p. 81.
 " *perlellus*. Meyr. Hdbk. Brit. Lep., p. 393.
 IMAGO. Leech, pl. ix., fig. 5.
 LARVA. Buck., vol. ix., pl. clx., fig. 14.

It is now considered doubtful if this be more than a variety of form of *Perlellus*, but they certainly occur here in places of widely different character. Mr. Gardner found *Warringtonellus*

on the salt-marsh at Greatham, a few miles south of Hartlepool. The specimens taken there are easily distinguished from Hezleden examples. They are always smaller, yellower, and much more streaked and marked with a darker shade. This may result from the difference of habitat, this occurring in the low swampy ground of a salt-marsh, and the other on a dry limestone bank, but were there none but these two from the Hartlepool district to consider they would certainly be reckoned as two species.

CHILO, Zk.

75. *Chilo phragmitellus*, Hb.

Chilo phragmitellus. Staint. Man., vol. ii., p. 186.

„ „ Leech, Brit. Pyr., p. 70.

„ „ Meyr. Hdbk. Brit. Lep., p. 397.

IMAGO. Leech, pl. vii., fig. 5.

LARVA. Buck., vol. ix., pl. clix., fig. 7.

We appear to be rather beyond the range of this species, or it has escaped detection. The only occurrence I know of is that it was taken at Hell Kettles, near Darlington, in July, 1874, by Mr. Stevenson. Mr. Bolam, of Berwick, had larvæ believed to be this species from the extreme north of Northumberland. He did not, however, rear the insects. There is a doubtful record from Perth, in Scotland. I would urge collectors in suitable places to try and confirm the occurrence of the insect in our district. The larvæ feed and pupate within the reed stem. We have not met with it about Greatham.

CHLŒPHORIDÆ, Steph.

CHLOEPHORA, Dup.

76. *Chloephora prasinana*, L. GREEN SILVER LINES.

Chloephora prasinana. Staint. Man., vol. ii., p. 187.

Halias „ Barr. Lep. Brit. Is., vol. ii., p. 175.

„ „ Meyr. Hdbk. Brit. Lep., p. 36.

LARVA. Buck., vol. ix., pl. clxi., fig. 1.

For particulars of this species see vol. i., p. 59.

TORTRICINA.

This is a very extensive family, over three hundred species being recognised as British. It has never been a popular one with collectors. The insects, as a rule, are but little diversified in appearance, are but dull coloured in most cases, and are without any very striking style of marking. Add to this their small size, for very few indeed are above an inch, and many are less than half that in expanse. Where there are many collectors but few study this group, here in the north of England, very few indeed. I have thus but very scanty records to draw upon for my account of their occurrence. I have none for the north-west of Northumberland, very few for the north-west of Durham. Many additional species are certain to be found within our area, and additional localities for nearly everything.

The sources from which the following list is compiled are, a lengthy and important list of recent captures by the late James Finlay, of Meldon, near Morpeth; a list supplied by the late J. B. Hodgkinson, of Preston, Lancashire, of species taken in south-west Northumberland, but which has no localities, and contains names of some species such as *Eupæcethia vectisana* and *affinitana*, that could not possibly occur there; the notes of the late Wm. Backhouse, of Shotley, and the "diary" of the late John Sang. There are also a few records, without localities, in the Transactions of the Society from the pen of the late W. Maling, of Newcastle, a few notices of local species in Stephens' "Illustrations," from the late George Wailes, and a few others in the Entomologist's Monthly Magazine, &c. These are all I have had to draw upon. Mr. Gardner, who has given some little attention to the group, has rendered me all the assistance in his power.

It is a very difficult group to differentiate. One writer will give as a species what another considers to be two or three. Some species, the "Buttons" for instance, are wonderfully variable; others are absolutely constant. No two authors appear to agree as to the best method of dividing them into

families and genera, nor to which genus certain species belong. Stainton, it is true, accepted Wilkinson's arrangement and nomenclature, and adopted it in the Manual, but Stainton had never studied the group. This arrangement I am following, not that I consider it the best, but for reasons already given. Mr. Barrett probably knows more of the Tortrices than any other writer, but his work on the group is not yet ready for issue. He has, however, been good enough to revise and correct my MS.

The larvæ seldom feed exposed. Many live in roots and stems, others roll themselves up in the leaves of their food-plant, hide themselves in seed capsules or flowers, and live there in concealment. The habits of the perfect insects have not been much written about. Some fly in the early morning, some at mid-day, or later, but the bulk fly at or about sunset; few, if any, after dark. Many, possibly all, "assemble," where there is a virgin female.

The nomenclature in many cases is most frightfully confused. I have done my best to make it correct here, but if I have blundered, those who understand it best will be the readiest to excuse any errors.

TORTRICIDÆ.

SARROTHRIPA, Curt.

1. *Sarrothripa revayana*, W.V.

Sarrothripa revayana. Staint. Man., vol. ii., p. 191.

„ „ Barr. Lep. Brit. Is., vol. vi., p. 192.

„ *undulana*. Meyr. Hdbk. Brit. Lep., p. 35.

LARVA. Buckler, vol. ix., pl. clxi., fig. 4.

For particulars of a solitary occurrence of this insect see vol. i., p. 192. No additional records have reached me since that was published.

This is a species whose place appears to be much disputed. Dr. Staudinger gave it among the *Bombyces*. Mr. Barrett considers it to be a *Noctua*. It is rather common generally, and has been taken far into Scotland, but it does not appear to have a habitat in these counties.

AMPHISA, Curt.

2. *Amphisa gerningana*, W.V.

Amphisa gerningana. Staint. Man., vol. ii., p. 191.

„ *gerningiana*. Wilk. Brit. Tort., p. 13.

Philedone gerningana. Meyr. Hdbk. Brit. Lep., p. 527.

More a northern than a southern species, occurring abundantly on all the heaths and moors of both counties. It is not, however, strictly confined to such habitats, for Mr. Sang took it on the banks of the Stockton and Darlington Railway, near Darlington, on 10th July, 1873. A variety of plants are named as affording food for the larva. The difference in spelling the name in Wilkinson's work is probably a misprint. He was not one of those modern nuisances, whose chief study seems to be to call insects by names different to other people.

3. *A. prodromana*, Hub.

Amphisa prodromana. Staint. Man., vol. ii., p. 191.

„ „ Wilk. Brit. Tort., p. 14.

Philedone „ Meyr. Hdbk. Brit. Lep., p. 527.

Rather more exclusively northern than the last, but not yet recorded beyond the Clyde. It is not uncommon on the moors of both counties, and is also plentiful on the sandhills between Hartlepool and Castle Eden Dene, and probably in similar places on the coasts of both counties. Stainton gives July as the time for the appearance of the imago. That is a mistake, it flies much earlier in the year. Sang records it several times from the Durham moors about Waskerley, and his latest date is 19th April. Perhaps it appears later on the moors, for about Hartlepool it is generally on the wing by the middle of March. It flies about mid-day in bright sunshine, and is a lovely insect when fresh. There appears to be some doubt as to the food of the larva. Stainton says "Sallow" with a ? after it. Meyrick says *Potentilla*. Wilkinson does not mention the larva at all. In 1894, Mr. Finlay, of Meldon, collected a quantity of united sallow leaves, hoping to breed *Peronea hastiana*. From these,

among other things, he reared *Prodromana*. It cannot feed on sallow on Hartlepool sand-hills, for there is none. Mr. Gardner has reared it from flower heads of valerian, and believes it will eat any flowers. It seems strange, if this be so, that it is so very local, though its early appearance may cause it to be overlooked.

Curtis, believing the insect to be new to science, called it *Walkerana*, after the gentleman who took it in New Lanark in 1827. Hubner had previously called it *Prodromana*.

Stainton says it "has occurred near Manchester and near Lanark." Meyrick says "Cheshire to the Clyde." It would therefore seem that its occurrence on the east coast is not generally known. I think it will be found more freely distributed in our counties than appears at present.

HYPERMECIA, Gner.

4. *Hypermechia augustana*, Hub.

Hypermechia augustana. Staint. Man., vol. ii., p. 191.

" " Wilk. Brit. Tort., p. 16.

Enarmonia cruciana. Meyr. Hdbk. Brit. Lep., p. 473.

5. *Hypermechia cruciana*, Linn. See below.

There has been considerable confusion between these two species, making it rather difficult to give intelligible references to each. Meyrick increases the difficulty by giving *Augustana* as a mere synonym. The facts appear to be as follows.

Cruciana is a common insect in Britain, and was well known to collectors under the name *Augustana*. The error was not detected until 1866, when Lord Walsingham (then the Hon. Thomas de Grey), took a single specimen of the true *Augustana* at High Force, Durham. This he sent to Mr. Doubleday, who pronounced it to be the *Augustana* of Hubner, new to Britain, and that the insect hitherto known as *Augustana* was the *Cruciana* of Linnæus. *Cruciana* had already been appended to that of *Augustana* with a ? as a doubtful synonym. The species was introduced to the British list in the Ent. Mo. Mag.

for March, 1869 (vol. v., p. 251), and also in the Ent. Annual for 1870 (p. 141). In this record reference to the first announcement is given as "Ent. Mo., vi., 251," instead of "Ent. Mo. Mag., v., 251."

In the Ent. Mo. Mag. for 1872 (vol. ix., p. 125), Mr. Barrett carefully differentiated the two species, pointing out a structural difference in the narrowness of the wings of *Augustana*, towards the apex, as well as the difference in markings.

The occurrence of the two insects in these counties, so far as I know it, is as under.

AUGUSTANA, Hub. First taken at High Force, Upper Teesdale, in 1866, by Lord Walsingham. Taken there by Mr. Sang in 1877 and 1878, and near Darlington later. We have also taken it about Hartlepool, and it is probably generally common.

CRUCIANA, Linn. Mr. Finlay took this commonly at Throphill Moor. Mr. Maling also recorded it in the Transactions for 1875 (p. 281), but he gave no locality. Mr. Backhouse took it at Shotley. Mr. Sang found it at Castle Eden in 1853, and again in 1860. We find it common about tallows in Hezleden Dene.

It must be remembered that it is always possible that records prior to 1866 may be of *Augustana*.

EULIA, Hub.

6. *Eulia ministrana*, Linn.

Eulia ministrana. Staint. Man., vol. ii., p. 192.

" " Wilk. Brit. Tort., p. 17.

Tortrix " Meyr. Hdbk. Brit. Lep., p. 536.

Probably in all woods of both counties. Mr. Finlay found it common in those where he collected. Mr. Henderson took it in Jesmond Dene, and Mr. Maling recorded it in the Transactions for 1875 (p. 281), but gave no locality. Mr. Wailes took it at Gibside nearly seventy years ago (see Stephens' Illustrations, vol. iv., p. 144). Mr. Backhouse got it in Hoffall Wood, near

Durham, and at Rockwell, Darlington. It is very common both in Castle Eden and Hezleden Denes. It flies freely before dusk, early in June, and sometimes rests on trees, sitting with its wings roof-like, a mode of resting in which it differs from the genus *Tortrix*, in which Doubleday and Meyrick have placed it. Wilkinson says, "Scotch specimens are mostly darker than the southern ones, constituting the var. *E. subfasciana*. *E. ferruginea* is an extension of the same variety, but darker and more evenly coloured." I have taken both these varieties in Hezleden Dene.

BRACHYTÆNIA.

7. *Brachytænia semifasciana*, Haw.

<i>Brachytænia semifasciana.</i>	Staint. Man., vol. ii., p. 192.
"	" Wilk. Brit. Tort., p. 19.
<i>Encosma</i>	" Meyr. Hdbk. Brit. Lep., p. 461.

Rather a local species, but occurring in both counties. Mr. Finlay found it in Meldon Park, but it was always scarce. Mr. Sang beat it out of tallows in Castle Eden Dene, 17th July, 1853. It is sure to occur elsewhere.

ANTITHESIA, Steph.

8. *Antithesia corticana*, Hub.

<i>Antithesia corticana.</i>	Staint. Man., vol. ii., p. 193.
"	" Wilk. Brit. Tort., p. 21.
<i>Encosma</i>	" Meyr. Hdbk. Brit. Lep., p. 461.

This is the *Picana* of Doubleday's list. It is rather a local species, but not uncommon where it occurs. Mr. Finlay found it plentiful in Old Park, Netherwitton. Mr. Sang got it at Castle Eden Dene on 12th July, 1857, and larvæ there on 3rd June, 1860, and near Darlington on 20th August, 1859. It also occurs at Edder Acres, near Hartlepool, on birch trunks, not uncommonly. The larva feeds on birch.

9. *A. betuletana*, Haw.

- Antithesia betuletana*. Staint. Man., vol. ii., p. 193.
 " " Wilk. Brit. Tort., p. 22.
Encosma " Meyr. Hdbk. Brit. Lep., p. 461.

Generally common on birch, but I have no records except that Mr. Backhouse took it in Hoffall Wood, near Durham, and we get it in Hezleden Dene, where it is quite plentiful. Mr. Sang probably found it too common to be worth entering in his diary.

10. *A. prælongana*, Gner.

- Antithesia prælongana*. Staint. Man., vol. ii., p. 194.
 " " Wilk. Brit. Tort., p. 24.
Encosma sororculana. Meyr. Hdbk. Brit. Lep., p. 462.

A local species, not generally common. In Northumberland Mr. Finlay found it at the Old Park, Netherwitton, where it was rather plentiful. In Durham Mr. Pattison found it at Chopwell, Mr. Sang recorded it for Castle Eden Dene in 1858, near Darlington in 1859, in Upper Teesdale in 1870, and at Wolsingham in 1873 and down to 1882. We also take it in Hezleden Dene.

11. *A. cynosbatella*, Linn.

- Antithesia cynosbatella*. Staint. Man., vol. ii., p. 194.
 " " Wilk. Brit. Tort., p. 26.
Encosma variegana. Meyr. Hdbk. Brit. Lep., p. 462.

Generally a common species, and plentiful in most places. It is in the Twizell list. Mr. Finlay found it generally distributed and common. Mr. Maling recorded it in the Transactions for 1875 (p. 281). Mr. Backhouse took it at Jesmond Dene, Newcastle, and at Hoffall Wood, near Durham. It is common in Hezleden Dene, and no doubt in all the woods of both counties. Mr. Sang did not enter it in his diary.

12. *A. pruniana*, Hub.

- Antithesia pruniana*. Staint. Man., vol. ii., p. 194.
 „ „ Wilk. Brit. Tort., p. 27.
Encosma „ Meyr. Hdbk. Brit. Lep., p. 463.

The larva of this insect feeds on sloe, and the insect is no doubt common everywhere. Mr. Finlay found it not at all scarce in the Old Park, Netherwitton. It is recorded by Mr. Maling in the Transactions for 1875 (p. 281). It is common around Hartlepool, and Mr. Gardner has taken it in Hezleden Dene.

13. *A. dimidiana*, Tr.

- Antithesia dimidiana*. Staint. Man., vol. ii., p. 195.
 „ „ Wilk. Brit. Tort., p. 28.
Encosma „ Meyr. Hdbk. Brit. Lep., p. 464.

Confined to places where the food plant, bog myrtle (*Myrica gale*) is found—the boggy moors that lie chiefly in the west of the counties. Mr. Maling recorded it in the Transactions for 1875 (vol. v.), but without locality. He collected much on Newbiggin Moor and in the neighbourhood of Hexham. Mr. Sang found it at Wolsingham, and it is certain to occur on the Teesdale moors, when looked for at the proper time.

14. *A. marginana*, Haw.

- Antithesia marginana*. Staint. Man., vol. ii., p. 195.
 „ „ Wilk. Brit. Tort., p. 29.
Encosma oblongana. Meyr. Hdbk. Brit. Lep., p. 463.

The larva of this insect feeds in the seed heads of teasle (*Stachys betonica*), and other plants of that kind. It is rather a local species, but very widely distributed. So far it is only recorded from the neighbourhood of Darlington by Mr. Sang, who took it at boggy places on the Tees side; and by Mr. Backhouse who found it at Shull.

15. *A. palustrana*, Zell.

Encosma palustrana. Meyr. Hdbk. Brit. Lep., p. 466.

This is a new introduction, and Meyrick confines it to Scotland, "Scotland to Ross," but Mr. Gardner took it in Upper Teesdale in 1897, and again in 1898, and it is certain to occur in Upper Weardale and along the high land to the Cheviots in Northumberland.

PENTHINA, Treit.

16. *Penthina salicella*, Linn.

Penthina salicella. Staint. Man., vol. ii., p. 196.

" " Wilk. Brit. Tort., p. 35.

Encosma " Meyr. Hdbk. Brit. Lep., p. 460.

This would seem to be a southern species. Stainton says "Not rare in the South of England." Wilkinson says it "appears in June, July, and August among Sallows and Willows in the Metropolitan district, and the south and west of England." Meyrick says "England to York." Mr. Sang, however, took the insect in the neighbourhood of Darlington, and he subsequently found larvæ in leaves of *Salix alba* and reared the moth. I have no other records. We never found it near Hartlepool.

DICHELIA, Gner.

17. *Dichelia grotiana*, Fab.

Dichelia grotiana. Staint. Man., vol. ii., p. 197.

" " Wilk. Brit. Tort., p. 39.

Epagoge " Meyr. Hdbk. Brit. Lep., p. 527.

Mr. Backhouse took this in Hoffall Wood near Durham. It is a local insect, but widely distributed in the south. Meyrick limits its range to York.

CLEPSIS, Guen.

18. *Clepsis rusticana*, Tr.

Clepsis rusticana. Staint. Man., vol. ii., p. 197.

" " Wilk. Brit. Tort., p. 41.

Tortrix " Meyr. Hdbk. Brit. Lep., p. 538.

This should not be a very rare species on boggy moors, and places where *Myrica gale* grows, but I have only one notice from each county. Mr. Maling reports in the Transactions, vol. v., p. 281, without locality, but almost certainly from Northumberland. Mr. Sang got it at Eggleston in June, 1881, having found larvæ there the previous month.

TORTRIX, Linn.

19. *Tortrix icterana*, Fröl.

Tortrix icterana. Staint. Man., vol. ii., p. 198.

" " Wilk. Brit. Tort., p. 43.

" *paleana*. Meyr. Hdbk. Brit. Lep., p. 537.

Very generally distributed throughout both counties, though it does not appear very plentiful anywhere. The larva feeds on any low plant, but seems to prefer plantain and *Centaurea*, folding back the leaves. Mr. Finlay found it in most places around Morpeth. Mr. Maling recorded it in the Transactions for 1875 (vol. v., p. 281). Mr. Sang took it around Darlington, and found larvæ on the railway banks. It is common about Hartlepool. I think I have found it most frequently on the railway embankment.

20. *T. viburnana*, W.V.

Tortrix viburnana. Staint. Man., vol. ii., p. 198.

" " Wilk. Brit. Tort., p. 44.

" *viburniana*. Meyr. Hdbk. Brit. Lep., p. 537.

This species is very abundant on the moors of Northumberland, and of Durham also, though I have no records from Weardale. Mr. Wailes reported it for Meldon Park in Stephens'

Illustrations (vol. iv., p. 69); Mr. Finlay found it on the moors generally. I have taken it myself on Greenleighton Moor, and the Rev. B. Harvey-Jellie took it at Shaften Moor in 1902. Mr. Maling recorded it in the Transactions for 1875 (p. 281). It is recorded for Darlington in a report of the Entomological Society as taken on 3rd September, 1890. This is a very late date, and the record must surely refer to some of the western moors, Darlington itself being a most unlikely place. Sang took the species at Eggleston in June, 1879, but Eggleston is in Upper Teesdale.

21. *T. viridana*, Linn.

- Tortrix viridana*. Staint. Man., vol. ii., p. 198.
 " " Wilk. Brit. Tort., p. 44.
 " " Meyr. Hdbk. Brit. Lep., p. 537.

A common insect in woods, sometimes much too common, the larvæ becoming quite destructive in their ravages. I have seen the oaks in Hezleden Dene entirely stripped of their leaves by their ravages. It is recorded in the Twizell list; Mr. Finlay found it very general in the Morpeth district, Mr. Maling (without specified locality) recorded it in the Transactions for 1875 (p. 281), Mr. Henderson found it at Jesmond, and Mr. Wailes recorded it nearly seventy years ago from Gibside (see Step. Illus., vol. iv., p. 69). Mr. Pattison got it at Chopwell in the same district, and it appears in every little wood in the county where oak grows, as noted years ago by Mr. Backhouse.

22. *T. Forsterana*, Fab.

- Tortrix Forsterana*. Staint. Man., vol. ii., p. 199.
 " " Wilk. Brit. Tort., p. 45.
 " " Meyr. Hdbk. Brit. Lep., p. 538.

A common insect in the south of England according to Stainton, and I think it ought to be common here also, but I have no records for Northumberland at all, and only for the southern portion of Durham. It is scarce in Hezleden Dene, Mr. Gardner has bred it from larvæ found at Barnard Castle, and Mr. Sang took it long ago at Harewood Grove, near

Darlington. Meyrick states that the insect reaches Ross in Scotland, it cannot be therefore that we are on the verge of its range, and I fully expect many additional habitats will be found.

23. *T. heparana*, W. V.

Tortrix heparana. Staint. Man., vol. ii., p. 199.

" " Wilk. Brit. Tort., p. 47.

Pandemis " Meyr. Hdbk. Brit. Lep., p. 533.

Generally a common insect, and no doubt occurring all over both counties. It was recorded for Newcastle as far back as 1834 by Mr. George Wailes (see Steph. Illust., Haust., vol. iv., p. 71). Mr. Finlay found it plentiful all around Morpeth. Mr. Backhouse bred it from larvæ found on pear in his garden at Darlington; Mr. Sang also took it in Cockerton lane there. We get it in Hezleden Dene.

24. *T. ribeana*, Hb.

Tortrix ribeana. Staint. Man., vol. ii., p. 199.

" " Wilk. Brit. Tort., p. 48.

Pandemis " Meyr. Hdbk. Brit. Lep., p. 533.

Another common species, occurring almost everywhere, especially in gardens. Mr. Finlay found it generally distributed and common in his district. Mr. Maling recorded it in the Transactions for 1875, p. 281, and Mr. Henderson got it in Jesmond Dene. I have no records for Durham, but the insect is common in gardens at Hezleden, and certainly occurs all over the country. Mr. Backhouse took a variety of it by a plantation hedge at Shotley—a form which Stephens considered distinct, and called *Grossulariana*.

25. *T. cinnamoneana*, Tr.

Tortrix cinnamoneana. Staint. Man., vol. ii., p. 199.

" " Wilk. Brit. Tort., p. 49.

Pandemis " Meyr. Hdbk. Brit. Lep., p. 534.

This is not a common species by any means, and though Meyrick limits its range to York, it occurs in South Durham,

and has been taken on Coniscliffe Moor, and at Elders, both near Darlington, by the late J. Sang. No one else appears to have met with it. The larva is a tree feeder, on larch, birch, &c.

26. *T. corylana*, Fab.

- | | |
|--------------------------|---------------------------------|
| <i>Tortrix corylana.</i> | Staint. Man., vol. ii., p. 200. |
| " " | Wilk. Brit. Tort., p. 50. |
| <i>Pandemis</i> " | Meyr. Hdbk. Brit. Lep., p. 533. |

Rather a common insect, and very generally distributed. It is in the Twizell list; Mr. Finlay found it generally; and Mr. Maling recorded it in the Transactions for 1875 (p. 281); Mr. Henderson also found it at Jesmond. In Durham it is equally common, and appears to occur in and about all the woods and denes.

PLECATÆ.

LOZOTÆNIA, Steph.

27. *Lozotænia sorbiana*, Hb.

- | | |
|----------------------------|---------------------------------|
| <i>Lozotænia sorbiana.</i> | Staint. Man., vol. ii., p. 202. |
| " " | Wilk. Brit. Tort., p. 55. |
| <i>Cacoecia</i> " | Meyr. Hdbk. Brit. Lep., p. 531. |

Rather a southern species, indeed Meyrick limits its range to York, but it reaches the southern extremity of Durham, having been taken in 1880 by Mr. Sang at Hell Kettles, near Darlington, and two years later he met with it at Wolsingham, high up in Weardale.

28. *L. musculana*, Hub.

- | | |
|-----------------------------|---------------------------------|
| <i>Lozotænia musculana.</i> | Staint. Man., vol. ii., p. 202. |
| " " | Wilk. Brit. Tort., p. 56. |
| <i>Cacoecia</i> " | Meyr. Hdbk. Brit. Lep., p. 532. |

A common species generally, and occurring everywhere. The larva feeds on bramble, a universally distributed hedge plant. I do not give localities, as it is in all the lists.

29. *L. latiorana*, Stainton.*Lozotænia latiorana*. Staint. Man., vol. ii., p. 202.

" " Wilk. Brit. Tort., p. 57.

Cacoecia costana. Meyr. Hdbk. Brit. Lep., p. 531.

Meyrick is probably right for once when he follows Doubleday in merging this with the next species as a mere variety. It was introduced as British in the Entomologist's Annual for 1857, p. 100 (Wilkinson says 1837, but that is evidently a misprint). It has been taken at most or all of the places where *Costana* occurs, and is undoubtedly a mere variety of that insect. I give it separately because Stainton does.

30. *L. costana*, Fab.*Lozotænia costana*. Staint. Man., vol. ii., p. 202.

" " Wilk. Brit. Tort., p. 58.

Cacoecia ,, Meyr. Hdbk. Brit. Lep., p. 531.

Costana is rather a common marsh insect. It has been met with on Newbiggin Moor by Mr. Maling. In Durham at Hell Kettles, Darlington, by Mr. Sang, and on Greatham marsh by Mr. Gardner, who has taken it this year (1904) at a pond at Thorp Bulmer. I do not understand why Mr. Finlay never met with it, and think some of the Newcastle collectors should find many fresh localities for it in Northumberland.

31. *L. unifasciana*, Dup.*Lozotænia unifasciana*. Staint. Man., vol. ii., p. 203.

" " Wilk. Brit. Tort., p. 59.

Cacoecia ,, Meyr. Hdbk. Brit. Lep., p. 532.

The smallest of the genus, and generally common where there is plenty of privet. It is recorded by Mr. Maling in the Transactions for 1875, p. 281. Mr. Sang found it about Darlington. We find it abundant in Hezleden Dene.

32. *L. fulvana*, W. V.*Lozotania fulvana*. Staint. Man., vol. ii., p. 203.

" " Wilk. Brit. Tort., p. 60.

Cacoecia podana. Meyr. Hdbk. Brit. Lep., p. 530.

Generally distributed and common in both counties. The larva feeds on a variety of trees and shrubs, and the insect is in all the lists. This is the *Pyrastrana*, Hub., of Doubleday's catalogue.

33. *L. roborana*, Hub.*Lozotania roborana*. Staint. Man., vol. ii., p. 203.

" " Wilk. Brit. Tort., p. 61.

Cacoecia crategana. Meyr. Hdbk. Brit. Lep., p. 530.

Rather a common species generally, but very rare with us. Mr. Maling recorded it in the Transactions for 1875, p. 281, but without locality, which is rather unfortunate when I have no other record. I have little doubt, however, that he took it in Northumberland. I met with it at Hartlepool in 1884, but have not taken it again. I have no other records. Meyrick limits its range to York.

34. *L. xylostearia*, Linn.*Lozotania xylostearia*. Staint. Man., vol. ii., p. 203.

" " Wilk. Brit. Tort., p. 62.

Cacoecia " Meyr. Hdbk. Brit. Lep., p. 530.

A generally distributed species, occurring on oak, beech, elm, honey-suckle, and quite a variety of trees. Mr. Finlay found it not at all uncommon around Meldon; Mr. Maling and Mr. Patterson both record it, but without localities. In Durham Mr. Sang took it in Castle Eden Dene, &c., and Mr. Gardner and I have found it fairly common in Hezleden Dene. It is probably to be found in all woods and denes in both counties.

35. *L. rosana*, Linn.*Lozotania rosana*. Staint. Man., vol. ii., p. 204.

" " Wilk. Brit. Tort., p. 63.

Cacoecia " Meyr. Hdbk. Brit. Lep., p. 531

A very common species, occurring everywhere. It is in the Twizell list as *Lozotania lavignana*. It is recorded for "Newcastle, &c.," by Wailes, in Stephens' Illustrations, vol. iv., p. 76. Mr. Maling also recorded it in the Transactions for 1875. Mr. Finlay found it plentiful in Meldon Park and elsewhere. In Durham I have few records, but it has been plentiful wherever I have collected. The larva feeds on almost everything (not low plants), so that it has no difficulty with food. Two varieties, which Stephens considered distinct, are recorded by Mr. Backhouse—*Lavignana*, which he took in a garden at Newcastle and also at Hoffall Wood; the other, *Nebulana*, was taken at Shotley, and bred from apricot and currants.

DITULA, Steph.

36. *Ditula angustiorana*, Haw.

<i>Ditula angustiorana</i> .	Staint. Man., vol. ii., p. 204.
" "	Wilk. Brit. Tort., p. 65.
<i>Capua</i> "	Meyr. Hdbk. Brit. Lep., p. 528.

This is generally an abundant species, but I only have one record from each county; Longhirst, Morpeth, by Mr. Finlay; and Harewood Grove, Darlington, by Mr. Sang. The larva feeds on any tree, but is especially attached to fruit trees. The moth is certain to occur almost everywhere.

PTYCHOLOMA, Leach.

37. *Ptycholoma lecheana*, Linn.

<i>Ptycholoma lecheana</i> .	Staint. Man., vol. ii., p. 205.
" "	Wilk. Brit. Tort., p. 67.
<i>Cacoecia</i> "	Meyr. Hdbk. Brit. Lep., p. 532.

A common species generally, appearing in all woods and denes at the end of June or in July. It is recorded already in the Transactions for 1875, and is in all the lists I have received. It is therefore unnecessary to give localities.

NOTOCELIA, Hub.

38. *Notocelia udmanniana*, Linn.

Notocelia udmanniana. Staint. Man., vol. ii., p. 205.

" " Wilk. Brit. Tort., p. 69.

" " Meyr. Hdbk. Brit. Lep., p. 488.

This is generally common among bramble, and I ought to have more records than have reached me. The only Northumbrian capture appears to be that of Mr. Maling's recorded in the Transactions for 1875 (p. 281). Mr. Backhouse took it at Hoffall Wood near Durham, and we get it about Hartlepool.

PARDIA, Gner.

39. *Pardia tripunctana*, Fab.

Pardia tripunctana. Staint. Man., vol. ii., p. 205.

" " Wilk. Brit. Tort., p. 70.

Epiblema " Meyr. Hdbk. Brit. Lep., p. 492.

A generally abundant species, swarming in gardens, and by hedge sides. It is in all the lists, and occurs wherever there is rose.

SPILONOTA, Steph.

40. *Spilonota roborana*, Tr.

Spilonota roborana. Staint. Man., vol. ii., p. 206.

" " Wilk. Brit. Tort., p. 71.

Notocelia " Meyr. Hdbk. Brit. Lep., p. 489.

An insect generally common on rose, and no doubt occurring throughout both counties, but I have found no notice of its appearance except that we take it around Hartlepool.

41. *S. rosæcolana*, Dbld.

Spilonota rosæcolana. Staint. Man., vol. ii., p. 206.

" " Wilk. Brit. Tort., p. 72.

Notocelia " Meyr. Hdbk. Brit. Lep., p. 488.

I have no Northumberland records for this species, which does not appear to be very common. Mr. Sang enters it once

only in his Diary, 12th July, 1871, when he met with it near Darlington. At Hartlepool Mr. Gardner has taken two only. I never met with it myself.

42. *S. trimaculana*, Haw.

Spilonota trimaculana. Staint. Man., vol. ii., p. 206.

" " Wilk. Brit. Tort., p. 73.

Notocelia " Meyr. Hdbk. Brit. Lep., p. 489.

Common in both counties. Mr. Finlay found it generally distributed and plentiful in the Morpeth district. Mr. Maling recorded it in the Transactions for 1875 (p. 281). In Durham it is found in all woods and denes. Mr. Backhouse got it long ago in Hoffall Wood. Mr. Gardner says it sits on elm trunks. It is common in Hezleden Dene.

43. *S. amœnana*, Hub.

Spilonota amœnana. Staint. Man., vol. ii., p. 206.

" " Wilk. Brit. Tort., p. 74.

Notocelia incarnitana. Meyr. Hdbk. Brit. Lep., p. 489.

A local species in England, and here apparently occurring only on the Durham coast among *Rosa spinosissima*. Mr. Sang took it at Castle Eden Dene and at Black Hall Rocks. It occurs also in the Cemetery close to the town, and on the railway embankment near, and probably on all the coast sandhills. I have no knowledge of it beyond Castle Eden Dene mouth, and it seems doubtful if it reach the Northumbrian coast.

LITHOGRAPHIA, Steph.

44. *Lithographia campoliliana*, Don.

Lithographia campoliliana. Staint. Man., vol. ii., p. 207.

" " Wilk. Brit. Tort., p. 76.

Epiblema subocellana. Meyr. Hdbk. Brit. Lep., p. 492.

An insect of general distribution. The larva feeds on willow, and the species occurs wherever there is willow. In these counties it appears everywhere, and it seems unnecessary to give localities.

45. *L. cinerana*, Haw.*Lithographia cinerana*. Staint. Man., vol. ii., p. 207

" " Wilk. Brit. Tort., p. 77.

Epiblema nisana. Meyr. Hdbk. Brit. Lep., p. 493.

Both Wilkinson and Stainton consider this distinct, Meyrick gives it as a mere synonym of the next species. Wilkinson says "it is very like the grey specimens of *L. nisella*, but always wants the coloured blotch on the dorsal margin; it is also larger in size." I give it separate because Stainton does. *Nisella* is a very variable insect with many named forms, and there is little doubt that *Cinerana* is one of them. It has been noticed at Coal Law Wood by Mr. Finlay, who found it not uncommon in July, and also in plantations at Darlington by Mr. Backhouse.

46. *L. nisella*, Cl.*Lithographia nisella*. Staint. Man., vol. ii., p. 207.

" " Wilk. Brit. Tort., p. 78.

Epiblema " Meyr. Hdbk. Brit. Lep., p. 493.

Commoner than the last, whether it be species or variety. Mr. Finlay found this plentiful in Coal Law Wood; Mr. Maling also recorded it in the Transactions for 1875 (p. 281). Mr. Sang took it in several places around Darlington. It is common in Hezleden Dene, and Mr. Gardner has reared it from larvæ in sallow catkins. It will be found in all suitable places.

47. *L. penkleriana*, F. R.*Lithographia penkleriana*. Staint. Man., vol. ii., p. 207.

" " Wilk. Brit. Tort., p. 78.

Epiblema " Meyr. Hdbk. Brit. Lep., p. 492.

To be found everywhere among alder and hazel.

PHLÆODES, Guen.

48. *Phlæodes tetraquetrana*, Haw.*Phlæodes tetraquetrana*. Staint. Man., vol. ii., p. 207.

" " Wilk. Brit. Tort., p. 80.

Epiblema " Meyr. Hdbk. Brit. Lep., p. 494.

A very abundant species among birch and alder, to be found wherever these may be, over the whole of both counties. In all the lists except Mr. Sang's, who doubtless thought it too common to enter.

49. *P. crenana*, Hub.

- Phlæodes crenana*. Staint. Man., vol. ii., p. 208.
 " " Wilk. Brit. Tort., p. 83.
Epiblema " Meyr. Hdbk. Brit. Lep., p. 493.

A scarce and local species. In the "Manual" it was only supposed to have been taken at Scarborough, but it has been found in several places since then, and Mr. Sang took it at Waskerley in April in various years from 1858 to 1873.

PÆDISCA, Tr.

50. *Pædisca piceana*, Haw.

- Pædisca piceana*. Staint. Man., vol. ii., p. 208.
 " " Wilk. Brit. Tort., p. 85.
Epiblema semifuscana. Meyr. Hdbk. Brit. Lep., p. 498.

An insect that frequents willows in marshy places. Mr. Finlay met with it in such places to the west of Netherwitton. Mr. Sang took it at Wolsingham in August, 1877, and found larvæ at High Force in June the following year. Mr. Gardner tells me it is abundant about willows near ponds at Thorp Bulmer near Hartlepool.

51. *P. stabilana*, Steph.

- Pædisca stabilana*. Staint. Man., vol. ii., p. 209.
 " " Wilk. Brit. Tort., p. 86.
Epiblema sordidana. Meyr. Hdbk. Brit. Lep., p. 498.

Rather a scarce species. Wilkinson gives no habitat for it; Stainton only Whitesea Mere. Meyrick on the other hand says "England to York," but knows nothing of the larva.

Sang took the insect first at Hell Kettles near Darlington, on 8th October, 1879. Next year he found the larvæ there on 17th June, and on 29th September he again took the perfect insect. I have no other record.

52. *P. solandriana*, Linn.

- | | |
|-----------------------------|---------------------------------|
| <i>Pædisca solandriana.</i> | Staint. Man., vol. ii., p. 209. |
| „ „ | Wilk. Brit. Tort., p. 86. |
| <i>Epiblema</i> „ | Meyr. Hdbk. Brit. Lep., p. 497. |

An abundant insect everywhere. The larva feeds on many trees, but appears to have a preference for birch, and wherever there is plenty, *Solandriana* is common. Mr. Finlay says abundant among birch in July and August. Mr. Maling also recorded it in the Transactions for 1875 (p. 281). Sang found it at High Force in July, 1873, and elsewhere. It is abundant in Hezleden and Castle Eden Denes, and at Edder Acres, near Thornley.

53. *P. opthalmicana*, Hub.

- | | |
|------------------------------|---------------------------------|
| <i>Pædisca opthalmicana.</i> | Staint. Man., vol. ii., p. 209. |
| „ „ | Wilk. Brit. Tort., p. 87. |
| <i>Epiblema</i> „ | Meyr. Hdbk. Brit. Lep., p. 497. |

Rather a local species, and commoner in the south than the north. Meyrick indeed limits its range to York, but that is far wrong, for Mr. Finlay found it among poplars on Needless Hall Moor. Mr. Sang found it in Castle Eden Dene in September, 1862. He afterwards showed me the place, a group of black poplars, not very far from the mouth of the dene. We took a good many of the moths flying round the trees in the afternoon sun. Meyrick gives aspen as the food (*Populus tremula*), but they certainly fed on *Populus nigra* in Castle Eden Dene. Mr. Gardner subsequently bred it from larvæ found on the same tree nearer Hartlepool.

CATOPTRIA, Guen.

54. *Catoptria fulvana*, Steph.

Catoptria fulvana. Staint. Man., vol. ii., p. 210.

" " Wilk. Brit. Tort., p. 89.

Epiblema " Meyr. Hdbk. Brit. Lep., p. 498.

An insect generally common, though not so plentiful as *Scopoliana* or *Hohenworthiana*. It is abundant in Hezleden Dene, and probably not entered by Mr. Sang because it was so common. Yet I have no record for Northumberland, where it is certain to occur.

55. *C. hohenworthiata*, W.V.

Catoptria hohenworthiata. Staint. Man., vol. ii., p. 210.

" " Wilk. Brit. Tort., p. 90.

Epiblema cana. Meyr. Hdbk. Brit. Lep., p. 499.

Generally common where it occurs. It is recorded by Mr. Maling (without locality) in the Transactions for 1875, p. 281. Mr. Finlay found it generally distributed and fairly plentiful in the Morpeth district. In Durham Mr. Sang got it at Castle Eden Dene, and we find it in Hezleden Dene, at Black Hall Rocks, Hartlepool, and elsewhere. The larva feeds on thistle seeds, and may be found pretty nearly everywhere. The nomenclature of this and *Scopoliana* is much mixed.

56. *C. scopoliana*, Haw.

Catoptria scopoliana. Staint. Man., vol. ii., p. 210.

" " Wilk. Brit. Tort., p. 88.

Epiblema " Meyr. Hdbk. Brit. Lep., p. 499.

A generally distributed insect, not very uncommon. It has been taken in both these counties, though I find but few records. Mr. Maling recorded it in the Transactions for 1875, p. 81. We get it commonly among thistles around Hartlepool.

57. *C expallidana*, Haw.*Catoptria expallidana*. Staint. Man., vol. ii., p. 210.

" " Wilk. Brit. Tort., p. 92.

Epiblema " Meyr. Hdbk. Brit. Lep., p. 498.

The larva of this insect feeds in the seed heads of sow thistle (*Sonchus arvensis*), and Stainton says it appears to frequent marshy places. The only records I have of its appearance are that Sang took it in 1860 at gas lamps at Darlington, and on the railway side there in 1873. It is a very local species.

HALONOTA, Steph.

58. *Halonota bimaculana*, Don.*Halonota bimaculana*. Staint. Man., vol. ii., p. 211.

" " Wilk. Brit. Tort., p. 93.

Epiblema similana. Meyr. Hdbk. Brit. Lep., p. 495.

Stainton says this is widely distributed but not common. That appears to be its character here. Mr. Finlay took it at Buckshaw, but it was never plentiful. Mr. Maling recorded it in the Transactions for 1875 (p. 281). Mr. Sang got it near Darlington in 1872, and at High Force, Upper Teesdale, in 1874. Mr. Gardner has taken it at Cole Hill, and we have met with it in Hezleden Dene among birches.

59. *H. trigeminana*, Steph.*Halonota trigeminana*. Staint. Man., vol. ii., p. 211.

" " Wilk. Brit. Tort., p. 94.

Epiblema " Meyr. Hdbk. Brit. Lep., p. 495.

Of this species also Stainton says it is widely distributed but not common. Here it has been recorded in the Twizell list—one of the few Tortrices therein. That is North-East Northumberland. Mr. Sang took it in 1854 at Seaton Carew. That is South-East Durham. Except these two records at the extremes of our area, I have no knowledge of its appearance.

60. *H. cirsiana*, Zell.*Halonota cirsiana*. Staint. Man., vol. ii., p. 211.

" " Wilk. Brit. Tort., p. 95.

Epiblema pflugiana. Meyr. Hdbk. Brit. Lep., p. 495.

Widely distributed, and probably occurring all over the district. Mr. Finlay found it on Needless Hall Moor, but never plentiful. Mr. Maling recorded it in the Transactions for 1875 (p. 281). We find it commonly about thistles and *Centaurea* round Hartlepool. The insect flies in June and July, and will be found when looked for about the food plant. The larva feeds in the stems, and is not very easy to rear.

61. *H. scutulana*, W.V.*Halonota scutulana*. Staint. Man., vol. ii., p. 212.

" " Wilk. Brit. Tort., p. 96.

Epiblema pflugiana. Meyr. Hdbk. Brit. Lep., p. 495.

Perhaps only a large form of the preceding species. Neither Stainton nor Wilkinson differentiate them other than by size. Their habits and food are the same, and Wilkinson says the larvæ can only be distinguished by size, and the imagines appear at the same time. Yet Mr. Gardner holds they are very distinct, and says *Scutulana* is an inhabitant of woods only, and *Cirsiana* of fields and lanes. Merrin, it may be noticed, says *Cirsiana* occurs in lanes. Finlay records *Pflugiana* as generally distributed and not uncommon, and *Cirsiana* he found in one place only, and not plentiful. Both occur here at Hartlepool, but others must decide whether there is one species or two.

62. *H. grandævana*, Zell.*Epiblema grandævana*. Meyr. Hdbk. Brit. Lep., p. 496.

This appears to be confined to the county of Durham. It was introduced as a British species by the late Christopher Eales from examples taken at South Shields. Mr. Gardner found a specimen in a box of unnamed small things taken at Hartlepool, and we made a special search for the insect and

discovered it in some numbers on loose ground among coltsfoot near the Cemetery. The habit appeared to be to emerge about dusk, fly a few minutes, and then settle on the upper side of the coltsfoot leaves. That particular ground is now washed away, but the insect still occurs in smaller numbers. Meyrick says the larva feeds "in roots of *Tusselago* and *Petasites*." This is scarcely correct. The larva forms a silken tube by the side of the root, and feeds *on* the root, not in it.

63. *H. brunnichiana*, W. V.

- | | |
|-------------------------------|---------------------------------|
| <i>Halonota brunnichiana.</i> | Staint. Man., vol. ii., p. 212. |
| „ „ | Wilk. Brit. Tort., p. 98. |
| <i>Epiblema</i> „ | Meyr. Hdbk. Brit. Lep., p. 496. |

Generally distributed throughout the district, and plentiful wherever there is a regular growth of coltsfoot on rather loose ground. It is not necessary to give localities. Some years ago I found it very abundant in a disused quarry in Hezleden Dene, and quite a large number were without the white spot on the forewing, that is characteristic of the species; there were also many intermediate forms, with the spot smaller, or darker in hue. Those entirely without the spot were exceedingly curious, and very difficult to name without the intermediate forms. The coltsfoot is now destroyed there, and both species and variety have disappeared.

64. *H. tetragonana*, Steph.

- | | |
|------------------------------|---------------------------------|
| <i>Halonota tetragonana.</i> | Staint. Man., vol. ii., p. 212. |
| „ „ | Wilk. Brit. Tort., p. 99. |
| <i>Notocelia</i> „ | Meyr. Hdbk. Brit. Lep., p. 489. |

Rather a local species, and apparently not reaching Scotland. I have no record of it for Northumberland nor North Durham, and the paucity of records makes it undesirable to draw positive conclusions. It occurs at Wolsingham, Upper Weardale, and at Coniscliffe Moor, Teesdale; and Mr. Sang, who met with it at these places, found it regularly around Darlington, and bred

it there. It is not uncommon in Hezleden Dene, and Mr. Gardner bred one from *Lotus corniculatus*, on which it had probably fallen from rose, on which the larva undoubtedly feeds. Wilkinson says "larvæ under moss on beech trees," which is certainly wrong.

65. *H. turbidana*, Tr.

Halonota turbidana. Staint. Man., vol. ii., p. 212.

" " Wilk. Brit. Tort., p. 99.

Epiblema " Meyr. Hdbk. Brit. Lep., p. 496.

A very local species, feeding certainly on *Petasites*. Mr. Sang met with the insect at Coniscliffe Moor, on the Teeside, and at Blackwell in 1878 and 1880. Mr. Gardner searched for this species for three years at Greatham without success, but he found it at last, and took two specimens on 6th July, 1904, among *Petasites*. One of them was in beautiful condition.

66. *H. inopiana*, Haw.

Halonota inopiana. Staint. Man., vol. ii., p. 213.

" " Wilk. Brit. Tort., p. 100.

Hysterosia " Meyr. Hdbk. Brit. Lep., p. 559.

A southern and western species, whose range extends to York, according to Meyrick. Mr. Sang took it at Seaton Carew on 23rd July, 1854. I have no other record. It should be looked for among *Inula dysenterica*, on which the larva feeds. Meyrick says it feeds on the roots of *Artemisia campestris*, but this is a sad mistake, for which, Mr. Barrett tells me, Baron von Nolcken was responsible.

67. *H. foenella*, Linn.

Halonota foenella. Staint. Man., vol. ii., p. 213.

" " Wilk. Brit. Tort., p. 101.

" " Meyr. Hdbk. Brit. Lep., p. 496.

A southern species, limited in range by Meyrick to Kent, to Hants, and Norfolk. Both Mr. Gardner and I have taken it in Hezleden Dene. I only took it once; I believe Mr. Gardner has met with more than one.

DICHORORAMPHA, Guen.

68. *Dichrorampha petiverella*, Linn.

- Dichrorampha petiverella*. Staint. Man., vol. ii., p. 213.
 " " Wilk. Brit. Tort., p. 103.
Hemimene " Meyr. Hdbk. Brit. Lep., p. 501.

Generally a common species, but not recorded for Northumberland, and Durham may be its northern limit on the east coast. Meyrick says it reaches the Caledonian Canal on the west. Mr. Backhouse took it on ling at Shull. It is very common about Hartlepool and Darlington, but I have no other records. The larva feeds on roots of yarrow and *Tanacetum*.

69. *D. politana*, W.V.

- Dichrorampha politana*. Staint. Man., vol. ii., p. 214.
 " " Wilk. Brit. Tort., p. 104.
Hemimene alpinana. Meyr. Hdbk. Brit. Lep., p. 501.

Rather a common species generally, and reaching the Caledonian Canal on the west. Here it has only been taken in Teesdale by Mr. Sang on 16th May, 1880, and by Mr. Gardner more recently, who found it common on the Teesdale moors. Like the last this may be its northern limit on the east side of the island. Meyrick limits its range to York.

70. *D. alpinana*, Tr.

- Dichrorampha alpinana*. Staint. Man., vol. ii., p. 214.
 " " Wilk. Brit. Tort., p. 105.
Hemimene quastionana. Meyr. Hdbk. Brit. Lep., p. 501.

A local species, occurring amongst tansy. Meyrick limits its range to York, but Mr. Sang took it on the Teeside at Coniscliffe. I have no other record, but it may occur elsewhere.

71. *D. herbosana*, Barrett.

This species was first described by Mr. Barrett, in the Entomologist's Monthly Magazine, vol. ix., p. 27, from specimens taken by "the Rev. H. Burney, and by Mr. J. Sang, who

takes them on grassy slopes near Darlington." Mr. Sang found it first at Coniscliffe, flying in the afternoon sun. He subsequently found it on the railway side at Darlington. Mr. Gardner has taken it in his garden at Middle Thorp, and has met with it also in Upper Teesdale. I have seen it flying in the afternoon sun near Fill-poke, the adjoining farm to Middle Thorp. Mr. Meyrick gives *Herbosana* as a synonym of *Tanaceti*, a doubtful species at best, and certainly not *Herbosana*.

72. *D. plumbagana*, Tr.

- | | |
|----------------------------------|---------------------------------|
| <i>Dichrorampha plumbagana</i> . | Staint. Man., vol. ii., p. 215. |
| " " | Wilk. Brit. Tort., p. 107. |
| <i>Hemimene</i> " | Meyr. Hdbk. Brit. Lep., p. 503. |

Though Meyrick calls this a very common species, it is only common locally. Here I have no records except for Hartlepool, and only Mr. Gardner has met with it.

73. *D. acuminatana*, Zell.

- | | |
|---------------------------------|------------------------------------|
| <i>Dichrorampha acuminatana</i> | Staint. Man., vol. ii., p. 215. |
| " " | Wilk. Brit. Tort., p. 108. |
| <i>Hemimene</i> " | Meyr. Hdbk. Brit. Lep.,
p. 502. |

A widely distributed species, but local. The larva feeds in the roots of tansy and chrysanthemum, and the insect might occur anywhere. I do not see why the insect is not reported from Northumberland, but at present I have no records except that Mr. Sang took it on Coniscliffe Moor, and near Darlington, and Mr. Gardner has met with it near Hart Station.

74. *D. consortana*, Wilk.

- | | |
|----------------------------------|---------------------------------|
| <i>Dichrorampha consortana</i> . | Staint. Man., vol. ii., p. 215. |
| " " | Wilk. Brit. Tort., p. 109. |
| <i>Hemimene</i> " | Meyr. Hdbk. Brit. Lep., p. 502. |

Not a common insect, and so far I have no record but that of Mr. Sang, who took it in several places close to Darlington. The larva is said to feed in shoots of *Chrysanthemum leucanthemum*.

COCCYX, Treit.

75. *Coccyx distinctana*, Wilk.

Coccyx distinctana. Staint. Man., vol. ii., p. 216.

„ „ Wilk. Brit. Tort., p. 111.

Epiblema „ Meyr. Hdbk. Brit. Lep., p. 494.

First taken at Braithwaite, near Windermere, which at one time was the only known locality. It has since been taken in other places, and Mr. Finlay found it on Needless Hall Moor, but very scarce.

76. *C. hyrciniana*, Wilk.

Coccyx hyrciniana. Staint. Man., vol. ii., p. 216.

„ „ Wilk. Brit. Tort., p. 112.

„ *tedella*. Meyr. Hdbk. Brit. Lep., p. 494.

Tolerably common among fir trees, but only recorded once in each county. Mr. Maling recorded it in the Transactions for 1875, p. 281; and Mr. Sang took it on Coniscliffe Moor on June 18th, 1882. Since this was written Mr. Gardner reports that it is very common in Teesdale among spruce firs.

CAPUA, Steph.

77. *Capua ochraceana*, Steph.

Capua ochraceana. Staint. Man., vol. ii., p. 216.

„ „ Wilk. Brit. Tort., p. 113.

„ *favillaceana*. Meyr. Hdbk. Brit. Lep., p. 528.

A generally distributed but local species. Mr. Finlay found it abundant in all parts of his district; Mr. Maling also recorded it in the Transactions for 1875, p. 281. In Durham I have fewer records. Possibly Sang thought it too common to enter in his diary. Mr. Gardner took it at Eggleston, in Upper Teesdale, the only Durham capture I know of.

CARTELLA, Guen.

78. *Cartella bilunana*, Haw.

Cartella bilunana. Staint. Man., vol. ii., p. 216.

„ „ Wilk. Brit. Tort., p. 114.

Epiblema „ Meyr. Hdbk. Brit. Lep., p. 497.

The larva of this insect feeds in birch catkins, and the species should be looked for where there is an abundance of that tree. It is recorded from the Old Park, Netherwitton, by Mr. Finlay, who found it scarce. It is not common either in Hezleden Dene, where Mr. Gardner met with it.

HEDYA, Hub.

79. *Hedya paykulliana*, Fab.

Hedya paykulliana. Staint. Man., vol. ii., p. 219.

„ „ Wilk. Brit. Tort., p. 117.

Cydia ramella. Meyr. Hdbk. Brit. Lep., p. 484.

Mr. Finlay never met with this species, though it is not by any means rare. Mr. Maling, however, recorded it in the Transactions for 1875, p. 281, the only Northumbrian record I have seen. Mr. Sang found it at Wolsingham, &c., in August, and Mr. Gardner took it in Hezleden Dene, where it is rather common.

80. *H. ocellana*, W.V.

Hedya ocellana. Staint. Man., vol. ii., p. 219.

„ „ Wilk. Brit. Tort., p. 118.

Turetocera „ Meyr. Hdbk. Brit. Lep., p. 476.

Commoner in the south of England than in the north, and here only taken at the southern extremity of Durham by Mr. Sang, who took it in July, 1870, at Darlington. Mr. Backhouse also took an insect which he called *Comitana* at Darlington in July, which is doubtless this species.

81. *H. lariciana*, Z.*Hedya lariciana*.

This species is not recognised by any of the authorities to whom I refer. Meyrick names it as a variety of *Ocellana*, but it is given as distinct in the "Entomologist" Catalogue. There should be no doubt on the subject, for it has narrower forewings than *Ocellana*, and is smaller in size and darker. Mr. J. B. Hodgkinson met with it in the west of Northumberland, and Mr. Sang in the west of Durham on Cotherstone Moor.

82. *H. dealbana*, Frol.

Hedya dealbana. Staint. Man., vol. ii., p. 219.

" " Wilk. Brit. Tort., p. 120.

Gypsonoma " Meyr. Hdbk. Brit. Lep., p. 481.

This is another species that Mr. Finlay has not seen, but Mr. Maling has recorded it in the Transactions for 1875, p. 281; Mr. Sang took it in Dinsdale Wood, and in Neasham Lane, near Darlington. Mr. Gardner has also taken it in Hezleden Dene, where it is far from common.

83. *H. neglectana*, Dup.

Hedya neglectana. Staint. Man., vol. ii., p. 220.

" " Wilk. Brit. Tort., p. 121.

Gypsonoma " Meyr. Hdbk. Brit. Lep., p. 482.

Certainly not a common species, yet one that ought to occur in most places in both counties. It has been taken at Meldon Park by Mr. Finlay, who found it scarce. Mr. Maling too records the species in the list he published in the Transactions for 1875, p. 281. I have no Durham records, but it is certain to be found there, and should be looked for among willow.

84. *H. aceriana*, Dup.

Hedya aceriana. Staint. Man., vol. ii., p. 220.

" " Wilk. Brit. Tort., p. 123.

Gypsonoma " Meyr. Hdbk. Brit. Lep., p. 482.

A very local species, and apparently not occurring in Yorkshire, for it is not in Mr. Porritt's catalogue for that county. Yet Mr. Sang took it at Darlington in 1860 at gas lamps. It would appear to frequent poplars.

85. *H. trimaculana*, Don.

Hedya trimaculana. Staint. Man., vol. ii., p. 221.

" " Wilk. Brit. Tort., p. 125.

Cydia " Meyr. Hdbk. Brit. Lep., p. 483.

Not included in the list of Mr. Finlay's captures, but recorded for Northumberland by Mr. Maling in the Transactions for 1875, p. 281. Mr. Pattison also found it at Newcastle. It is a species generally common among elm, but the only record I have for it in Durham is from Hezleden Dene, where it is very abundant. Mr. Gardner has bred it freely from there.

STEGANOPTYCHA, Steph.

86. *Steganoptycha nævana*, Hub.

Steganoptycha nævana. Staint. Man., vol. ii., p. 221.

" " Wilk. Brit. Tort., p. 128.

Eudemis " Meyr. Hdbk. Brit. Lep., p. 477.

Mr. Finlay found *Nævana* not uncommon to the west of Netherwitton in July. Mr. Sang got it at Cockerton, near Darlington, on July 26th, 1857, and at Castle Eden Dene on September 25th, 1862. The Castle Eden date appears a very late one. The larva feeds in the shoots of holly, and I found it exceedingly abundant in a nursery garden at West Hartlepool among young holly trees. It ought to be plentiful in the west where holly grows freely.

87. *S. geminana*, Steph.

Steganoptycha geminana. Staint. Man., vol. ii., p. 222.

" " Wilk. Brit. Tort., p. 129.

Meyrick considers this and the preceding insect to be but one species. That is a matter for others, it is enough for me that

Stainton considered them distinct. *Geminana* so far has been recorded only from Wolsingham, where Mr. Sang took it on 15th August, 1877. In regard to its distinctness Wilkinson says the hind wings are narrower than in *Nævana*, and also that the larva feeds on *Vaccinium myrtillus*.

ANCHYLOPERA, Steph.

88. *Anchylopera ramella*, Linn.

Anchylopera ramella. Staint. Man., vol. ii., p. 223.

„ „ Wilk. Brit. Tort., p. 132.

Ancylis lactana. Meyr. Hdbk. Brit. Lep., p. 481.

The only record I have for this rather common species is that Mr. Finlay was in the habit of taking it occasionally on Needless Hall Moor in July. It is said to feed on white poplar (*Populus alba*).

89. *A. mitterbacheriana*, W.V.

Anchylopera mitterbacheriana. Staint. Man., vol. ii., p. 223.

„ „ Wilk. Brit. Tort., p. 132.

Ancylis „ Meyr. Hdbk. Brit. Lep.,
p. 480.

Generally common among oaks, but I have very few records. For Northumberland Mr. Maling recorded it in 1875 in the Transactions for that year, p. 281. For Durham Mr. G. Wailes took it at Gibside. See Stephens' Illustrations, vol. iv., p. 117. It is quite certain to occur elsewhere.

90. *A. biarcuana*, Steph.

Anchylopera biarcuana. Staint. Man., vol. ii., p. 223.

„ „ Wilk. Brit. Tort., p. 136.

Ancylis „ Meyr. Hdbk. Brit. Lep., p. 480.

Widely distributed, but not a very common insect. Mr. Finlay took it in some numbers on Needless Hall Moor, the only Northumberland record I have. Mr. Sang took it

occasionally near Darlington, and Mr. Gardner got it at Winch Bridge, Upper Teesdale. The larva feeds on willow (*Salix caprea*), according to the books, but Mr. Barrett says dwarf willow, and sometimes *Salix fusca*. I see no reason why it should not be taken elsewhere in both counties.

91. *A. myrtillana*, Tr.

<i>Anchylopera myrtillana</i> .	Staint. Man., vol ii., p. 224.
" "	Wilk. Brit. Tort., p. 138.
<i>Ancylis</i> "	Meyr. Hdbk. Brit. Lep., p. 479.

I have no records of the capture of this species, but I am so certain of its occurrence that I include it here without a reference.

92. *A. lundana*, Fab.

<i>Anchylopera lundana</i> .	Staint. Man., vol. ii., p. 224.
" "	Wilk. Brit. Tort., p. 138.
<i>Ancylis</i> "	Meyr. Hdbk. Brit. Lep., p. 478.

This is a pretty but tolerably common species. It is one of the few Tortrices in the Twizell list. Mr. Finlay found it not uncommon on Needless Hall Moor. Mr. Maling has also recorded it without locality in the Transactions for 1875, p. 281. Mr. Backhouse took it at South Shields and at Sunderland. I have taken it at Barnard Castle, and it is always to be found around Hartlepool. The larva feeds on *Vicia*, *Lathyrus*, &c., between united leaves. I have also reared it from *Trifolium pratense* when breeding *Lithocolitis insignitella*.

93. *A. paludana*, Barr.

<i>Anchylopera paludana</i> .	Meyr. Hdbk. Brit. Lep., p. 478.
-------------------------------	---------------------------------

This was separated from *Lundana* by Mr. Barrett. It is an insect frequenting swamps and fens, and was taken by Mr. Sang at Hell Kettles, Darlington, on 22nd and 29th May, 1870. Meyrick, unaware of these captures, limits it to the fens of Norfolk and Cambridge.

94. *A. comptana*, Frol.

- Anchylopera comptana*. Staint. Man., vol. ii., p. 225.
 „ „ Wilk. Brit. Tort., p. 141.
Ancylis „ Meyr. Hdbk. Brit. Lep., p. 479.

A species that appears chiefly on open chalk downs and hills. Meyrick says it extends to Cheshire, but Mr. Barrett assures me he knows of no record north of Cambridgeshire. Mr. Sang records that he took the insect in a lane near Darlington in 1859! It may be so, but it could only be a stray specimen. I give it here with grave doubts as to its correctness.

95. *A. unguicella*, Linn.

- Anchylopera unguicella*. Staint. Man., vol. ii., p. 225.
 „ „ Wilk. Brit. Tort., p. 143.
Ancylis „ Meyr. Hdbk. Brit. Lep., p. 479.

Not uncommon among *Erica*. Mr. Finlay found it freely in June on Needless Hall Moor. Mr. Sang found it at Wolsingham on 3rd June, 1874, and again on 22nd June, 1878. He also got it at Eggleston on 11th June, 1881, and found larvæ on the 1st June, 1884. Mr. Gardner has also taken it on the Teesdale moors.

BACTRA, Steph.

96. *Bactra lanceolana*, Hub.

- Bactra lanceolana*. Staint. Man., vol. ii., p. 226.
 „ „ Wilk. Brit. Tort., p. 145.
 „ „ Meyr. Hdbk. Brit. Lep., p. 456.

An abundant species, well distributed over both counties, and plentiful everywhere. Mr. Finlay found it "Generally distributed and very plentiful." Mr. Maling recorded it in the Transactions for 1875, p. 281. It is abundant among rushes in Hezleden Dene and elsewhere. Mr. Scott found it near Stockton-on-Tees (see E. W. I., vol. i., p. 164).

ARGYROTOZA, Steph.

97. *Argyrotoza conwayana*, Fab.

Argyrotoza conwayana. Staint. Man., vol. ii., p. 227.

" " Wilk. Brit. Tort., p. 148.

Tortrix " Meyr. Hdbk. Brit. Lep., p. 536.

The larva feeds on privet and on ash, and appears to occur almost everywhere, though not always common. Mr. Finlay, for instance, found it rather a scarce insect about privet hedges in Meldon Park; Mr. Maling also recorded it in the Transactions for 1875, p. 281. In Durham it occurs in most places, and is very common in Hezleden Dene where privet is abundant and elsewhere around Hartlepool.

DICTYOPTERYX, Steph.

98. *Dictyopteryx contaminana*, Hub.

Dictyopteryx contaminana. Staint. Man., vol. ii., p. 227.

" " Wilk. Brit. Tort., p. 150.

Acalla " Meyr. Hdbk. Brit. Lep., p. 525.

Common by every hawthorn hedge or bush in both counties. It is recorded by all whose lists cover the Tortricina, the earliest notice being that in Stephens' Illustrations, vol. iv., p. 169, for specimens taken by Mr. Wailes at Gibside. Practically it occurs everywhere, only the higher moors being without it.

99. *D. lœflingiana*, Linn.

Dictyopteryx lœflingiana. Staint. Man., vol. ii., p. 227.

" " Wilk. Brit. Tort., p. 152.

Tortrix " Meyr. Hdbk. Brit. Lep., p. 537.

A generally distributed species, occurring in most or all woods and plantations. Yet Mr. Finlay never took it, but it is recorded for Northumberland by Mr. Maling in the Transactions for 1875, p. 281. Mr. Sang took it in Haughton Lane, Darlington, in 1857, and Mr. Gardner has met with it in Hezleden Dene, but never very commonly.

CRÆSIA, Hub.

100. *Cræsia bergmanniana*, Linn.

Cræsia bergmanniana. Staint. Man., vol. ii., p. 228.

" " Wilk. Brit. Tort., p. 153.

Tortrix " Meyr. Hdbk. Brit. Lep., p. 536.

Very common everywhere among rose. Swarming on the sandhills amongst *Rosa spinosissima*, equally abundant amongst dog rose in the hedges, and plentiful in gardens amongst the standard and climbing roses therein. It begins to fly about five o'clock in the afternoon in the early part of June, and flits about leisurely for an hour or so. It is on all the lists sent me.

101. *C. forskaleana*, Linn.

Cræsia forskaleana. Staint. Man., vol. ii., p. 228.

" " Wilk. Brit. Tort., p. 154.

Tortrix " Meyr. Hdbk. Brit. Lep., p. 536.

Generally common, and probably occurring wherever the food plant, maple, grows. Mr. Finlay found it in Meldon Park; Mr. Maling also recorded it for Northumberland in the Transactions for 1875, p. 281. I have no Durham records, except that both Mr. Gardner and myself have met with it about Hartlepool.

102. *C. holmiana*, Linn.

Cræsia holmiana. Staint. Man.; vol. ii., p. 228.

" " Wilk. Brit. Tort., p. 155.

Acalla " Meyr. Hdbk. Brit. Lep., p. 526.

A common species, and generally well distributed. In Northumberland, however, I have but one record, that of the Twizell list. In Durham, in the south of the county, it appears common. Mr. Backhouse took it at Darlington. Mr. Sang found it on the Teeside in Cockerton Lane and also at Seaton Carew. It also occurs near Hartlepool on the railway side and elsewhere.

HEMEROSIA, Steph.

103. *Hemerusia rheediella*, Cl.

Hemerusia rheediella. Staint. Man., vol. ii., p. 229.

„ „ Wilk. Brit. Tort., p. 157.

Pammene „ Meyr. Hdbk. Brit. Lep., p. 506.

Not a scarce insect, the larva feeding on hawthorn and apple. Mr. Hodgkinson got it in the west of Northumberland, and Mr. Finlay found it fairly common in Meldon Park. Mr. Backhouse took it at Sunderland; Mr. Sang at Darlington; and Mr. Gardner at Hartlepool. It probably occurs all over both counties.

CHEIMATOPHILA, Steph.

104. *Cheimatophila mixtana*, Hub.

Cheimatophila mixtana. Staint. Man., vol. ii., p. 230.

„ „ Wilk. Brit. Tort., p. 159.

Acalla „ Meyr. Hdbk. Brit. Lep., p. 523.

Widely distributed in heathy places, and rather common there. Mr. Finlay found it common on the moors; Mr. Sang took it both at Waskerley and Wolsingham; and Mr. Gardner also met with it on the Teesdale moors.

OXYGRAPHA, Hub.

105. *Oxygrapha literana*, Linn.

Oxygrapha literana. Staint. Man., vol. ii., p. 230.

„ „ Wilk. Brit. Tort., p. 160.

Acalla „ Meyr. Hdbk. Brit. Lep., p. 522.

This is not a common insect, being both local and scarce. Mr. Finlay found it rare in Meldon Park. Mr. Henderson found it in Jesmond Dene. In Durham Mr. Sang took it at Eggleston and near Darlington. I got a single specimen on the cemetery palings at Hartlepool, and Mr. Gardner got another at the sea end of Hezleden Dene.

PERONEA, Curt.

106. *Peronea schalleriana*, Linn.

- Peronea schalleriana*. Staint. Man., vol. ii., p. 231.
 " " Wilk. Brit. Tort., p. 165.
Acalla " Meyr. Hdbk. Brit. Lep., p. 524.

A common insect, and very generally distributed. Mr. Finlay reports it so in his district; Mr. Maling recorded it in the Transactions for 1875, p. 281. In Durham Mr. Wailes recorded it in Stephens' Illustrations, vol. iv., p. 159, as taken at Gibside; Mr. Backhouse took it at a plantation hedge near Darlington; Mr. Sang took it at Hell Kettles in 1874, and at Aycliffe Station, and in the quarry there in 1879. The larva feeds on sallow and willow, and the insect will be found wherever these are at all plentiful.

107. *P. comparana*, Hub.

- Peronea comparana*. Staint. Man., vol. ii., p. 232.
 " " Wilk. Brit. Tort., p. 166.
Acalla schalleriana. Meyr. Hdbk. Brit. Lep., p. 524.

A generally distributed species, and common among willows, on which the larva feeds. Mr. Finlay found it all around Morpeth, and always plentiful. Mr. Sang took it at Aycliffe Station, and in the quarry also. It is common in Hezleden Dene and elsewhere around Hartlepool. Meyrick puts this and the preceding species together. Stainton and Wilkinson give them as distinct.

108. *P. commariana*, Z.

- Acalla commariana*. Meyr. Hdbk. Brit. Lep., p. 524.

Mr. Gardner took a single specimen of this insect on the Teesdale moors. It occurs in Yorkshire and Lancashire, and the Teesdale moors are a probable place for its occurrence. No one else has met with it yet. It would appear to have been introduced to the British list after the issue of Wilkinson's and Stainton's works.

109. *P. perplexana*.

Acalla perplexana. Meyr. Hdbk. Brit. Lep., p. 524.

Of this comparatively new species Mr. Gardner took two specimens at Greatham. No localities on the east coast are quoted by Meyrick north of Norfolk, but he says it extends to the Clyde on the west.

110. *P. tristana*, Hub.

Peronea tristana. Staint. Man., vol. ii., p. 232.

„ „ Wilk. Brit. Lep., p. 167.

Acalla logiana. Meyr. Hdbk. Brit. Lep., p. 523.

The larva of this feeds on *Viburnum lantana* and *opulus*, not very common plants in these counties. Mr. Wailes records the insect for Newcastle and Gibside in Stephens' Illustrations, vol. iv., p. 157. Mr. Backhouse also took it by a plantation hedge near Darlington. Stephens' *Plumbosana*, a variety of this species, was taken at Newcastle by Mr. Backhouse from the garden hedge. These are all old records; I have seen none more recent.

111. *P. rufana*, W. V.

Peronea rufana. Staint. Man., vol. ii., p. 232.

„ „ Wilk. Brit. Tort., p. 168.

Acalla „ Meyr. Hdbk. Brit. Lep., p. 522.

A widely distributed insect, but never very common. The larva is supposed to feed on willow and poplar, but I think it is a much more general feeder, and will eat rose among other things. It is scarce at Coal Law Wood, Mr. Finlay writes; he found larvæ there in united leaves of sallow. Mr. Wailes recorded it in Stephens' Illustrations, vol. iv., p. 155, where it is called *Peronea autumnana*, as taken at Gibside. Mr. Sang found it at Hell Kettles in 1874, and at Castle Eden in 1878. We find it on the Hartlepool sandhills, and Mr. Gardner has reared it from *Rosa spinosissima*; it also occurs about the dog-rose (*Rosa canina*). Mr. Barrett tells me it feeds also on meadow-sweet, gale, sallow, &c.

112. *P. favillaceana*, Hub.

- Peronea favillaceana*. Staint. Man., vol. ii., p. 232.
 " " Wilk. Brit. Tort., p. 170.
Acalla sponsana. Meyr. Hdbk. Brit. Lep., p. 522.

A common and generally distributed species. According to books, the larva feeds on beech, but Mr. Finlay, who was a most careful and painstaking man, found *Sponsana* "not uncommon among maple." Mr. Maling records it, without locality or other note, in the Transactions for 1875, p. 281. It is common in Hezleden Dene, but I have no note of the food. Mr. Barrett tells me the larva is common on hornbeam, but that is very rare in these counties.

113. *P. maccana*, Tr.

- Peronea maccana*. Staint. Man., vol. ii., p. 233.
 " " Wilk. Brit. Tort., p. 171.
Acalla " Meyr. Hdbk. Brit. Lep., p. 523.

This is said to occur in Epping Forest, but it appears to be rather a north-western species. Meyrick, right for once, says Lancashire to Ross. The only record I have of its occurrence here is that Mr. Maling has it in his list in the Transactions for 1875, p. 281. These were taken near Hexham in September, and confirm Meyrick's idea of its habitat; Hexham being in the west of Northumberland.

114. *P. hastiana*, Linn.

- Peronea hastiana*. Staint. Man., vol. ii., p. 233.
 " " Wilk. Brit. Tort., p. 171.
Acalla " Meyr. Hdbk. Brit. Lep., p. 521.

A common and generally distributed species, but I have few records. Mr. Finlay found it not uncommon at the Old Park, Netherwitton, where he bred the insect from larvæ in the united leaves of willow. Mr. Gardner has also bred it from dwarf willow at Black Hall Rocks and at Cole Hill Wood, both near Hartlepool. It probably occurs in most other places.

115. *P. umbrana*, Hub.*Peronea umbrana*. Staint. Man., vol. ii., p. 233.

,, ,, Wilk. Brit. Tort., p. 173.

Acalla ,, Meyr. Hdbk. Brit. Lep., p. 521.

A very local species, and only recorded in Durham by Mr. Maling, who recorded it in 1875 from Thornley Dene, in the valley of the Derwent (see Ent. ix., p. 19). Meyrick says "Lancashire to Northumberland." I have considerable doubt in including this species. I imagine Meyrick got "Northumberland" from the record in the Entomologist, which is dated from Newcastle-on-Tyne, and does not say that Thornley is in Durham. I know Mr. Maling took considerable pains with his records, but I very much fear there is an error here. Time will show.

116. *P. variegana*, W.V.*Peronea variegana*. Staint. Man., vol. ii., p. 234.

,, ,, Wilk. Brit. Tort., p. 175.

Acalla ,, Meyr. Hdbk. Brit. Lep., p. 523.

The larva of this insect feeds on whitethorn, blackthorn, and bramble, and the insect is abundant by every hedge side in September. It is, as its name implies, a very variable species. It is in every list, and I need not give localities.

PARAMESIA, Steph.

117. *Paramesia aspersana*, Hub.*Paramesia aspersana*. Staint. Man., vol. ii., p. 235.

,, ,, Wilk. Brit. Tort., p. 177.

Acalla ,, Meyr. Hdbk. Brit. Lep., p. 526.

Generally considered a local species, though abundant where it occurs. In these counties it appears to be generally distributed and common. Mr. Finlay found it plentiful in Meldon Park and elsewhere in his district. Mr. Maling recorded it in the Transactions for 1875, p. 281. Nearly seventy years ago Mr. Wailes took it at Gibside (see Stephens' Illustrations,

vol. iv., p. 160). Mr. Sang took it at Castle Eden Dene in 1858, and subsequently at Wolsingham, at High Force, and at Hell Kettles. Mr. Backhouse took it by a plantation hedge at Darlington, and also at Shull. It is very common in Hezleden Dene, and Mr. Gardner has found the larva there on meadow-sweet.

118. *P. ferrugana*, W. V.

<i>Paramesia ferrugana.</i>	Staint. Man., vol. ii., p. 235.
„ „	Wilk. Brit. Tort., p. 178.
<i>Acalla</i> „	Meyr. Hdbk. Brit. Lep., p. 525.

A common species, and very generally distributed. Mr. Finlay found it very plentiful in the Old Park, Netherwilton; Mr. Maling recorded it in the Transactions for 1875, p. 281; and Mr. Henderson took it in Jesmond Dene. In Durham Mr. Sang took it in Castle Eden Dene; I have taken it in Hezleden Dene; and Mr. Sang says it is very common in wooded ravines in Upper Teesdale. I expect it will be found wherever there is plenty of birch, on which the larva feeds.

119. *P. caledoniana*, Steph.

<i>Paramesia caledoniana.</i>	Staint. Man., vol. ii., p. 235.
„ „	Wilk. Brit. Tort., p. 179.
<i>Acalla</i> „	Meyr. Hdbk. Brit. Lep., p. 526.

Common on heaths and moors in both counties. Mr. Finlay found it abundant on all moors in his district. Mr. Sang found it year after year at High Force, and Mr. Gardner also reports it as common on the Teesdale moors.

TERAS, Tr.

120. *Teras caudana*, Fab.

<i>Teras caudana.</i>	Staint. Man., vol. ii., p. 236.
„ „	Wilk. Brit. Tort., p. 180.
<i>Rhacodia</i> „	Meyr. Hdbk. Brit. Lep., p. 519.

A common species, and very generally distributed among sallow. Mr. Finlay found it in all parts of his district, and not

uncommon. Mr. Maling recorded it in the Transactions for 1875, p. 281; Mr. Henderson got it in Jesmond Dene. In Durham I have no records, probably because it is so plentiful. Mr. Gardner says it is to be found wherever there is sallow. I have taken it freely both in Castle Eden and Hezleden Denes.

STIGMONOTIDÆ.

PÆCILOCHROMA, Steph.

121. *Pæcilochroma corticana*.

Pæcilochroma corticana. Staint. Man., vol. ii., p. 238.

„ „ Wilk. Brit. Tort., p. 185.

Enarmonia „ Meyr. Hdbk. Brit. Lep., p. 475.

The larva feeds on oak and whitethorn, and the insect occurs throughout both counties, though I have not many records. It is given in the list Mr. Maling published in the Transactions for 1875, p. 281, the only Northumberland notice I have met with. Mr. Wailes took it at Gibside, and recorded it (as *Communana*) in Stephens' Illustrations, vol. iv., p. 140. Mr. Backhouse records it from Hoffall Wood (as *Communana*, the name used in Stephens), where he says the larva feeds on oak galls. Mr. Sang got it around Darlington, and Mr. Gardner has taken it at Edder Acres near Hartlepool.

122. *P. Bouchardana*, Doub.

Pæcilochroma Bouchardana. Staint. Man., vol. ii., p. 238.

„ „ Wilk. Brit. Tort., p. 186.

Enarmonia rubiginosana. Meyr. Hdbk. Brit. Lep.,
p. 473.

The only record I have of this species is that Mr. Finlay took it on Needless Hall Moor, where it was always scarce. There is no record of it for Durham. It should be looked for among fir trees.

123. *P. tenerana*, Dup.

- Pacilochroma tenerana*. Staint. Man., vol. ii., p. 238.
 " " Wilk. Brit. Tort., p. 185.
Enarmonia ratzburghiana. Meyr. Hdbk. Brit. Lep., p. 475.

Widely distributed, and occurring among fir trees, on which the larva feeds. Mr. Hodgkinson reported it from the west of Northumberland; and Mr. Finlay met with it on Needless Hall Moor, not very uncommonly. Mr. Sang got it at High Force, on Coniscliffe Moor, and near Darlington, at various dates in August, down to 1885. A single specimen was taken by Mr. Gardner in Hezleden Dene in 1899.

124. *P. oppressana*, Tr.

- Pacilochroma oppressana*. Staint. Man., vol. ii., p. 239.
 " " Wilk. Brit. Tort., p. 189.
Enarmonia " Meyr. Hdbk. Brit. Lep., p. 475.

A very local insect. Fifty years ago only two specimens were known. Meyrick now gives its distribution as "Kent to Hereford and Norfolk, Westmoreland." To this I add Northumberland. Mr. Finlay took it regularly, and not rarely on Needless Hall Moor.

ANISOTÆNIA, Steph.

125. *Anisotænia ulmana*, Hub.

- Anisotænia ulmana*. Staint. Man., vol. ii., p. 239.
 " " Wilk. Brit. Tort., p. 190.
 " " Meyr. Hdbk. Brit. Lep., p. 556.

Not a common species here at all. So far as I know it has only been taken by Mr. Gardner in Hezleden Dene. It ought to be much more generally distributed. The larva is said to feed on folded leaves of *Ranunculus ficaria*, which abounds everywhere. I understand however that but a single collector has found the larva there. Mr. Gardner believes that the larva feeds on elm (*Ulmus*), and that any found on pilewort had fallen from the tree on which they fed.

SEMASIA, Steph.

126. *Semasia populana*, Fab.

Semasia populana. Staint. Man., vol. ii., p. 240.

„ „ Wilk. Brit. Tort., p. 193.

Pammene „ Meyr. Hdbk. Brit. Lep., p. 508.

Not a common species, and, so far, only taken by Mr. Finlay at Meldon Park, where it was scarce; and at Hartlepool, where I found larvæ, and bred the insect in 1884. The larva feeds on willow. Meyrick limits its northward range to York.

127. *S. Wœberana*, W.V.

Semasia wœberana. Staint. Man., vol. ii., p. 241.

„ „ Wilk. Brit. Tort., p. 195.

Enarmonia wœberiana. Meyr. Hdbk. Brit. Lep., p. 476.

The larva of this species feeds under the bark of various fruit trees, and the insect consequently occurs in gardens and orchards. Here it has only been noticed by Mr. Maling, who recorded it in the Transactions for 1875, p. 281, and by Mr. Backhouse, who got it in gardens at Darlington.

128. *S. rufillana*, Zell.

Semasia rufillana. Staint. Man., vol. ii., p. 241.

„ „ Wilk. Brit. Tort., p. 197.

Laspeyresia „ Meyr. Hdbk. Brit. Lep., p. 510.

This insect is not recorded for Northumberland. Meyrick gives York as its northern range, but it occurs generally in South Durham. Mr. Sang took it in several places around Darlington, and he also obtained it at Seaton Carew; Mr. Gardner has met with it at Greatham, and it is not very uncommon at Hartlepool. The larva feeds on the seeds of the wild carrot (*Daucus carota*), and it would be interesting if our Newcastle collectors would gather a bag full of these in autumn. We would then ascertain if South Durham be the limit of its range.

129. *S. vacciniana*, Zell.

- Semasia vacciniana*. Staint. Man., vol. ii., p. 242.
 „ „ Wilk. Brit. Tort., p. 198.
Enarmonia „, Meyr. Hdbk. Brit. Lep., p. 474.

The larva of this insect feeds on *Vaccinium myrtillus*, a common enough plant in these counties, but the insect itself has only been taken at Wolsingham by Mr. Sang. A careful search should give many further localities for it.

EUCELIS, Hub.

130. *Eucelis aurana*, Fab.

- Eucelis aurana*. Staint. Man., vol. ii., p. 242.
 „ „ Wilk. Brit. Tort., p. 200.
Epinotia „, Meyr. Hdbk. Brit. Lep., p. 517.

The larva of this insect feeds on seeds of *Heracleum sphondylium*, and the imago sits on the flowers in bright sunshine, and later in the day on the leaves. I have also seen it on the wing, or beaten it out of willows where the food plant was plentiful. It is only recorded for Castle Eden Dene by Mr. Sang, and about Hartlepool. It is especially common in Crimdon Cut, a well sheltered place above Hart Station.

EPHIPPIPHORA, Dup.

131. *Ephippiphora regiana*, Zell.

- Ephippiphora regiana*. Staint. Man., vol. ii., p. 243.
 „ „ Wilk. Brit. Tort., p. 202.
Pammene „, Meyr. Hdbk. Brit. Lep., p. 508.

This insect is recorded for Northumberland by Mr. Maling in the Transactions for 1875, p. 281. In Durham I have no record except that Mr. Sang found it at Eggleston. It is very common in Hezleden Dene in the larval or pupal state. Near the base of the tree the bark of sycamore cracks and turns up,

becoming partly detached. There the larva or pupa may be found freely. Mr. Gardner holds that the larva feeds on sycamore seeds, and goes into these places to spin up. I think this very likely to be so. I have never seen any signs of the larva feeding there, nor of young larvæ. What we find appear to be full grown larvæ in silken cases, or pupæ. They are never free to move about. Though it is so common in this stage, I never but once saw the imago in the dene at rest on a tree trunk. Mr. Gardner also, who is in the dene much more frequently than I am, never saw but one perfect insect.

132. *E. argyrana*, Hub.

<i>Ephippiphora argyrana</i> .	Staint. Man., vol. ii., p. 243.
" "	Wilk. Brit. Tort., p. 202.
<i>Pammene</i> "	Meyr. Hdbk. Brit. Lep., p. 507.

Rather a common species, occurring in both counties. Mr. Finlay found it scarce in Meldon Park. Mr. Backhouse took it at Sunderland, at Tothills, in Castle Eden Dene, and at Darlington. Mr. Sang also took it around Darlington in different places. Mr. Gardner says it is common in Upper Teesdale, and that the larva feeds on oak bark. Stainton and Wilkinson say the same, but Meyrick says it feeds on oak, and perhaps on apple.

133. *E. nigricostana*, Haw.

<i>Ephippiphora nigricostana</i> .	Staint. Man., vol. ii., p. 243.
" "	Wilk. Brit. Tort., p. 204.
<i>Ecosina</i> "	Meyr. Hdbk. Brit. Lep., p. 464.

Stainton says this is not rare in the south of England, and Meyrick gives it as reaching York, but it has occurred in South Durham once at least, for Mr. Sang took it in Dinsdale Wood on July 1st, 1860. I have no other record.

STIGMONOTA, Guen.

134. *Stigmonota internana*, Guen.

- Stigmonota internana*. Staint. Man., vol. ii., p. 245.
 " " Wilk. Brit. Tort., p. 208.
Laspeyresia " Meyr. Hdbk. Brit. Lep., p. 511.

Not a common species, and apparently not extending beyond South Durham. Meyrick limits it to York. Mr. Sang took it at Croft, near Darlington. Mr. Gardner has taken it in Hezleden Dene. It also occurs at Benridge reservoir among the whins round there and elsewhere.

135. *S. perlepidana*, Haw.

- Stigmonota perlepidana*. Staint. Man., vol. ii., p. 245.
 " " Wilk. Brit. Tort., p. 208.
Laspeyresia " Meyr. Hdbk. Brit. Lep., p. 511.

Apparently not generally common, and only recorded here by Mr. Sang, who took the imago near Darlington in 1870. Wilkinson says the larva feeds on *Orobis niger*, and Meyrick says "in pods of *Lathyrus macrorrhizus*." Neither of these plants grows in either county, but Mr. Barrett tells me it feeds in *Orobis tuberosus*, which is "common upon heaths and the borders of pastures." (See Trans., ii., 154).

136. *S. dorsana*, Fab.

- Stigmonota dorsana*. Staint. Man., vol. ii., p. 246.
 " " Wilk. Brit. Tort., p. 211.
Laspeyresia " Meyr. Hdbk. Brit. Lep., p. 512.

Another species recorded by Mr. Sang, and, so far, by no one else. He found the insect on the railway embankment near Croft, and subsequently bred it from larvæ in pods of *Lathyrus sylvestris*. Meyrick says "in pods of *Lathyrus macrorrhizus* (and perhaps *L. pratensis*)." Mr. Sang's larvæ therefore give an additional food plant. Possibly the larvæ of the previous species might also feed on *Lathyrus sylvestris*.

ASTHENIA, Hub.

137. *Asthenia coniferana*, Reitz.*Asthenia coniferana*. Staint. Man., vol. ii., p. 246.

,, ,, Wilk. Brit. Tort., p. 212.

Laspeyresia ,, Meyr. Hdbk. Brit. Lep., p. 514.

Mr. Finlay took this species on Needless Hall Moor, the only Northumbrian record. Mr. Sang found it at Elders, near Darlington, and bred it from larvæ found in the bark of Scotch fir (see Entomologist's Weekly Intelligencer, vol. viii., p. 76).

138. *A. splendidulana*, Guen.*Asthenia splendidulana*. Staint. Man., vol. ii., p. 247.

,, ,, Wilk. Brit. Tort., p. 215.

Pammene ,, Meyr. Hdbk. Brit. Lep., p. 506.

Mr. Sang found this in various places near Darlington, in Park Lane, on the railway side near Croft, and elsewhere. His dates are from May, 1857, to May, 1884. Mr. Gardner says the insect flies about oaks in Upper Teesdale. The larvæ feed between oak leaves. He took one in Hezleden Dene in 1904.

RETINIA, Guen.

139. *Retinia pinicolana*, Doub.*Retinia pinicolana*. Staint. Man., vol. ii., p. 248.

,, ,, Wilk. Brit. Tort., p. 208.

Evetria brobana. Meyr. (partim) Hdbk. Brit. Lep., p. 470.

Another insect only taken by Mr. Sang, who met with it around Darlington in July and August, and took larvæ in June on Scotch fir.

140. *R. pinivorana*, Zell.*Retinia pinivorana*. Staint. Man., vol. ii., p. 248.

,, ,, Wilk. Brit. Tort., p. 219.

Evetria ,, Meyr. Hdbk. Brit. Lep., p. 471.

Mr. Finlay found this insect not uncommonly on Needless Hall Moor. Mr. Sang found it near Darlington, and also at Conisliffe Moor, and bred it from Scotch fir. I have no other records.

141. *R. occultana*, Doug.

- Retima occultana*. Staint. Man., vol. ii., p. 249.
 " " Wilk. Brit. Tort., p. 223.
Enarmonia pinicolana. Meyr. Hdbk. Brit. Lep., p. 474.

Mr. Finlay found this species not scarce on Needless Hall Moor, and Mr. J. B. Hodgkinson reported it from the west of Northumberland. Mr. Sang took it in 1858 in Castle Eden Dene, where Mr. E. R. Bankes found it in May, 1885. Mr. Sang also took it near Darlington, and Mr. Gardner at Edder Acres.

PAMPLUSIA, Guen.

142. *Pamplusia monticolana*, Mann.

- Pamplusia monticolana*. Staint. Man., vol. ii., p. 249.
 " " Wilk. Brit. Tort., p. 224.
 " *mercuriana*. Meyr. Hdbk. Brit. Lep., p. 470.

Mr. Finlay took this rather freely on the Northumberland moors. Mr. Sang got it at Hell Kettles in the larva stage in June and July, 1878 and 1879, and the imago there on September 1st, 1879, and Mr. Gardner has taken it in Upper Teesdale in August. I have no doubt it occurs on all the moors and high land in the west.

CARPOCAPSIDÆ.

ENDOPISA, Guen.

143. *Endopisa ulicana*, Gn.

- Endopisa ulicana*. Staint. Man., vol. ii., p. 251.
 " " Wilk. Brit. Tort., p. 228.
Lipoptycha plumbana. Meyr. Hdbk. Brit. Lep., p. 504.

This does not appear to be very plentiful here. The only record I have is that of Mr. Sang, who took the insect on the railway banks near Darlington. It is common about Hartlepool, and I expect will be found elsewhere. It extends as far north as the Hebrides, and the larva feeds in the roots of *Chrysanthemum* and kindred plants. It ought to be found in most places.

144. *E. germarana*, Hub.*Endopisa germarana*. Staint. Man., vol. ii., p. 251.

" " Wilk. Brit. Tort., p. 229.

Laspeyresia roseticolana. Meyr. Hdbk. Brit. Lep., p. 510.

Meyrick limits the range of this species to York. It certainly reaches South Durham, for Mr. Sang took it on more than one occasion in a lane near the railway at Darlington. As the larva feeds in the hip of the wild rose, I do not see why it should not extend further.

145. *E. nigricana*, Fab.*Endopisa nigricana*. Staint. Man., vol. ii., p. 251.

" " Wilk. Brit. Tort., p. 230.

Laspeyresia " Meyr. Hdbk. Brit. Lep., p. 513.

Probably generally distributed, but only recorded by Mr. Sang from Coniscliffe. The larva feeds on *Vicia sylvatica*, *Pisum sativum*, &c., according to the authorities. Mr. Barrett tells me the moth is abundant about pea fields in the south.

146. *E. proximana*, Haw.*Endopisa proximana*. Staint. Man., vol. ii., p. 251.

" " Wilk. Brit. Tort., p. 231.

Laspeyresia nigricana. Meyr. Hdbk. Brit. Lep., p. 513.

Meyrick is no doubt right in considering this and the preceding species to be alike, but as Stainton (following Wilkinson) gave them separately, I must do so here; more particularly as Sang enters both in his diary. They were both met with at the same place, Coniscliffe, near Darlington.

CARPOCAPSA, Tr.

147. *Carpocapsa splendana*, Hub.*Carpocapsa splendana*. Staint. Man., vol. ii., p. 253.

" " Wilk. Brit. Tort., p. 234.

" " Meyr. Hdbk. Brit. Lep., p. 515.

Not a common species, and only taken near Darlington by Mr. Sang. The larva feeds in acorns, and the insect must be looked for in oak woods.

148. *C. pomonella*, Tr.

- | | |
|------------------------------|---------------------------------|
| <i>Carpocapsa pomonella.</i> | Staint. Man., vol. ii., p. 253. |
| „ „ | Wilk. Brit. Tort., p. 237. |
| „ „ | Meyr. Hdbk. Brit. Lep., p. 515. |

The larva of this insect feeds in apples and sometimes in pears, but the imago is of very retiring habits, and it is not often noticed in the perfect state. I have no records except at home. Mr. Gardner says he has taken odd specimens, and I took it once in my own house in Hartlepool.

GRAPHOLITA, Steph.

149. *Grapholita albersana*, Hub.

- | | |
|------------------------------|---------------------------------|
| <i>Grapholita albersana.</i> | Staint. Man., vol. ii., p. 254. |
| „ „ | Wilk. Brit. Tort., p. 239. |
| <i>Epinrota</i> | Meyr. Hdbk. Brit. Lep., p. 517. |

Mr. Sang records (Ent. Mo. Mag., vi., 170) having bred this species from a larva found near Darlington. It is a species more frequently found in the perfect state than as a larva, and he only found one, in April. The books give August as the time for the appearance of the larva, but it probably hibernates. No entry of this insect appears in his "Diary," where most of the others referred to in the note quoted from are duly entered. The insect has been taken at Scarborough.

150. *G. ulicetana*, Haw.

- | | |
|------------------------------|---------------------------------|
| <i>Grapholita ulicetana.</i> | Staint. Man., vol. ii., p. 254. |
| „ „ | Wilk. Brit. Tort., p. 240. |
| <i>Laspeyresia</i> | Meyr. Hdbk. Brit. Lep., p. 534. |

A most abundant species, flying in the day time around every whin bush in both counties. Very common everywhere.

CNEPHASIDÆ.

CNEPHASIA, Curt.

151. *Cnephasia hybridana*, Hub.

Cnephasia hybridana. Staint. Man., vol. ii., p. 257.

" " Wilk. Brit. Tort., p. 249.

Isotrias " Meyr. Hdbk. Brit. Lep., p. 542.

Mr. Finlay found this generally distributed and not at all uncommon. Mr. Maling also recorded it in the Transactions for 1875, p. 281. It is not recorded for Durham, but is sure to occur.

152. *C. subjectana*, Guen.

Cnephasia subjectana. Staint. Man., vol. ii., p. 257.

" " Wilk. Brit. Tort., p. 250.

Tortrix incertana. Meyr. Hdbk. Brit. Lep., p. 540.

A common species, and generally abundant, the larva not being very particular in its food. Mr. Finlay found it in most parts of the Morpeth district. Mr. Maling recorded it in the Transactions for 1875, p. 281. In Durham I only have my own records and Mr. Gardner's. We have both found it plentiful.

153. *C. virgaureana*, Tr.

Cnephasia virgaureana. Staint. Man., vol. ii., p. 258.

" " Wilk. Brit. Tort., p. 251.

Tortrix " Meyr. Hdbk. Brit. Lep., p. 539.

Generally a common species, the larva feeding indiscriminately on many low plants. There is no doubt it occurs almost everywhere, but I have few records. Mr. Finlay says generally distributed and common. Mr. Maling recorded it in the Transactions for 1875, p. 281. These are for Northumberland. For Durham I have no records. Mr. Sang would think it too common, and it is not among the few Mr. Backhouse records. About Hartlepool it is always very common.

154. *C. alternella*, W.V.*Cnephasia alternella*. Staint. Man., vol. ii., p. 258.

" " Wilk. Brit. Tort., p. 252.

Tortrix chrysanthemana. Meyr. Hdbk. Brit. Lep., p. 539.

Rather a local species, and not recorded for Northumberland, the only captures I know of being that Mr. Sang took it near Darlington, and at Seaton Carew, near Hartlepool. The larva feeds on several common plants, and its range here will no doubt be extended by further captures.

155. *C. pascuana*, Hb.*Cnephasia pascuana*. Staint. Man., vol. ii., p. 258.

" " Wilk. Brit. Tort., p. 253.

Tortrix " Meyr. Hdbk. Brit. Lep., p. 540.

Mr. Finlay recorded *C. sinuana* as "generally distributed and scarce." I venture to transfer the record to this species. Woeke (Staud. Cat. No. 780, 783, Ed. 1871) appears to have mixed up these species, and perhaps Mr. Finlay's insects were thus wrongly named. *Sinuana* is not known so far north, even in the west of England, while *Pascuana* is much more general, and is recorded as far as York by Meyrick. I may say that Mr. Barrett approves of the alteration.

156. *C. conspersana*, Doug.*Cnephasia conspersana*. Staint. Man., vol. ii., p. 258.

" " Wilk. Brit. Tort., p. 254.

Tortrix " Meyr. Hdbk. Brit. Lep., p. 541.

A local species, the larvæ feeding on heads of composite plants on the coast. Mr. Gardner says it is common about Hartlepool, but I never met with it myself, and have no other record.

157. *C. octomaculana*, Haw.*Cnephasia octomaculana*. Staint. Man., vol. ii., p. 258.

" " Wilk. Brit. Tort., p. 254.

Tortrix " Meyr. Hdbk. Brit. Lep., p. 541.

A widely distributed species according to Stainton, but confined to "Cheshire to Caledonian Canal" according to Meyrick. If Meyrick be correct it would seem to be a westerly species, but it certainly occurs in both these counties. Mr. Maling recorded it for Northumberland in the "Young Naturalist," vol. iv., p. 23; Mr. Gardner and I have met with it about Hartlepool, not very commonly. It is an abundant insect in Scotland. The larva feeds on common plants, *Plantago*, *Centaurea*, &c.

ABLABIA, Hub.

158. *Ablabia pratana*, Hub.

Ablabia pratana. Staint. Man., vol. ii., p. 259.

" " Wilk. Brit. Tort., p. 257.

Tortrix osseata. Meyr. Hdbk. Brit. Lep., p. 542.

Rather a local species, though plentiful where it occurs. Mr. Finlay found it abundant on the Northumberland moors. Mr. Maling recorded it, without locality, in the Transactions for 1875, p. 281. Mr. Sang took it in Masham lane, and I have found it about Hartlepool, generally in rough pastures and such like places. The moth seems to fly about mid-day, and to continue on the wing for four or five hours. I have seen it on the wing in hundreds when taking *Miana expolita*. Mr. Gardner has found it abundant in Upper Teesdale, and thinks it occurs everywhere among rushes.

SERICORIDÆ.

EUCHROMIA, Steph.

159. *Euchromia ericetana*, Bentley.

Euchromia ericetana. Staint. Man., vol. ii., p. 261.

" " Wilk. Brit. Tort., p. 262.

Eucosma " Meyr. Hdbk. Brit. Lep., p. 469.

The only record I have of the occurrence of this species is that I took it occasionally in my garden when I lived at Bellerby Terrace, West Hartlepool, in 1880. The house was then more than a mile out of the town, beyond the Cemetery,

and was surrounded by nursery gardens and fields. The specimens were named by Mr. Sang, who had some of them. The larva feeds in roots of *Stachys arvensis*, and the insect should be looked for where that occurs.

160. *E. striana*, W.V.

Euchromia striana. Staint. Man., vol. ii., p. 261.

„ „ Wilk. Brit. Tort., p. 262.

Eucosma „ Meyr. Hdbk. Brit. Lep., p. 469.

Rather a common species generally, but not yet recorded for Northumberland. Mr. Sang got it at Dinsdale Wood, near Middleton-one-Row, and Mr. Gardner has taken it at Greatham. I have no further records at present.

ORTHOTÆNIA, Steph.

161. *Orthotænia antiquana*, Hub.

Orthotænia antiquana. Staint. Man., vol. ii., p. 262.

„ „ Wilk. Brit. Tort., p. 264.

Eucosma „ Meyr. Hdbk. Brit. Lep., p. 469.

Not a very common species, and in these counties only taken by Mr. Sang, who found it at Hell Kettles, near Darlington. The larva feeds in the roots of *Stachys arvensis*, and pupates therein. The plant has been found in many places over both counties.

SERICORIS, Tr.

162. *Sericoris conchana*, Hub.

Sericoris conchana. Staint. Man., vol. ii., p. 262.

„ „ Wilk. Brit. Tort., p. 266.

Eucosma rivulana. Meyr. Hdbk. Brit. Lep., p. 466.

I have no Northumberland records for this species, and in Durham only for Castle Eden Dene and places near Darlington. The larva is said to feed on *Genista tinctoria*. I only know one station for this plant in the Hartlepool district, a meadow near Black Hall Rocks, but there is so little of it there that it is not likely to produce any moths. Mr. Barrett has reared this insect from an orchid.

163. *S. lacunana*, Dup.

- Sericoris lacunana*. Staint. Man., vol. ii., p. 262.
 „ „ Wilk. Brit. Tort., p. 266.
Eucosma „ Meyr. Hdbk. Brit. Lep., p. 467.

An abundant species everywhere. Mr. Finlay says "Generally distributed around Morpeth, and plentiful." Mr. Maling recorded it in the Transactions for 1875, p. 281. Mr. Sang, I presume, considered it too common to enter. It is very abundant around Hartlepool, and I have no doubt may be found all over both counties.

164. *S. urticana*, Hub.

- Sericoris urticana*. Staint. Man., vol. ii., p. 263.
 „ „ Wilk. Brit. Tort., p. 267.
Eucosma „ Meyr. Hdbk. Brit. Lep., p. 467.

Strange to say Mr. Finlay never met with this insect, but Mr. Maling recorded it for Northumberland in the Transactions for 1875, p. 281, and Mr. Backhouse for Jesmond as well as at Hoffall Wood, Durham. Mr. Sang did not enter it—an evidence of its abundance. Mr. Gardner has taken it in Teesdale, and I have bred it from nettle at Hartlepool. It feeds on a vast variety of plants, and is generally a plentiful hedge side insect, though Meyrick says it gets scarcer northwards.

165. *S. micana*, Hub.

- Sericoris micana*. Staint. Man., vol. ii., p. 263.
 „ „ Wilk. Brit. Tort., p. 268.
Eucosma „ Meyr. Hdbk. Brit. Lep., p. 467.

An insect fond of damp or swampy places. Mr. Finlay found it not uncommon to the west of Netherwitton—the only Northumbrian record. Mr. Sang took it near Darlington in boggy places, and Mr. Gardner got it at a pond at Thorp Bulmer, near Hartlepool, plentifully, taking fifty or more in a season.

166. *S. cespitana*, Hub.*Sericoris cespitana*. Staint. Man., vol. ii., p. 263.

" " Wilk. Brit. Tort., p. 270.

Eucosma " Meyr. Hdbk. Brit. Lep., p. 468.

Rather a local species. Mr. Maling recorded it for Northumberland in the Transactions for 1875, p. 281; Mr. Hodgkinson also included it in his list of species occurring in the west of that county. Mr. Sang does not appear to have met with it, but it occurs near Hartlepool.

167. *S. politana*, Haw.*Sericoris politana*. Staint. Man., vol. ii., p. 263.

" " Wilk. Brit. Tort., p. 271.

Tortrix " Meyr. Hdbk. Brit. Lep., p. 538.

A moorland species, the larva feeding on *Myrica gale*, *Erica*, and other moor plants. Mr. Finlay found it on Needless Hall Moor, but never very common; and Mr. Hodgkinson took it in West Northumberland. Mr. Backhouse got it at Shull, flying by a plantation hedge. It does not appear to have been taken in Upper Teesdale, but it is certain to occur there.

168. *S. bifasciana*, Haw.*Sericoris bifasciana*. Staint. Man., vol. ii., p. 264.

" " Wilk. Brit. Tort., p. 274.

Eucosma " Meyr. Hdbk. Brit. Lep., p. 468.

A local species, occurring among fir trees. Mr. Sang took it near Darlington on 6th July, 1870, and 26th June, 1872. I have no other records.

MIXODIA, Guen.

169. *Mixodia schultzi*, Fab.*Mixodia schultzi*. Staint. Man., vol. ii., p. 265.

" " Wilk. Brit. Tort., p. 276.

Eucosma " Meyr. Hdbk. Brit. Lep., p. 466.

A common insect on boggy moors, but not occurring elsewhere. It is recorded for Muckle Moss in vol. v. of the Transactions, p. 8. Mr. Finlay also found it plentiful on the Northumbrian moors. I have taken it on Greenleighton Moor myself. It is also common in boggy places on the Teesdale moors.

170. *M. palustrana*, Zell.

Mixodia palustrana. Staint. Man., vol. ii., p. 265.

" " Wilk. Brit. Tort., p. 277.

Eucosma " Meyr. Hdbk. Brit. Lep., p. 466.

This is really a Scotch insect, and recorded in the "Manual" as being confined to that country, but Mr. Gardner found it plentifully in one locality on the Teesdale moors. Lord Walsingham confirmed the name. It will probably be found on the more western of the Northumberland moors.

LOZOPERIDÆ.

LOBESIA, Guen.

171. *Lobesia reliquana*, Hub.

Lobesia reliquana. Staint. Man., vol. ii., p. 266.

" " Wilk. Brit. Tort., p. 280.

" *permixtana*. Meyr. Hdbk. Brit. Lep., p. 455.

Rather a southern insect, and only recorded here by Mr. Maling in the Transactions for 1875, p. 281. There are no localities in this list, but Mr. Maling collected chiefly, I believe, about Newbiggin on the coast, and around Hexham in the west. *Reliquana* does not appear to occur in Yorkshire, but Mr. Barrett informs me there are records for Cumberland and Westmoreland, and Mr. Meyrick gives Ayr as its northern limit. If therefore Mr. Maling took it about Hexham, it is where we would naturally look for it. If collectors in the Derwent valley would look out I think it will be met with there also.

PHTHEOCHROA, Steph.

172. *Phtheochroa rugosana*, Hub.*Phtheochroa rugosana*. Staint. Man., vol. ii., p. 267.

" " Wilk. Brit. Tort., p. 281.

Commophila " Meyr. Hdbk. Brit. Lep., p. 555.

Limited to York by Meyrick, this insect appears only to reach the extreme south of Durham. In fact, it is unable to extend further, as the food plant, *Bryonia dioica*, does not grow beyond South Durham. Mr. Sang took the insect in Dinsdale Wood, near Middleton-one-Row, in 1867, and on Coniscliffe Moor in 1889; both localities being close to the county boundary.

ERIOPSELA, Guen.

173. *Eriopsela fractifasciana*, Haw.*Eriopsela fractifasciana*. Staint. Man., vol. ii., p. 267.

" " Wilk. Brit. Tort., p. 283.

Cydia " Meyr. Hdbk. Brit. Lep., p. 485.

A very local species, and Wilkinson speaks as though it were confined to chalk lands. Mr. Gardner took a single specimen at Black Halls, where the rocks are limestone. Probably only a casual, as it has not occurred again.

174. *E. quadrana*, Hub.*Eriopsela quadrana*. Staint. Man., vol. ii., p. 267.

" " Wilk. Brit. Tort., p. 284.

Enarmonia " Meyr. Hdbk. Brit. Lep., p. 474.

This species extends to Lancashire and Westmoreland, according to Meyrick, and it appears to cross the boundary on the west of Durham, for Mr. Gardner took it on 25th May, 1896, at Winch Bridge, Teesdale.

CHROSIS, Guen.

175. *Chrosis tesserana*, Tr.*Chrosis tesserana*. Staint. Man., vol. ii., p. 268.

" " Wilk. Brit. Tort., p. 285.

Phalonia " Meyr. Hdbk. Brit. Lep., p. 548.

Rather a common species generally, and extending far into Scotland. Here it has, so far, only been taken in Headley Lane, Darlington, by the late John Sang. The food plant, however, is only recorded for a few places in Durham and none in Northumberland.

ARGYROLEPIA, Steph.

176. *Argyrolepia baumanniana*, W.V.

- | | |
|----------------------------------|-----------------------------------|
| <i>Argyrolepia baumanniana</i> . | Staint. Man., vol. ii., p. 269. |
| " | " Wilk. Brit. Tort., p. 289. |
| <i>Chlidonia</i> | " Meyr. Hdbk. Brit. Lep., p. 554. |

Rather a common species, and fairly plentiful in most places. Mr. Finlay says it is "generally distributed and sometimes plentiful." Mr. Maling recorded it in the Transactions for 1875, p. 281. Mr. Sang got it about Darlington, and it occurs in most places around Hartlepool.

177. *A. subbaumanniana*, Wilk.

- | | |
|-------------------------------------|--------------------------------------|
| <i>Argyrolepia subbaumanniana</i> . | Staint. Man., vol. ii., p. 269. |
| " | " Wilk. Brit. Tort., p. 291. |
| <i>Chlidonia</i> | " Meyr. Hdbk. Brit. Lep.,
p. 554. |

Generally rather common, but here only taken by Mr. Sang nearly fifty years ago. The larva is not known.

178. *A. badiana*, Hb.

- | | |
|------------------------------|-----------------------------------|
| <i>Argyrolepia badiana</i> . | Staint. Man., vol. ii., p. 270. |
| " | " Wilk. Brit. Tort., p. 291. |
| <i>Phalonia</i> | " Meyr. Hdbk. Brit. Lep., p. 548. |

Not generally a scarce species, but only occurring here in Castle Eden and Hezleden Denes among burdock, on which the larva feeds. Meyrick says in the stems and roots; Mr. Gardner says in the seeds. I believe it really feeds on the seeds, but pupates near the roots.

179. *A. cnicana*, Doub.*Argyrolepia cnicana*. Staint. Man., vol. ii., p. 270.

,, ,, Wilk. Brit. Tort., p. 292.

Phalonia ,, Meyr. Hdbk. Brit. Lep., p. 548.

Very widely distributed, and recorded by most collectors. Mr. Finlay says it is generally distributed about Morpeth, but not plentiful. Mr. Maling recorded it in the Transactions for 1875, p. 281. In Durham Mr. Sang took it at Hell Kettles and Elders, near Darlington. Mr. Gardner says Black Halls and Hezleden Dene. I never found it in the dene myself, but among thistles at Black Halls it is generally plentiful. In a wet gully just beyond the last rocks I once found it positively swarming.

CALOSETIA, Wilk.

180. *Calosetia nigromaculana*, Haw.*Calosetia nigromaculana*. Staint. Man., vol. ii., p. 271.

,, ,, Wilk. Brit. Tort., p. 295.

Cydia ,, Meyr. Hdbk. Brit. Lep., p. 486.

Of this species I have no records except at Hartlepool, where both Mr. Gardner and I have taken it on the railway side among ragwort, and Mr. Gardner took it this year (1904) at Thorp Bulmer.

EUPÆCILIA, Steph.

181. *Eupœcilia maculosana*, Haw.*Eupœcilia maculosana*. Staint. Man., vol. ii., p. 271.

,, ,, Wilk. Brit. Tort., p. 297.

,, ,, Meyr. Hdbk. Brit. Lep., p. 555.

The only notices of this species that I have met with are that Mr. J. B. Hodgkinson included it in his list of species occurring in West Northumberland; and that Mr. Sang took it on 19th and 26th May, 1889. It does not appear to abound in the north, and is only recorded from five places in Yorkshire. The larva is said to feed on the seeds of *Scilla nutans* (*Hyacinthus non-scriptus*), which abounds in our woods and denes.

182. *E. atricapitana*, Steph.*Eupæcilia atricapitana*. Staint. Man., vol. ii., p. 271.

" " Wilk. Brit. Tort., p. 298.

Phalonia " Meyr. Hdbk. Brit. Lep., p. 552.

Not a common species, but probably much overlooked. The only Northumberland record I have is that Mr. J. B. Hodgkinson found it in the west of the county. Mr. Sang took it on the railway banks at Darlington. We formerly got it rather freely in the small enclosure between the ropery at Hartlepool and the railway banks, sometimes sitting on the brick walls of the ropery, sometimes on the old sleeper fence of the railway. Mr. Gardner has bred it from larvæ found there in ragwort stems. The town has extended here, and this place is now enclosed as gardens, and I have not seen *Atricapitana* for some years.

183. *E. nana*, Haw.*Eupæcilia nana*. Staint. Man., vol. ii., p. 272.

" " Wilk. Brit. Tort., p. 301.

Phalonia " Meyr. Hdbk. Brit. Lep., p. 552.

Mr. Finlay records this from the Old Park, Netherwitton, and says it is plentiful among birch. Mr. Sang took it at Wolsingham only. We never met with it about Hartlepool.

184. *E. rupicola*, Curt.*Eupæcilia rupicola*. Staint. Man., vol. ii., p. 273.

" " Wilk. Brit. Tort., p. 305.

Phalonia " Meyr. Hdbk. Brit. Lep., p. 550.

Rather a local species, and not extending into Scotland. It only appears to reach the extreme of South Durham. Mr. Sang took it many years ago at Hell Kettles, near Darlington, and Mr. Gardner has taken it in Hezleden Dene, where he says it is not very uncommon, but I never met with it.

185. *E. vectisana*, Westw.*Eupæcilia vectisana*. Staint. Man., vol. ii., p. 273.

" " Wilk. Brit. Tort., p. 306.

Phalonia " Meyr. Hdbk. Brit. Lep., p. 549.

Very abundant on Greatham salt marsh. The insect flies just before sunset, and I have seen it flying in hundreds about the food plant, *Triglochin maritimum*. In the Entomologist's Monthly Magazine, vol. xxv., p. 178, is a most interesting account of the larva from the pen of Mr. E. R. Bankes. It eats the pith of the shoot, hibernates full fed, and sometimes changes in the cocoon inside the flower stems, in which it passed the winter; sometimes it spins another cocoon, probably impervious to water. Mr. Hodgkinson included this in his West Northumberland list, but that is evidently a mistake.

186. *E. affinitana*, Doug.*Eupæcilia affinitana*. Staint. Man., vol. ii., p. 273.

" " Wilk. Brit. Tort., p. 307.

Phalonia " Meyr. Hdbk. Brit. Lep., p. 549.

Another salt marsh insect, the larva feeding in stems of *Aster tripolium*. It occurs on Greatham marshes, but not in anything like the numbers of the last species. Mr. Gardner has bred it from there. Mr. Hodgkinson included this also in his West Northumberland list, certainly in error.

187. *E. ruficiliana*, Haw.*Eupæcilia ruficiliana*. Staint. Man., vol. ii., p. 274.

" " Wilk. Brit. Tort., p. 310.

Phalonia ciliella. Meyr. Hdbk. Brit. Lep., p. 551.

In the number of the Entomologist's Weekly Intelligencer for 11th June, 1859 (vol. vi., p. 82), Mr. V. R. Perkins, then of Newcastle-on-Tyne, says this species occurs amongst furze bushes on the sea coast. If this is intended to imply that the larva feeds on furze, it is an error, for it feeds on seeds of cowslip. It occurs as stated and elsewhere along the coast, and

on the railway embankments and other places where cowslip grows freely. Mr. Finlay reported it as generally distributed and plentiful around Morpeth. Mr. Sang found it at Coniscliffe, near Darlington, and we find it common near Hartlepool. These are all the records I have, but it will be found wherever there is plenty of cowslip.

LOZOPERA, Steph.

188. *Lozopera straminea*, Haw.

Lozopera straminea. Staint. Man., vol. ii., p. 276.

„ „ Wilk. Brit. Tort., p. 313.

Euzanthis „ Meyr. Hdbk. Brit. Lep., p. 557.

A well distributed species, and generally common. Mr. Finlay recorded it thus, and Mr. Maling also (see Transactions for 1875, p. 281). Mr. Wailes recorded it for Gibside in Stephens' Illustrations (vol. iv., p. 93 and 188). Mr. Sang took it about Darlington; Mr. Gardner says it is common everywhere about Greatham, and it is also common round Hartlepool. I have little doubt it may be had everywhere. The larva feeds in the heads of *Centaurea nigra*, a common enough plant.

XANTHOSETIA, Steph.

189. *Xanthosetia hamana*, Linn.

Xanthosetia hamana. Staint. Man., vol. ii., p. 276.

„ „ Wilk. Brit. Tort., p. 316.

Euxanthis „ Meyr. Hdbk. Brit. Lep., p. 558.

A generally distributed species, but not abundant. Mr. Wailes recorded it for Meldon Park in Stephens' Illustrations, vol. iv., p. 192. Mr. Finlay said it was generally distributed, but not plentiful in his district. It is one of the earlier entries in Sang's diary, "Seaton, 2nd August, 1853." He does not enter it again. He probably found it everywhere. It occurs all round Hartlepool, but never in large numbers.

190. *X. zoegana*, Linn.*Xanthosetia zoegana*. Staint. Man., vol. ii., p. 276.

,, ,, Wilk. Brit. Tort., p. 316.

Euxanthia ,, Meyr. Hdbk. Brit. Lep., p. 558.

Widely distributed, but never very common. Mr. Finlay found it scarce at Meldon Park; Mr. Maling recorded it in the Transactions for 1875, p. 281; Mr. Patterson met with it at Chollerford; Mr. Sang got it at Castle Eden Dene; and Mr. Gardner and I have taken it at Black Halls and on the railway embankment. The larvæ feed in the roots of *Centaurea nigra*, and perhaps in those of *Scabrosa columbaria* as stated in Stainton and Meyrick.

TORTRICODIDÆ.

TORTRICODES, Gn.

191. *Tortricodes hyemana*, Hub.*Tortricodes hyemana*. Staint. Man., vol. ii., p. 278.*Cheimatophila tortricella*. Meyr. Hdbk. Brit. Lep., p. 543.

Wilkinson appears not to have considered this to be a Tortrix, indeed Stainton did not, but he includes it with them in his index. It is a very common species in oak woods, but is on the wing so early in the year that it is not often noticed by entomologists. Mr. Finlay reports it as plentiful in his district, and Mr. Maling includes it in his list in the Transactions for 1875 (p. 281). Mr. Sang took it around Darlington, and we find it common in Hezleden Dene. The lack of further records must be explained by its early appearance.

TINEINA.

We are now at the last of the larger groups, and the last but one of the entire Lepidopterous fauna, after the arrangement of the late H. T. Stainton. It was to this group that he gave much of his attention, and he worked out many of the genera and species very thoroughly. The sequence of no two authors is identical, so, failing any generally accepted one, we prefer to follow that adopted in Stainton's "Manual." Very few of our local entomologists have collected the TINEINA. Those who have done so consider it a most interesting group. It is also that in which new discoveries are most likely to be made. The few who have collected these in this district, have been already enumerated in connection with the TORTRICINA. I cannot say that I have ever collected the TINEINA, though I have occasionally taken a few, and have been fortunate enough to meet with some of the rarer species. I have, however, had the great advantage for this work of being aided by Mr. E. R. Bankes, F.E.S., &c., of Corfe Castle, Dorset, who probably knows more about British Lepidoptera than any other man, and especially does he thoroughly know the British TINEINA. Mr. Bankes has not only given me all possible advice, but has most kindly revised the MS., so that I do not think anything wrong will occur through my personal want of experience.

Two or three species in this group occur in the district that have scarcely been met with elsewhere in Britain. It is exceedingly curious how these minute creatures have found their way here, to a locality hundreds, or perhaps thousands of miles from any known colony of them. One insect, *Acrolepia betulella*, has not been recorded elsewhere than in the county of Durham, though I believe a solitary example was taken by Mr. Sang at Richmond in Yorkshire. Another, *Lithocolletis insignitella*, whose entire life, in its larval and pupal stages, is passed between the skins of a clover leaf, has not been taken in England, except between Hartlepool and Castle Eden, where it occurs in enormous numbers. A third, *Harpella bracteella*, a

most brilliant little species, has only once been met with in England, except in the county of Durham. *Gelechia tetragonella* also, which is erroneously included in Porritt's Yorkshire list, has not been found at any northern locality, except at Greatham Salt Marsh, Co. Durham, and its only two other known stations are in Dorset and Norfolk respectively.

Other peculiarities of our fauna will be mentioned in their places. I have no doubt, when both counties are fully examined by competent collectors, many additional species will be found. As it is, the bulk of those on the following list have been taken by less than half-a-dozen collectors in the two counties.

EXAPATIDÆ.

EXAPATE, Zell.

1. *Exapate gelatella*, Linn.

Exapate gelatella. Staint. Man., vol. ii., p. 282.

„ *congelatella*. Meyr. Hdbk. Brit. Lep., p. 543.

Generally common, but occurring so late in the year, that it is not often taken on the wing. Meyrick gives its most northern recorded habitat as York (*i.e.*, Yorkshire), but Mr. Finlay found it comparatively common in Coal Law Wood; Mr. Maling took it at light in November (see Transactions, 1875, p. 282), and Mr. Henderson found it in Jesmond Dene. In Durham we get it in Hezleden Dene when we venture there in November or later; Mr. Dixon took one at Hartlepool in 1883, probably a wanderer from the dene; and Mr. Sang met with it around Darlington. The female has very small forewings, and seems incapable of flight. I have no doubt the species will be met with all over both counties.

DASYSTOMA, Curt.

2. *Dasystoma salicella*, Hub.

Dasystoma salicella. Staint. Man., vol. ii., p. 282.

Cheimophila „ Meyr. Hdbk. Brit. Lep., p. 615.

Not a very common species; Meyrick does not give its east-

ward range, but enters Westmoreland as its most western recorded locality. The only notice I have of its occurrence in these counties, is that Mr. Finlay took a single specimen in Meldon Park. It occurs but rarely in Yorkshire. I have no Durham records.

CHIMABACCHE, Hub.

3. *Chimabacche phryganella*, Hub.

Chimabacche phryganella. Staint. Man., vol. ii., p. 282.

„ „ Meyr. Hdbk. Brit. Lep., p. 616.

Generally common, and probably occurring in most woods in both counties. Meyrick does not give its range on the East Coast; on the west he gives Westmoreland as the most northerly of its recorded localities. It is quite common in Northumberland as well as in Durham. Mr. Finlay found it plentiful in Coal Law Wood in October, and in other woods around. Mr. Backhouse took it at Shotley, Mr. Sang entered it in his diary as occurring at Barnard Castle woods on October 9th, 1857. He also took it in Castle Eden Dene in 1878. It is common in Hesleden Dene and elsewhere around Hartlepool, and it will probably yet be recorded from many woods in October.

4. *C. fagella*, W.V.

Chimabacche fagella. Staint. Man., vol. ii., p. 282.

„ „ Meyr. Hdbk. Brit. Lep., p. 616.

Appearing in April, and plentiful in all parts of the district. It was recorded by Wailes in Stephens' Illustrations (vol. iv., p. 238) as occurring at Newcastle-on-Tyne. That was some 70 years ago. Now, it often appears much darker in hue, sometimes quite black, but the great majority are still of the normal colour. The larva feeds on most trees, and the imago may always be found in the day time resting on tree trunks. The female has small wings, and seems incapable of flight, yet the species occurs almost everywhere.

SEMIOSCOPIS, Hub.

5. *Semioscopis avellanella*, Hub.*Semioscopis avellanella*. Staint. Man., vol. ii., p. 283.

" " Meyr. Hdbk. Brit. Lep., p. 616.

A generally distributed species, but rather local, and certainly not plentiful anywhere in the north. For Northumberland I have no records, and for Durham only two, both in the south of the county. Mr. Sang took it near Darlington in 1861—nearly half a century ago. Mr. Gardner has since met with the species in Teesdale, but never commonly.

6. *S. steinkellneriana*, W.V.*Semioscopis steinkellneriana*. Staint. Man., vol. ii., p. 283." " Meyr. Hdbk. Brit. Lep.,
p. 617.

This species is given in the "Manual" as having occurred at Darlington. Sang, however, does not record it, nor have I any knowledge of its occurrence in either county, except that I took a single specimen on the wing some forty years ago in the lane leading from West Hartlepool to the workhouse. I was not sufficiently interested in the group then to seek more, nor has it been taken since. The larva feeds on hawthorn and other trees, so it ought to be commoner than appears by this. The lane where it was taken is now ruined for entomological purposes. Mr. Harding recorded that this species was on the wing from daylight to sunrise (E.W.I., vol. i., p. 26). My specimen was taken about sunset.

TINEIDÆ, Stain.

TALÆPORIA, Zell.

7. *Talæporia pseudobombycella*, Och.*Talæporia pseudobombycella*. Staint. Man., vol. ii., p. 285." " Meyr. Hdbk. Brit. Lep.,
p. 776.

Generally a common species, but scarcely recorded for these counties, the only notice of it that I have seen being the

"Ne" (Newcastle) of the "Manual." The larva feeds in a long slender case on lichens growing on palings and tree trunks. We never found it about Hartlepool, nor is it entered in Sang's diary.

SOLENOBIA, Zell.

8. *Solenobia inconspicuella*, Staint.

Solenobia inconspicuella. Staint. Man., vol. ii., p. 286.

" " Meyr. Hdbk. Brit. Lep., p. 775.

There is a little uncertainty as to the exact number of species belonging to the obscure genus *Solenobia* that have been found in Britain. Stainton, Doubleday, and Meyrick each give two, but the nomenclature was then in sad confusion. Stainton gives *inconspicuella* and *douglasii*; Doubleday *inconspicuella* and *triquetrella*, with *douglasii* as a doubtful variety of the first; Meyrick *inconspicuella* and *douglasii*, with *triquetrella* as a synonym of *douglasii*. There is no doubt but that these two are wrong as to *douglasii*, which was long thought unique, and, being distinct from every known species, is now placed in a separate genus. Barrett gives another supposed species, *wockii* (E.M.M., xxxi, 164.) This would appear to be an error also, and the British species to be only *inconspicuella*, *lichenella* (of which no male is known, the females being parthenogenetic), *clathrella*, and according to Tutt's "British Lepidoptera," possibly *nickerlii*.

The authorities it will be observed agree on one point only, *inconspicuella*. This, though a local species, is not particularly rare. The larva feeds on lichens on tree trunks and palings. The only record I have found of its occurrence in our counties is the "Ne" of the "Manual." Whether the specimens taken by Wailes were found in Durham or Northumberland must remain doubtful at present. When these insects are more searched for I think it will probably be found in both counties.

9. *S. clathrella*, F.v.R.

This insect has never before been recorded as British, though there is a misleading account of one "supposed British example"

in Tutt's "British Lepidoptera." The precise facts are as follows. After the sale of his collection, the late John Sang went to Burton-on-Trent to figure Coleoptera for Dr. Mason. He resided there some time, then came back to Darlington and set up house-keeping again. Here he commenced a new collection, which was not very large when he died. Dr. Mason came down to the funeral, and before his return home he purchased this and took it to Burton-on-Trent with him. On examining it at his leisure he found it contained five specimens of a *Solenobia* (two ♂'s and three ♀'s), which Sang had called *triquetrella*, but which were really *clathrella*. Knowing I was engaged in the preparation of this catalogue, Dr. Mason wrote me in 1899, informing me of this discovery, that I might include the species here. I am not able to give the exact locality where they were taken, all of them probably as larvæ, but there is no doubt they were taken in Upper Teesdale, where Mr. Gardner also found larvæ which were possibly those of *clathrella*, but which he unfortunately failed to rear.

Triquetrella, to which Sang referred these specimens, is an insect that has never occurred in Britain, though, owing to errors of identification, it has been recorded by Doubleday and others as British. Whilst I am writing, four out of Sang's five *clathrella* are at Stevens' saleroom, where they will probably be sold before this portion of the catalogue is printed.* The fifth specimen, a ♀, has disappeared. It may have been accidentally destroyed. Dr. Chapman mounted two ♀'s very carefully for Dr. Mason, but he has no knowledge as to the fate of the third ♀ specimen, which he never saw. There is no need for me to point out the shortcomings of Tutt's account of the matter. Dr. Mason was an exceedingly brief letter writer, and

* These specimens are now in the possession of Mr. E. R. Bankes, of Corfe Castle, who purchased them at the sale of Dr. Mason's collection. He says of them, "Of the two ♂'s, one is on a black pin, and the pinning and setting are peculiarly characteristic of Sang's handiwork, while the other is on a gilt pin, and does not show Sang's manipulation to such a marked degree. The different colours of the pins obviously show, I should say, that the two ♂'s were bred or taken in different years, for after Sang adopted black pins, I do not think he ever used any other colour."

may have unwittingly misled him. It seems sufficient here to record the occurrence of the species in Britain. The genus is doubtless a difficult one, and the insects are sufficiently rare to make it not easy to obtain them in any number. The larvæ all feed on lichens.

DIPLODOMA, Zell.

10. *Diplodoma marginepunctella*, Steph.

Diplodoma marginepunctella. Staint. Man., vol. ii., p. 286.

„ „ Meyr. Hdbk. Brit. Lep.,
p. 777.

Mr. Sang took cases of this species at Baydales, Darlington, on 19th April, 1855, and concerning them made one of his very few notes, which runs, "cases low down on tree trunks." Meyrick says, "in a three-sided case enclosed in an outer shorter case, covered with fragments of refuse or dead insects, fungus, &c." Darlington is given as a habitat in the "Manual."

The species was first described by Stephens, who says, "of this very distinct species I have seen but a pair which are in my own collection."

OCHSENHEIMERIA, Zell.

11. *Ochsenheimeria birdella*, Curt.

Ochsenheimeria birdella. Staint. Man., vol. ii., p. 287.

„ „ Meyr. Hdbk. Brit. Lep., p. 778.

A local species, but widely distributed in England, though apparently not occurring in Scotland. The "Manual" gives "Ne," which might mean the whole area or any part of it in which Mr. Wailes collected, say from Morpeth to Castle Eden Dene or Upper Teesdale. Mr. Maling also recorded it, in the Transactions for 1875, p. 282, as "flying in the sunshine among long grass in July." No locality is given, but the specimens were probably taken in Northumberland. Mr. Bankes took a specimen at Hawthorn Tower, near Seaham Harbour, on September 1st, 1885—the only undoubted Durham capture I

know of. The larva lives in grass stems, and the insect is generally found in pasture fields.

12. *O. bisontella*, Zell.

Ochsenheimeria bisontella. Staint. Man., vol. ii., p. 288.

„ „ Meyr. Hdbk. Brit. Lep., p. 778.

Another local species, but widely distributed in England, and reaching at least the south of Scotland. It is recorded for Newcastle-on-Tyne in the "Manual," but I know no particulars. Mr. Sang took it at Wolsingham, Durham, on 19th August, 1874, and at High Force, Upper Teesdale, on 1st August, 1878. Mr. Gardner never took it there, but swept it up not uncommonly from long grass on the sea-banks near the mouth of Hezleden Dene. Although two or three pairs were *in. cop.* when so taken, Mr. Stainton insisted, nevertheless, that all the darker ones were *bisontella* and all the paler ones were *birdella*. Mr. Banks, however, now says that the *frenula* prove that every dark one is a male, while every pale one is a female, and that they are all certainly *bisontella*, with the female of which, he adds, Mr. Stainton was obviously most imperfectly acquainted, for in the "Manual," ii, 287, he gives the antennæ of *bisontella* (*i.e.* in both sexes) as "very slightly thickened with scales nearly to the middle," whereas in the female they are *strongly* thickened thus to about the middle. Two specimens previously taken in the same spot, and identified for Mr. Gardner as *vaccullella*, are pronounced by Mr. Banks to be typical *bisontella*.

13. *O. vaccullella*, F.v.R.

Ochsenheimeria vaccullella. Staint. Man., vol. ii., p. 288.

„ „ Meyr. Hdbk. Brit. Lep., p. 778.

This is given in Stainton's "Manual" as occurring at Darlington, but it is not named in Sang's diary. Meyrick says it reaches Durham, but this statement was doubtless taken from the "Manual" record, as he told me he had no special list from Durham. I give it here, then, as an insect recorded from

Darlington nearly half a century ago, and can only hope that conclusive evidence that it still occurs in Durham may soon be forthcoming.

EUPLOCAMUS, Latr.

14. *Euplocamus boleti*, Fab.

Euplocamus boleti. Staint. Man., vol. ii., p. 288.

Scardia „ Meyr. Hdbk. Brit. Lep., p. 779.

Stainton says of this species, "New Forest and Epping Forest, scarce." Meyrick says, "Hants, Essex, N. Ireland, local and scarce." I took a solitary specimen in 1862 in my own house in Olive Street, Hartlepool. This seems to be a very extraordinary occurrence, and I have no suggestion to make as to the origin of the insect. The house faced the Moor, but that was only a grassy place. The larva feeds in fungus.

TINEA, Linn.

15. *Tinea rusticella*, Hub.

Tinea rusticella. Staint. Man., vol. ii., p. 290.

Monopis „ Meyr. Hdbk. Brit. Lep., p. 785.

A common species generally, the larva feeding on refuse. It is recorded in the "Manual" both for Newcastle-on-Tyne and Darlington. Mr. Finlay found it generally distributed about Morpeth, and not uncommon; Mr. Maling also recorded it in the Transactions for 1875, p. 282. In Durham it is also common. Mr. Corder took it at Sunderland; Mr. Sang enters it in his diary as being met with at Hell Kettles, near Darlington, rather a curious place for an insect whose larva feeds on wool and other refuse. About Hartlepool it is generally common, and Mr. Gardner has taken it in Teesdale also.

16. *T. fulvimitrella*, Sodof.

Tinea fulvimitrella. Staint. Man., vol. ii., p. 290.

„ „ Meyr. Hdbk. Brit. Lep., p. 788.

Not so common as the last, but occurring generally throughout both counties. It is recorded from the Old Park, Netherwitton,

by Mr. Finlay. Mr. Sang found it at Waskerley. Mr. Gardner has reared it from fungi found in Upper Teesdale, and I have found it in Hezleden Dene also, but not very commonly.

17. *T. tapetzella*, Linn.

Tinea tapetzella. Staint. Man., vol. ii., p. 290.

Tricophaga tapetiella. Meyr. Hdbk. Brit. Lep., p. 785.

A generally common species, the larva feeding in a silken tube or gallery. It seems to prefer skins of animals or woollen cloths. Mr. Finlay found it at Meldon Park on rabbit skins rather plentifully. Mr. Maling recorded it "at rest on palings" in the Transactions for 1875, p. 282. Mr. Backhouse got it "in houses, etc.," at Darlington; Mr. Sang found it at Barnard Castle and elsewhere. About Hartlepool I have found it in houses and outside also, particularly near the rubbish accumulated at the Ropery. The "Manual" gives both Newcastle-on-Tyne and Darlington.

18. *T. arcella*, Fab.

Tinea arcella. Staint. Man., vol. ii., p. 290.

„ „ Meyr. Hdbk. Brit. Lep., p. 788.

Meyrick says "England to Durham." The most northerly record I have is that of Mr. Backhouse, who took *arcella* at Shotley in North-West Durham. It is marked in the "Manual" as occurring at Darlington, and Mr. Sang took it both at Baydales and Middleton-one-Row, near that town. Mr. Gardner says, "One specimen in Hezleden Dene." I have also taken one there at rest on a decayed tree trunk.

19. *T. picarella*, Linn.

Tinea picarella. Staint. Man., vol. ii., p. 290.

„ „ Meyr. Hdbk. Brit. Lep., p. 789.

A very local and scarce species. It is given in the "Manual" as occurring at "Manchester and Newcastle-on-Tyne," that is, somewhere in the districts around those centres. I have no idea where Mr. Wailes got his specimens, but probably on the

high land in the west of Durham. There Mr. Gardner found it by pure accident. He had gathered fungi for breeding Coleoptera, and much to his delight this rarity emerged. I do not know what the fungus was, but it grew on alder in Upper Teesdale. He has bred it several times since the first discovery. In the Ent. Ann., for 1858, p. 104, Stainton wrote "A remarkably small specimen of this pretty species was taken by Mr. Wailes in July, on the stem of a birch tree. The larva will probably be found in fungi on birches." No locality is mentioned.

20. *T. corticella*, Curt.

Tinea corticella. Staint. Man., vol. ii., p. 291.

" " Meyr. Hdbk. Brit. Lep., p. 788.

A local species of the occurrence of which I have no recent record. It is given in the "Manual" as having been met with at Newcastle-on-Tyne, and the specimens may have been taken by Mr. Wailes in North-West Durham. Mr. Backhouse took it in Kepier Wood, near Durham. Neither Mr. Finlay nor Mr. Maling appears to have met with it in Northumberland, nor Mr. Sang in Durham, the above records being more than fifty years old. The larva feeds in fungus growing on trees, but Mr. Gardner, who collects fungus to breed *picarella*, does not appear to have met with this species. I do not wish to throw any doubt on these old records, but rather to induce others who have the opportunity to try and rear *corticella*.

21. *T. parasitella*, Hub.

Tinea parasitella. Staint. Man., vol. ii., p. 291.

" " Meyr. Hdbk. Brit. Lep., p. 788.

The larva of this insect also feeds on fungi, and Stainton adds "rotten wood." The only notice of its occurrence is the "Ne" of the "Manual." Wailes collected in the Derwent Valley and in Castle Eden Dene, as well as at many places in Northumberland, but I do not know where this was taken—probably in the north-west of Durham. It is a pity that no one collects these small things there now.

22. *T. granella*, Linn.*Tinea granella*. Staint. Man., vol. ii., p. 291.

,, ,, Meyr. Hdbk. Brit. Lep., p. 789.

Very abundant in granaries and other places where corn is stored. It was recorded for Newcastle-on-Tyne by George Wailes in Stephens' Illustrations, vol. iv., p. 347. Mr. Backhouse marked it "corn lofts, etc.," and the "Manual" gives it as occurring at Darlington and as being abundant at Newcastle. These show how long it has been common. I have seen it myself on the outside of a corn warehouse on Newcastle Quay sitting in countless thousands.

23. *T. cloacella*, Haw.*Tinea cloacella*. Staint. Man., vol. ii., p. 291.

,, ,, Meyr. Hdbk. Brit. Lep., p. 789.

A common species occurring in most places. It is given in Stephens' Illustrations, iv., 347, for "Newcastle, etc.," and in the "Manual" for both Newcastle-on-Tyne and Darlington. Mr. Finlay reported it as "generally distributed and common" in the Morpeth district. Mr. Corder has met with it near Sunderland, Mr. Backhouse at Shotley, I have taken it in Hezleden Dene, and Mr. Gardner says "common everywhere." The larva feeds on fungus and rotten wood.

24. *T. albipunctella*, Haw.*Tinea albipunctella*. Staint. Man., vol. ii., p. 292.

,, ,, Meyr. Hdbk. Brit. Lep., p. 790.

The only records that I have found of the occurrence of this species are that it was taken by Mr. Sang at Seaton Carew on August 2nd, 1853, and near Darlington on 13th June, 1859. It is a local species and does not occur very far north, these records possibly representing the extent of its range, but it ought to have been met with again in the last half-century.

25. *T. confusella*, H. S.*Tinea confusella*. Staint. Ent. Ann., 1862, p. 112.

" " Meyr. Hdbk. Brit. Lep., p. 790.

A single specimen of this very local species was taken by myself at Black Hall Rocks many years ago. There is but one other known English specimen I believe, taken by Mr. Murray at Morecambe. The species, which is rare and local on the Continent, was introduced as British by the late C. G. Barrett, who met with it at Howth in the first week* in August running up stems of grass in the evening. I am told the larva feeds on fungus, or perhaps rubbish about the dead stems of *Silene inflata* (Meyrick says "probably on lichen".) There was no *Silene* within half a mile of where I took my specimen, but it is very abundant on the railway embankment not a mile away.

26. *T. fuscipunctella*, Haw.*Tinea fuscipunctella*. Staint. Man., vol. ii., p. 292.

" " Meyr. Hdbk. Brit. Lep., p. 791.

Rather a common species, but apparently not reaching the northern portion of our district; I have no record of its occurrence here except in South Durham. Mr. Gardner has taken it in Hezleden Dene; Mr. John Scott reared it at Stockton (see Ento. Weekly Int., vi., 164); and Mr. Backhouse found it in houses at Darlington. It is marked "Da.!!" in the "Manual" signifying its abundance there.

27. *T. misella*, Zell.*Tinea misella*. Staint. Man., vol. ii., p. 292.

" " Meyr. Hdbk. Brit. Lep., p. 790.

Meyrick gives Yorkshire as the most northern habitat of this insect, but it occurs in South Durham, if no further north. In June, 1876, Mr. Sang took it both in Castle Eden Dene and at Black Halls. No other collector appears to have met with it except Mr. Gardner, who found it in stables in Hartlepool. The larva is said to feed upon "pressed skins, dried plant

* I have no idea who supplied the author with this information.—E. R. B.

stems, fungi, etc.," so it is evidently not very particular in its food.

28. *T. pellionella*, Linn.

Tinea pellionella. Staint. Man., vol. ii., p. 292.

" " Meyr. Hdbk. Brit. Lep., p. 791.

A house insect, generally too common. It is recorded in the "Manual" as appearing regularly at both Newcastle-on-Tyne and Darlington. Mr. Stainton adds, at the end of the localities, "no doubt everywhere." The larva feeds in a case on cloth, feathers, wool, and such like substances, and the moth is of very general occurrence in houses. Mr. Gardner marks it as being taken in Hezleden Dene.

29. *T. pallescentella*, Stainton.

Tinea pallescentella. Staint. Man., vol. ii., p. 293.

" " Meyr. Hdbk. Brit. Lep., p. 791.

Meyrick limits the northerly range of this species to Durham, but Mr. Maling recorded it as a Northumberland insect in the Transactions for 1875. It was also noted for Northumberland by the late Mr. Patterson. It is very common at Hartlepool, and I have found it so regularly in timber yards, both here and at West Hartlepool, that the larva must eat sawdust among other refuse. It may always be disturbed among stacks of sawn timber, particularly towards the bottom of the piles. Mr. Gardner also makes note of its abundance in timber yards. It is not uncommon in houses also among refuse.

30. *T. lapella*, Hub.

Tinea lapella. Staint. Man., vol. ii., p. 293.

" " Meyr. Hdbk. Brit. Lep., p. 791.

Of this insect Meyrick says, "England to Lancashire," as though it did not occur in the north-east of England. It occurs, however, in both our counties, though perhaps not very commonly. Mr. Finlay recorded it as "not plentiful" in Meldon Park. The "Manual" gives Darlington as one of the

places where it occurs regularly. It is found also in Hezleden Dene, and Mr. Gardner has bred it from birds' nests collected there. This is the *Tinea ganomella* of Doubleday's list.

31. *T. biselliella*, Hümmel.

Tinea biselliella. Staint. Man., vol. ii., p. 293.

Tineola „ Meyr. Hdbk. Brit. Lep., p. 782.

This also is a house insect, much commoner than either *pellionella* or *pallescentella*, the larva living in the lining of chairs and sofas on the hair with which they are stuffed, or on wool, cloth, etc. The "Manual" says it is abundant both at Newcastle-on-Tyne and Darlington, and I have no doubt it is equally so everywhere; it certainly is at Hartlepool. Mr. Backhouse has marked it as occurring in Hoffal Wood, near Durham, if I am correct in assuming that his *T. destructor* is this species.

32. *T. semifulvella*, Haw.

Tinea semifulvella. Staint. Man., vol. ii., p. 294.

„ „ Meyr. Hdbk. Brit. Lep., p. 792.

This pretty species is well distributed over both counties. Mr. Finlay met with it in most parts of his district, but never very commonly. In Durham Mr. Backhouse took it at St. Johns, in the west of the county. It is recorded from Darlington in the "Manual," and Mr. Sang took it on the railway side there in 1861. It is also not uncommon in Hezleden Dene. The larva feeds "on wool, etc., in nests of birds."

33. *T. bistrigella*, Haw.

Tinea bistrigella. Staint. Man., vol. ii., p. 295.

Phylloporia „ Meyr. Hdbk. Brit. Lep., p. 783.

The larva of this insect feeds in the leaves of birch, and though said to be local, appears well distributed in these counties. Mr. Finlay found it not at all uncommon among birch around Morpeth. Mr. Sang got it at Wolsingham and in Castle Eden Dene in May, June, and October. He also found

pupæ there on 3rd March, 1884, and subsequently. It occurs in Hezleden Dene, and Mr. Gardner has also taken it in Upper Teesdale.

LAMPRONIA, Steph.

34. *Lampronia quadripunctella*, Steph.

Lampronia quadripunctella. Staint. Man., vol. ii., p. 295.
 " " Meyr. Hdbk. Brit. Lep.,
 p. 781.

Rather a common species, but not recorded for Northumberland, which may be beyond its range on the East Coast. Mr. Sang took it at Wolsingham, and all around Darlington, which is given in the "Manual" as a place where it is abundant. Mr. Gardner took it beside the ropery at Hartlepool. It also occurs in Hezleden Dene, though not very commonly. The larva feeds in the shoots of rose, and the imago flies in June.

35. *L. luzella*, Hub.

Lampronia luzella. Staint. Man., vol. ii., p. 295.
 " " Meyr. Hdbk. Brit. Lep., p. 781.

This species is not recorded from Northumberland, and Meyrick limits its known northward range to Cumberland. It is given in the "Manual" as found at Castle Eden Dene, and Mr. Sang took it in 1869 near Darlington (see E.M.M., vi., p. 170). It also occurs in Hezleden Dene, but not very commonly. The larva appears to be unknown.

36. *L. prælatella*, W.V.

Lampronia prælatella. Staint. Man., vol. ii., p. 296.
 " " Meyr. Hdbk. Brit. Lep., p. 781.

More widely spread both in Britain and in these counties than the two preceding species. It is given in the "Manual" as occurring regularly both at Newcastle-on-Tyne and Darlington. Mr. Finlay found it "local but plentiful," in the Old Park, Netherwitton. It occurs in Castle Eden Dene and in Hezleden Dene, commonly in certain suitable places, but not everywhere. Mr. Gardner reports it as common in Upper

Teesdale. The larva feeds in a case from September to May on wild strawberry. It also has been found on *Spiræa ulmaria*, *Geum urbanum*, *Rubus* and *Alchemilla vulgaris*, but it has not yet been observed on all these plants in Britain.

37. *L. rubiella*, Bjerk.

Lampronia rubiella. Staint. Man., vol. ii., p. 296.

„ „ Meyr. Hdbk. Brit. Lep., p. 781.

The commonest of the genus, occurring wherever the raspberry grows wild, and also plentiful in gardens among the cultivated plants. The "Manual" gives it as occurring regularly at Newcastle-on-Tyne, and abundantly at Darlington. Mr. Maling reported it in the Transactions for 1875, as "flying among wild raspberry plants in June" (p. 282). Mr. Backhouse found it in Kepier Wood in Durham at the end of May, and at Shotley. Mr. Gardner has taken it at Hutton Henry among cultivated raspberries in Mr. Barron's garden. It is also to be found at the reservoir near Benridge among wild raspberries, and in Teesdale.

TEICHOBIA, H. S.

38. *Teichobia verhuellella*, Stainton.

Teichobia verhuellella. Staint. Man., vol. ii., p. 296.

„ „ Meyr. Hdbk. Brit. Lep., p. 777.

Mr. Sang is the only collector who has met with this insect here. He took it in Castle Eden Dene and at Black Hall Rocks on 11th June, 1858. He also enters in his diary that he found larvæ at Castle Eden on 4th June, 1865, apparently a late date. He does not note on what he found the larvæ. It is known to burrow among the fructification of *Asplenium*, *Scolopendrium*, and *Ceterach*. The only one of these at all common is *Scolopendrium vulgare*, which is plentiful in the dens. *Asplenium marinum* occurs sparingly at Black Halls. It is very small and stunted there, but as the larva has been found freely on *Asplenium ruta-muraria*, the size of the plant does not seem to matter.

INCURVARIA, Haw.

39. *Incurvaria muscalella*, Fab.

Incurvaria muscalella. Staint. Man., vol. ii., p. 297.

„ „ Meyr. Hdbk. Brit. Lep., p. 780.

Generally a common species, and given as abundant both at Newcastle-on-Tyne and Darlington in Stainton's "Manual." Mr. Gardner tells me it is also very common in Upper Teesdale. The larva mines hawthorn leaves when young, and afterwards lives in a case among the fallen leaves.

40. *I. pectinea*, Fab.

Incurvaria pectinea. Staint. Man., vol. ii., p. 297.

„ „ Meyr. Hdbk. Brit. Lep., p. 780.

Mr. Finlay found this species at Needless Hall Moor, but it was not very plentiful. The "Manual," however, gives it as abundant at Newcastle-on-Tyne. In Durham it is only recorded from Teesdale by Mr. Gardner, who found it not very common there.

41. *I. canariella*, Staint.

Incurvaria canariella. Staint. Ent. Ann., 1872, p. 122.

Lampronia pubicornis. Meyr. Hdbk. Brit. Lep., p. 781

(partim).

This species was not known to science until long after the publication of the "Manual." Mr. Gardner is the only collector who has met with it in either county. He found it in early June, not uncommon among *Rosa spinosissima*, at the low end of Hezleden Dene, and on the sand banks on either side. Mr. Banks informs me that although Mr. Meyrick in his "Handbook," and Dr. Rebel, who in Staudinger and Rebel's "Catalog" evidently copied Meyrick, have treated *canariella*, Stn., as identical with *pubicornis*, Haw., these two species are totally distinct.

NEMOPHORA, Hub.

42. *Nemophora swammerdammella*, Linn.*Nemophora swammerdammella*. Staint. Man., vol. ii., p. 298." " Meyr. Hdbk. Brit. Lep.,
p. 793.

Strange to say I have no record of the occurrence of this common insect in Durham, beyond an old note of the late W. Backhouse that he had taken it at Shotley. It is given in the "Manual" as occurring regularly at Newcastle-on-Tyne; Mr. Finlay reported it as generally distributed in plantations around Morpeth, and Mr. Maling made exactly the same note, "generally distributed in plantations," in the Transactions for 1875, p. 282.

43. *N. schwarziella*, Zell.*Nemophora schwarziella*. Staint. Man., vol. ii., p. 298.

" " Meyr. Hdbk. Brit. Lep., p. 793.

Apparently commoner than the last, or more frequently recorded. It is given in the "Manual" as occurring regularly both at Newcastle-on-Tyne and at Darlington. In Northumberland Mr. Finlay found it generally distributed in plantations around Morpeth; Mr. Maling also recorded it in the Transactions for 1875, p. 282. In Durham Mr. Backhouse took it at St. John's; Mr. Sang got it at Wolsingham in 1872; I found it in Castle Eden Dene in 1895; and Mr. Gardner has found it commonly in Hezleden Dene.

ADELA, Latr.

44. *Adela fibulella*, W.V.*Adela fibulella*. Staint. Man., vol. ii., p. 299.

" " Meyr. Hdbk. Brit. Lep., p. 794.

Occurring regularly at Newcastle-on-Tyne and Darlington, according to the "Manual." Yet I have no other record from Northumberland, though it is certain to occur elsewhere in that county. In Durham Mr. Sang took it at Castle Eden Dene as

long ago as 1853, and also near Darlington. At Hartlepool it is not uncommon on the railway side, and Mr. Gardner, who has found the cases in early spring, says "in most places where *Veronica chamædrys* grows." In Germany the larva has also been found on *Veronica officinalis*, though not in Britain.

45. *A. rufimitrella*, Scop.

Adela rufimitrella. Staint. Man., vol. ii., p. 299.

" " Meyr. Hdbk. Brit. Lep., p. 794.

The "Manual" gives this species as occurring both at Newcastle-on-Tyne and Darlington. Meyrick on the other hand limits its northward range to Yorkshire. The only recorded localities I have been able to find are all close to the river Tees, the southern boundary of the county of Durham. Mr. Sang met with it in Dinsdale Wood in June, 1857; on the railway bank at Croft in May, 1859, and at various dates in May and June from 1872 to 1880 at Hell Kettles. I do not think Mr. Wailes, who supplied the Newcastle list for the "Manual," ever collected on the Tees-side except in Upper Teesdale, and it is exceedingly desirable that the place where he found *rufimitrella* be rediscovered.

46. *A. viridella*, Scop.

Adela viridella. Staint. Man., vol. ii., p. 300.

" " Meyr. Hdbk. Brit. Lep., p. 795.

Viridella is given in the "Manual" as being abundant at Newcastle-on-Tyne, and as occurring at Darlington, though not in abundance. Mr. Finlay found it generally distributed around Morpeth. In Hezleden Dene it is very common,* and Mr. Backhouse took it at Darlington. I have no further records, but think it will be found in most woods and denes.

* Mr. Gardner, on the contrary, does not believe that *A. viridella* occurs at all in Hezleden Dene, for he has collected assiduously there without ever having met with it.—E. R. B.

47. *A. cuprella*, Thunb.*Adela cuprella*. Staint. Man., vol. ii., p. 300.

" " Meyr. Hdbk. Brit. Lep., p. 795.

This extremely local species is given in the "Manual" as occurring both at Newcastle-on-Tyne and at Darlington. I have no other knowledge of it being taken in either county, nor can I confirm the "Manual" records. It is very desirable that it should be met with again. The insect is on the wing at the end of April, and Meyrick says it frequents the flowers of *Salix caprea*.

NEMOTOIS, Hub.

48. *Nemotois cupriacellus*, Hub.*Nemotois cupriacellus*. Staint. Man., vol. ii., p. 301.

" " Meyr. Hdbk. Brit. Lep., p. 796.

The only record of the capture of this species is an entry in Mr. Sang's diary that he took it near Darlington on 22nd July, 1874.

MICROPTERYGIDÆ.

MICROPTERYX, Hub.

49. *Micropteryx calthella*, Linn.*Micropteryx calthella*. Staint. Man., vol. ii., p. 302.*Eriocephala* " Meyr. Hdbk. Brit. Lep., p. 806.

A very common insect. It is recorded in the "Manual" as being abundant both at Newcastle-on-Tyne and at Darlington. Mr. Finlay found it in plenty at the Old Park, Netherwitton; Mr. Backhouse got it at Shotley, and in Hoffall Wood near Durham; I have taken it at Black Hall Rocks, and Mr. Gardner says "very common on the sea banks and in Hezleden Dene. I have seen it in myriads on the flowers of the sand rose."

50. *M. seppella*, Fab.*Micropteryx seppella*. Staint. Man., vol. ii., p. 303.*Eriocephala aruncella*. Meyr. Hdbk. Brit. Lep., p. 806
(partim).

Stainton gives *seppella* as distinct from *aruncella*, but

Meyrick says "the variety of the ♂ with a posterior costal mark has long been regarded as a distinct species under the name of *seppella*; but the two forms are connected by gradual transitions." Mr. Banks also believes that *seppella*, Fabr., is merely a variety of *aruncella*, Scop. I use the name *seppella* as Stainton did so, and also because the form so-called appears to be the only one known in this district. The "Manual" marks it as occurring regularly both at Newcastle-on-Tyne and at Darlington. Mr. Sang took it at Castle Eden Dene as long ago as 1853; on the railway banks, Darlington, in 1872, and at Hartlepool in 1889; Mr. Backhouse took it at St. John's; and Mr. Gardner has taken it on the Hartlepool sand banks, especially common on the spiny rose.

51. *M. allionella*, Fab.

Micropteryx allionella. Staint. Man., vol. ii., p. 303.

Eriocephala aureatella. Meyr. Hdbk. Brit. Lep., p. 806.

This is given in the "Manual" as occurring at Newcastle-on-Tyne regularly and at Darlington. Mr. Finlay found it scarce at Longwitton Garden House. Mr. Sang took it at Wolsingham in June, 1877 and 1878. I have no other records than these. It is a "local" species, generally occurring in woods.

52. *M. thunbergella*, Fab.

Micropteryx thunbergella. Staint. Man., vol. ii., p. 303.

Eriocephala ,, Meyr. Hdbk. Brit. Lep., p. 806.

Generally a common species in woods. I have, however, no records from our district but those of the "Manual," which gives it as occurring regularly both at Newcastle-on-Tyne and Darlington.

53. *M. purpurella*, Haw.

Micropteryx purpurella. Staint. Man., vol. ii., p. 303.

,, ,, Meyr. Hdbk. Brit. Lep., p. 803.

No doubt a common species, but the only record I have found is the "Manual" note of its regular occurrence at Newcastle-

on-Tyne. The larva feeds in birch leaves, causing a blotch in them.

54. *M. salopiella*, Staint.

Micropteryx salopiella. Staint. Man., vol. ii., p. 303.

„ „ Meyr. Hdbk. Brit. Lep., p. 803.

Rather a local species, and not extending very far north. Our only record is that Mr. Sang took larvæ of it at High Force in August, 1877. Like the last it makes a blotch in birch leaves.

55. *M. semipurpurella*, Steph.

Micropteryx semipurpurella. Staint. Man., vol. ii., p. 304.

„ „ Meyr. Hdbk. Brit. Lep., p. 804.

A common species, notwithstanding the paucity of records. It is marked in the "Manual" as occurring regularly at Newcastle-on-Tyne. It is common in Hezleden Dene, and Mr. Gardner tells me it is also common in Upper Teesdale.

56. *M. sangii*, Wood.

Micropteryx sangii. Meyr. Hdbk. Brit. Lep., p. 804.

Discovered since the publication of the "Manual," and only taken here by Mr. Sang, after whom it is named. He found larvæ on the railway banks near Darlington on 7th June, 1866. Meyrick, however, appears to doubt its occurrence in Durham, giving, as its habitat, "South of England to Herts and Hereford," and marking Durham with a "?."

57. *M. unimaculella*, Zett.

Micropteryx unimaculella. Staint. Man., vol. ii., p. 304.

„ „ Meyr. Hdbk. Brit. Lep., p. 804.

Another insect generally common, but scarcely recorded here. The "Manual" gives it as of regular occurrence at Newcastle-on-Tyne, and in Durham Mr. Gardner has found it in Upper Teesdale. I know of no other notices of its appearance in these counties.

58. *M. sparmanella*, Bosc.*Micropteryx sparmanella*. Staint. Man., vol. ii., p. 304.

,, ,, Meyr. Hdbk. Brit. Lep., p. 803.

Not recorded from Northumberland, and in Durham only from Upper Teesdale. Mr. Sang met with it at High Force on 1st August,* 1878, and Mr. Gardner has taken the moth at Sharnbery Gill in Teesdale.

59. *Micropteryx subpurpurella*, Haw.*Micropteryx subpurpurella*. Staint. Man., vol. ii., p. 304.

,, ,, Meyr. Hdbk. Brit. Lep., p. 805.

A very abundant species, apparently occurring freely everywhere. The oldest record I have seen is in Stephens' Illustrations (Haust., vol. iv., p. 359), where it is given, on the authority of the late George Wailes, as taken at Newcastle-on-Tyne. The "Manual" also gives it as of regular occurrence both at Newcastle-on-Tyne and Darlington. Mr. Finlay found it "not uncommonly" in the Old Park, Nether-witton; Mr. Backhouse met with it in Hoffall Wood, near Durham; Mr. Sang got it near Darlington and at Eggleston. Mr. Gardner took it in Hezleden Dene, where it is common, as well as in Upper Teesdale.

SWAMMERDAMIA, Hb.

60. *Swammerdamia apicella*, Don.*Swammerdamia apicella*. Staint. Man., vol. ii., p. 305.,, *combinella*. Meyr. Hdbk. Brit. Lep., p. 769.

Generally a common species. It is recorded as occurring regularly at Newcastle-on-Tyne and Darlington in Stainton's "Manual." Mr. Finlay found it commonly on plum trees in Meldon Park. At Darlington Mr. Sang took it on the railway side on 17th June, 1872, and Mr. Thomas Laws bred it from

* The species being single-brooded, and the moth out in April and May, this date doubtless refers to the finding of the larva.—E. R. B.

a larva found there on plum (Ent. Weekly Intell., vol. ii., p. 77). Mr. Gardner has also taken it in Hezleden Dene, and the late Mr. W. Backhouse met with it at St. John's.

61. *S. oxyacanthella*, Dup.

Swammerdamia cæsiella. Staint. Man., vol. ii., p. 306
(partim).

„ *lutarea*. Meyr. Hdbk. Brit. Lep., p. 769
(partim).

This name does not appear in the "Manual," but Mr. Bankes tells me that the hawthorn-eating insect to which it belongs, and the closely allied blackthorn-eating species *S. spiniella*, Hub., are confused together there under the name "*cæsiella*," though the statement "Larva on hawthorn" refers to *oxyacanthella* only. I am, however, unable to tell to which of the two species the "Manual" entries, indicating abundance at Darlington and Newcastle-on-Tyne, are really applicable, though it is quite likely that this and *spiniella*, Hub., are plentiful in both localities.

62. *S. spiniella*, Hub.

Swammerdamia cæsiella. Staint. Man., vol. ii., p. 306
(partim).

„ „ Meyr. Hdbk. Brit. Lep., p. 769
(partim).

This species was, owing to imperfect knowledge, included with the last in Stainton's notice of *S. cæsiella* in the "Manual," and as mentioned above, it may well be that this, as well as the preceding, is abundant at Darlington and Newcastle-on-Tyne. They are both common insects, and this is certainly the insect Mr. Finlay found freely in the Old Park, Netherwitton.

62a. *S. griseo-capitella*, Stain.

Swammerdamia griseo-capitella. Staint. Man., vol. ii.,
p. 306.

„ *heroldella*. Meyr. Hdbk. Brit. Lep.,
p. 769.

A double-brooded species, on the wing according to Stainton in May and August, but here occurring in June and September.

The "Manual" gives it as of regular appearance at both Newcastle-on-Tyne and Darlington. Mr. Sang took it at Wolsingham on 13th June, 1872, 21st June, 1877, and 28th September, 1881. Mr. Gardner has taken it in Hezleden Dene.

63. *S. lutarea*, Haw.

Swammerdamia lutarea. Staint. Man., vol. ii., p. 306.

" " Meyr. Hdbk. Brit. Lep., p. 769
(partim).

A comparatively scarce insect here as elsewhere, whose larva feeds on mountain-ash. It is given in the "Manual" as occurring at Darlington. Mr. Sang only enters it in his diary as being taken at Whessoe Fox Cover.

64. *S. pyrella*, Vill.

Swammerdamia pyrella. Staint. Man., vol. ii., p. 306.

" " Meyr. Hdbk. Brit. Lep., p. 770.

A generally common species. Marked in the "Manual" as being abundant at Newcastle-on-Tyne. Mr. Finlay found it very plentiful at Meldon Park in June. Though it is not marked in the "Manual" as occurring at Darlington, Mr. Sang found the larvæ there in Grange Road. Mr. Backhouse has taken it in Weardale at St. John's, and Mr. Gardner has met with it in Hezleden Dene.

HYPONOMEUTA, Latr.

65. *Hyponomeuta padellus*, Linn.

Hyponomeuta padellus. Staint. Man., vol. ii., p. 308.

Yponomeuta " Meyr. Hdbk. Brit. Lep., p. 696.

A common species in England, but apparently not extending to Scotland. The "Manual" marks it as occurring regularly both at Newcastle-on-Tyne and Darlington. It is common in Weardale, and Mr. Backhouse took it at Shotley; it is plentiful too near Stockton-on-Tees and in Teesdale. We do not find the species about Hartlepool, nor have I any record of its occurrence near the coast.

66. *H. evonymellus*,* Scop.*Hyponomeuta evonymellus*. Staint. Man., vol. ii., p. 308.*Yponomeuta cognatellus*. Meyr. Hdbk. Brit. Lep., p. 696.

Generally common, but, like the last, apparently not reaching Scotland. It is not marked in the "Manual" from our district, nor have I found any record for Northumberland, the most northern locality being Chopwell, where Mr. Patterson took it. Mr. Sang met with it at Hartburn, Mr. Backhouse got it at Darlington, and Mr. Gardner found it in Hezleden Dene. It formerly occurred in Hart Lane, still nearer Hartlepool, where there was a solitary spindle tree in the hedge. There the larva could always be found in large numbers, but I have not seen it for many years.

67. *H. padi*,* Zell.*Hyponomeuta padi*. Staint. Man., vol. ii., p. 308.*Yponomeuta evonymellus*. Meyr. Hdbk. Brit. Lep., p. 695.

The "Manual" gives this species as occurring abundantly at Newcastle-on-Tyne, and Mr. Finlay found it generally common among bird-cherry around Morpeth, which is probably the most northern known station for the species. Mr. Backhouse found it at Shotley, and Mr. Gardner has also found it in Weardale, as well as in Upper Teesdale. It does not occur near Hartlepool, but other localities than these will probably yet be found. I have seen it abundantly just south of the Tees on the Yarm road. Possibly it avoids the coast.

ANESYCHIA, Steph.

68. *Anesychia funerella*, Fab.*Anesychia funerella*. Staint. Man., vol. ii., p. 309.*Psecadia* ,, Meyr. Hdbk. Brit. Lep., p. 631.

A very local species, only recorded here from Barnard Castle.

* Care must be taken not to confuse these species. The oldest known name of No. 66, which feeds on *Euonymus*, is *cognatellus*, Hb., while that of No. 67, which feeds on *Prunus padus*, is *evonymellus*, Lin., but the author's invariable rule throughout this Catalogue has been to adopt the names used in Stainton's "Manual."—E. R. B.

Meyrick gives its northern distribution as "York to Cumberland"; and Barnard Castle, in West Durham, is not far from Cumberland. I have no other record but that of Mr. Sang, who took it there on 2nd June, 1865.

PRAYS, Hub.

69. *Prays curtisellus*, Don.

Prays curtisellus. Staint. Man., vol. ii., p. 310.

" " Meyr. Hdbk. Brit. Lep., p. 694.

A common species, very generally distributed. The "Manual" gives both Newcastle-on-Tyne and Darlington as places where it occurs regularly. Mr. Finlay found it scarce to the west of Netherwitton; Mr. Maling says, "In June, at rest on palings. Very variable, some specimens nearly black. Found the larvæ feeding in young shoots of ash in May" (Trans., 1875, p. 282). Mr. Corder took it near Sunderland. In Hezleden Dene both the type and the dark variety (var. *rustica*, Haw.) are very common. There it sits on tree trunks. Mr. Backhouse also records it from Shotley.

PLUTELLA, Schrk.

70. *Plutella cruciferarum*, Zell.

Plutella cruciferarum. Staint. Man., vol. ii, p. 312.

" " Meyr. Hdbk. Brit. Lep., p. 702.

This is recognised as one of the more injurious of the Lepidoptera, though I am doubtful if it does as much harm as it is blamed for. It is always common everywhere; and occasionally, from immigration or other cause, it appears in enormous numbers. The eggs are laid on cruciferous plants, especially on the turnip, and the swarms of young larvæ devour the leaves of the springing turnips. But the turnip is a quick grower, and soon recovers the loss of the earlier leaves, though it must doubtless be more or less thrown back. A few years ago this moth seemed to come across the sea in unusually large numbers. The swarm appeared first on the sea coast, and gradually spread inland, missing certain sheltered places as it went on. This year, 1905,

it has again been unusually abundant on the coast, and its appearance in great numbers in the streets of Hartlepool appears to me to point only to immigration.* It is called the "Turnip Moth," from its habit of attacking the turnip, then in its early stage; and the "Diamond-back Moth," from the row of pale diamond-shaped marks down the back of the perfect insect when the wings are closed.

71. *P. porrectella*, Linn.

Plutella porrectella. Staint. Man., vol. ii., p. 312.

" " Meyr. Hdbk. Brit. Lep., p. 701.

The "Manual" gives this as abundant at Newcastle-on-Tyne, and occurring regularly at Darlington. It is doubtless common everywhere in gardens where the food plant, *Hesperis matronalis*, is grown. Mr. Finlay found it in plenty in the gardens at Meldon Park. Mr. Backhouse records it in gardens at Newcastle-on-Tyne and at Shotley, and Mr. Gardner also says it is common in gardens among *Hesperis matronalis*, near Hezleden Dene.

72. *P. annulatella*, Curt.

Plutella annulatella. Staint. Man., vol. ii., p. 312.

" " Meyr. Hdbk. Brit. Lep., p. 702.

Mr. Wailes reported this as being abundant at Newcastle-on-Tyne in the Entomologists' Weekly Intelligencer, vol. i., p. 187. It is also given in the "Manual" as being abundant there. Mr. Sang found it at Hartlepool in 1879, but neither Mr. Gardner nor I have taken it. I know of no other localities. It appears to be an insect of peculiar distribution. Stainton gives Newcastle-on-Tyne, Scarborough, Belfast, and the Isle of Portland. Meyrick says "Devon, Dorset, Denbigh, and York to the Orkneys, N. and E. Ireland."

* In occasional years this species suddenly appears in S. England in such immense and unwonted numbers that immigration seems to be the only rational explanation of the phenomenon. Nor can I recall any such invasion without similar ones, at about the same time, having been noticed in the cases of some other migratory species, of which *Plusia gamma* is one of the best known.—E. R. B.

73. *P. dalella*, Staint.*Plutella dalella*. Staint. Man., vol. ii., p. 312.

,, ,, Meyr. Hdbk. Brit. Lep., p. 702.

An insect rather of northern habitat. It is given in the "Manual" as abundant at Newcastle-on-Tyne. Mr. Sang took it at Waskerley, Durham. The larva feeds on *Arabis*, which is common enough in most places.

CEROSTOMA, Latr.

74. *Cerostoma sequella*, Cl.*Cerostoma sequella*. Staint. Man., vol. ii., p. 313.

,, ,, Meyr. Hdbk. Brit. Lep., p. 701.

This is recorded in the "Manual" as occurring regularly at Darlington, near which town Mr. Sang took it almost every year from 1854 to 1871; he also captured it at Eggleston in Upper Teesdale in September, 1879. Mr. Gardner has also met with it in Teesdale, but reports it as very scarce. It is a local species and not very common.

75. *C. vittella*, Linn.*Cerostoma vittella*. Staint. Man., vol. ii., p. 313.

,, ,, Meyr. Hdbk. Brit. Lep., p. 701.

The "Manual" gives this insect as occurring at Newcastle-on-Tyne, and abundant at Darlington. Mr. Finlay found it not uncommonly at Meldon Park near Morpeth. Mr. Sang took it near Darlington at various dates from 1854 to 1881. Mr. Gardner reports it as very common in Hezleden Dene, where I have taken it myself.

76. *C. radiatella*, Don.*Cerostoma radiatella*. Staint. Man., vol. ii., p. 313.

,, ,, Meyr. Hdbk. Brit. Lep., p. 700.

A very common species. It is given in the "Manual" as abundant both at Newcastle-on-Tyne and Darlington. Mr. Finlay found it generally distributed and common at the end of

August and in September. Mr. Maling too recorded it in the Transactions for 1875, p. 282. In Durham I have no doubt it is well distributed and common in most places, but the only records I have are that Mr. Gardner found it freely both in Castle Eden Dene and in Hezleden Dene, and that Mr. Backhouse got it at Shotley.

77. *C. costella*, Fab.

Cerostoma costella. Staint. Man., vol. ii., p. 314.

„ „ Meyr. Hdbk. Brit. Lep., p. 700.

Generally well distributed and common. It is given in the "Manual" as being abundant at Newcastle-on-Tyne, and occurring regularly at Darlington. Mr. Finlay found it all over the Morpeth district, but never very common. Mr. Maling also recorded it in the Transactions for 1875, p. 282. In Durham Mr. Backhouse took it at Shotley, and Mr. Sang at Castle Eden Dene, as far back as 1854. Mr. Gardner has subsequently taken it there as well as in Hezleden Dene. He found it common in both places.

78. *C. lucella*, Fab.

Cerostoma lucella. Staint. Man., vol. ii., p. 314.

„ „ Meyr. Hdbk. Brit. Lep., p. 700.

A very local and rather scarce species. No one appears to have taken it in these counties but Mr. Sang, who got it at Elders, near Darlington, in 1869, 1870, and 1871, according to his diary. In the Entomologist's Monthly Magazine, vol. vi., p. 170, he records the capture of this insect and says that when beaten out of young oaks "by day they generally drop straight down, but not towards evening."

79. *C. scabrella*, Linn.

Cerostoma scabrella. Staint. Man., vol. ii., p. 314.

„ „ Meyr. Hdbk. Brit. Lep., p. 699.

A very local species, and apparently only occurring here in the neighbourhood of Darlington. It is given in the "Manual"

as being taken there commonly, and Mr. Sang's diary has various entries of its occurrence in August from 1853 down to 1878. No one else appears to have met with the species.

80. *C. nemorella*, Linn.

Cerostoma nemorella. Staint. Man., vol. ii., p. 315.

„ „ Meyr. Hdbk. Brit. Lep., p. 699.

Another rather local species, but fairly well distributed here. The earliest notice of its occurrence that I have seen is in Stephens' Illustrations, vol. 4, p. 17, where Mr. Wailes records it from Newcastle and Meldon Park. Mr. Finlay reports it as being scarce in Coal Law Wood. Mr. Maling recorded it in the Transactions for 1875 as beaten from honeysuckle. Mr. Sang took it at Castle Eden at dates from 1854 to 1859, and Mr. Gardner says it occurs in Hezleden Dene, but is not common there. The "Manual" gives it as occurring at Darlington, but if the insects referred to are Mr. Sang's captures they were obtained at Castle Eden.

81. *C. xylostella*, Linn.

Cerostoma xylostella. Staint. Man., vol. ii., p. 315.

„ „ Meyr. Hdbk. Brit. Lep., p. 698.

A common and generally distributed species. The "Manual" gives it as occurring commonly at Newcastle-on-Tyne, and abundant at Darlington. Mr. Finlay found it over all his district, and always common. Mr. Maling recorded it in the Transactions for 1875, p. 282, as beaten from honeysuckle in August. Mr. Backhouse took it at Shotley, St. John's, etc. It is also very common in Castle Eden and Hezleden Dene.

ORTHOTÆLIA, Steph.

82. *Orthotælia sparganella*, Thunb.

Orthotalia sparganella. Staint. Man., vol. ii., p. 318.

„ „ Meyr. Hdbk. Brit. Lep., p. 697.

A local species, the larva of which feeds in the leaves and stems of water plants, *Sparganium*, *Iris*, etc. The only record

from this district is that Mr. Sang took it at Hell Kettles, near Darlington, in August, 1881. He took one on the 6th and four more subsequently, so that it was evidently a very scarce insect there. Mr. Gardner took one at a brick pond near Hartlepool some years ago. This pond is now filled up, but there are plants of *Sparganium* in some of the ditches near.

PHIBALOCERA, Steph.

83. *Phibalocera quercana*, Fab.

Phibalocera quercana. Staint. Man., vol. ii., p. 319.

Carcina „ Meyr. Hdbk. Brit. Lep., p. 613.

A very common species generally, yet I have had no record sent to me of its occurrence here, and the only notice of it in our district is in the "Manual," where it is marked as occurring at Newcastle-on-Tyne, and regularly at Darlington. I do not think it is found in Scotland, yet it is singular that no one appears to have met with it during the last half century. It may be that it has left the district, but this seems very unlikely. Can no one find it now? The larva feeds on oak, beech, etc., and the moth should be beaten from these.

EXÆRETIA, Stain.

84. *Exæretia allisella*, Stain.

Exæretia allisella. Staint. Man., vol. ii., p. 320.

„ „ Meyr. Hdbk. Brit. Lep., p. 618.

A very local species, and, so far, not taken in Northumberland. Indeed I have but two localities in Durham, though others are sure to be found when this group is collected. The insect is not uncommon on the railway side, Hartlepool, and Mr. Gardner tells me it also occurs on the banks of the Wear at Chester-le-Street. The larva feeds in stems and roots of *Artemisia*, and I expect where that is plentiful the insect will be found.

DEPRESSARIA, Haw.

85. *Depressaria costosa*, Haw.*Depressaria costosa*. Staint. Man., vol. ii., p. 320.

" " Meyr. Hdbk. Brit. Lep., p. 620.

Generally distributed and common. It is given in the "Manual" as occurring at Newcastle-on-Tyne, and regularly so at Darlington. Mr. Finlay found it in all parts of his district, and not uncommon. Mr. Maling recorded it in the Transactions for 1875, p. 282. Mr. Sang found it at Castle Eden as well as Darlington. Around Hartlepool it is tolerably common. Mr. Corder has also taken it at Sunderland. The larva feeds on furze, broom and kindred plants.

86. *D. liturella*, W.V.*Depressaria liturella*. Staint. Man., vol. ii., p. 320.

" " Meyr. Hdbk. Brit. Lep., p. 621.

The earliest record of this insect is in Stephens' Illustrations, vol. iv., p. 200, where Mr. Wailes recorded it from Gibside under the name of *sparrmanniana*. Then the "Manual" reports it as occurring regularly both at Newcastle-on-Tyne and Darlington. Subsequently Mr. Finlay found it generally distributed in the Morpeth district, and not at all uncommon. Mr. Maling also recorded it in the Transactions for 1875, p. 282. In Durham, besides Mr. Wailes' Gibside record, Mr. Backhouse got it at Shotley. Mr. Sang found it at Hell Kettles, and we have bred it at Hartlepool. The larva rolls up the leaves of knapweed.

87. *D. umbellana*, Steph.*Depressaria umbellana*. Staint. Man., vol. ii., p. 321.

" " Meyr. Hdbk. Brit. Lep., p. 621.

Another furze-eating species, but decidedly rarer than *costosa*. It is recorded for Darlington in the "Manual," and Mr. Finlay found it at Meldon Park, though always rare. Mr. Sang took it at Waskerley and at Castle Eden Dene. Mr. Gardner also has taken it at Hartlepool and bred it freely from furze.

88. *D. assimilella*, Tr.*Depressaria assimilella*. Staint. Man., vol. ii., p. 321.

,, ,, Meyr. Hdbk. Brit. Lep., p. 621.

I have only one record of the species beyond that of the "Manual," which is that it is abundant at Newcastle-on-Tyne, and occurs regularly at Darlington. Mr. Backhouse found it at Shotley and at St. John's.

89. *D. nanatella*, Stain.*Depressaria nanatella*. Staint. Man., vol. ii., p. 321.

,, ,, Meyr. Hdbk. Brit. Lep., p. 622.

This local species is only recorded from the neighbourhood of Hartlepool, where Mr. Sang met with it in 1880 and again in 1884. The larva feeds on the carline thistle, which is common about Black Halls, and on the railway banks from Hart Station northward. Mr. Gardner has bred it freely from larvæ found in Crimdon Cut.

90. *D. scopariella*, Hein.*Depressaria atomella*. Staint. Man., vol. ii., p. 322

(partim)

,, ,, Meyr. Hdbk. Brit. Lep., p. 621

(partim)

The larva of this species, which is confused with *atomella* in both Stainton's "Manual" and Meyrick's "Handbook," feeds on broom, which grows freely on the railway banks about Darlington. There Mr. Sang took *scopariella* in 1861 and again in 1866. It has not been recorded elsewhere in either county, but may be expected in the west of Durham among the food plant.

91. *D. arenella*, W.V.*Depressaria arenella*. Staint. Man., vol. ii., p. 322.

,, ,, Meyr. Hdbk. Brit. Lep., p. 622.

Rather more generally distributed than the preceding. It is given in the "Manual" as occurring at Newcastle-on-Tyne, and regularly at Darlington. Mr. Finlay found it in Meldon

Park. Mr. Sang found larvæ in July at Castle Eden, and also on the railway side at Darlington. Mr. Gardner has taken it in Hezleden Dene, and I have found it in Crimdon Cut close to the Dene.

92. *D. subpropinquella*, Stain.

Depressaria subpropinquella. Staint. Man., vol. ii., p. 322.

„ „ Meyr. Hdbk. Brit. Lep.,
p. 623.

Of the occurrence of this insect I have but a single record. Mr. Sang found larvæ at Black Hall Rocks on 26th June, 1861, and reared the moths. It feeds on the underside of thistle leaves, and is certain to be found elsewhere when looked for.

93. *D. alstroemeriana*, Cl.

Depressaria alstroemeriana. Staint. Man., vol. ii., p. 323.

„ „ Meyr. Hdbk. Brit. Lep., p. 625.

A species widely distributed and locally common. The larva feeds on hemlock, rolling up the leaflets. The earliest record of the insect here is in Stephens' Illustrations, vol. iv., p. 202, where Mr. Wailes says it occurs at Newcastle-on-Tyne. The next is the "Manual" that it is abundant there, and occurs regularly at Darlington. Mr. Maling records it in the Transactions for 1875, p. 282. At Sunderland Mr. Corder has taken it, while around Hartlepool it is very plentiful both in August and in spring after hibernation. Mr. Bankes has met with it at Seaton Carew.

94. *D. hypericella*, Tr.

Depressaria hypericella. Staint. Man., vol. ii., p. 323.

„ „ Meyr. Hdbk. Brit. Lep., p. 623.

Recorded in the "Manual" as occurring regularly both at Newcastle-on-Tyne and Darlington. I have no other record for Northumberland. Mr. Sang found it on the Tees side near Blackwell Bridge, and it has been taken at Castle Eden by Mr. Bankes. It is very abundant in Hezleden Dene. The larvæ screw up the heads of the *Hypericum* before they flower, and the

imagines fly in the same places later in the year. I have no doubt but it may be found in most places in the district, except perhaps the more northern portions of Northumberland.

95. *D. conterminella*, Zell.

Depressaria conterminella. Staint. Man., vol. ii., p. 324.

„ „ Meyr. Hdbk. Brit. Lep., p. 624.

This is given in the "Manual" as appearing regularly at Darlington. Mr. Sang took it there by the river side near Old Croft Bridge. I have seen no other record, but it is certain to occur elsewhere among willows in the terminal shoots of which the larva feeds.

96. *D. angelicella*, Hub.

Depressaria angelicella. Staint. Man., vol. ii., p. 324.

„ „ Meyr. Hdbk. Brit. Lep., p. 625.

Mr. Finlay records this as taken at Needless Hall Moor. Mr. Maling also gives it as a Northumbrian insect in the Transactions for 1875, p. 282. The "Manual" gives it as occurring at Darlington, but it is not entered in Mr. Sang's diary. Mr. Gardner has taken it in Hezleden Dene, where it is common, and also near Hartlepool. I have bred it freely from leaves of *Heracleum sphondylium*. Mr. Bankes tells me this is an unusual food in Britain. I can only say that the larva is very abundant upon it around Hartlepool, and I never saw it on anything else.

96A. *D. carduella*, Hub.

Depressaria carduella. Staint. Man., vol. ii., p. 324.

„ „ Meyr. Hdbk. Brit. Lep., p. 623.

A local insect that feeds on thistle, and is given by Meyrick as extending northwards to Westmoreland. I have no record of its occurrence in Northumberland, and in Durham it has only been met with at Hawthorn Tower, near Seaham Harbour, where a specimen was captured by Mr. Bankes on August 27th, 1885.

97. *D. ocellana*, Fab.*Depressaria ocellana*. Staint. Man., vol. ii., p. 324.

,, ,, Meyr. Hdbk. Brit. Lep., p. 624.

A common species generally, yet the only record is Darlington in the "Manual." The larva feeds between sallow leaves, and I expect the species will turn up in many other places.

98. *D. applana*, Fab.*Depressaria applana*. Staint. Man., vol. ii., p. 325.

,, ,, Meyr. Hdbk. Brit. Lep., p. 626.

The larva of this insect is not very particular in its choice of food, and I have no doubt it occurs nearly everywhere, except perhaps on the higher moorland. Records however are not so numerous. The "Manual" gives it as abundant both at Newcastle-on-Tyne and at Darlington. Mr. Finlay found it common in Meldon Park and elsewhere. He marks it, like *arenella*, "October and in spring," but the insect emerges in August, continuing on the wing through October before retiring for hibernation. Mr. Maling also recorded it in the Transactions for 1875, p. 282. It is very common everywhere around Hartlepool, and vies with *alstræmeriana* for abundance in spring.

99. *D. ciliella*, Stain.*Depressaria ciliella*. Staint. Man., vol. ii., p. 325.

,, ,, Meyr. Hdbk. Brit. Lep., p. 626.

Widely distributed and not uncommon locally. Mr. Finlay found it "not uncommon" in Meldon Park in "October and in spring." Mr. Maling, however, thought it rare. See Transactions for 1875, p. 282. It is also given in the "Manual" as occurring at Newcastle-on-Tyne. The only record I have for Durham is that Mr. Gardner bred a fine series from larvæ got in Hezleden Dene upon *Angelica*.

100. *D. pulcherrimella*, Stain.*Depressaria pulcherrimella*. Staint. Man., vol. ii., p. 326." " Meyr. Hdbk. Brit. Lep.,
p. 629.

Rather a local species, but fairly well distributed here, occurring in most places from whence I have any records. Mr. Finlay found it in most parts of his district, but always scarce. The "Manual" gives it as occurring at Darlington. Mr. Sang took it at Eggleston, Upper Teesdale, on the railway side at Croft, and at Castle Eden. We have found it in Hezleden Dene, and Mr. Gardner has taken it in Upper Teesdale.

101. *D. weirella*, Stain.*Depressaria weirella*. Staint. Man., vol. ii., p. 327.

" " Meyr. Hdbk. Brit. Lep., p. 629.

A local species that is recorded for Lancashire. The only record I have is that Mr. Sang took it on the Tees side above Darlington in August, 1878 and 1881.

102. *D. chærophylli*, Zell.*Depressaria chærophylli*. Staint. Man., vol. ii., p. 327.

" " Meyr. Hdbk. Brit. Lep., p. 628.

Rather a local species, and little known in these counties. It is given in the "Manual" as having occurred at Newcastle-on-Tyne, and Mr. Maling records it in the Transactions for 1875, p. 282. Mr. Sang found larvæ in Grange Road, Darlington, on 30th June, 1864. I have seen no other records.

103. *D. nervosa*, Haw.*Depressaria nervosa*. Staint. Man., vol. ii., p. 327.

" " Meyr. Hdbk. Brit. Lep., p. 630.

A common species, extending far to the north, yet little noticed here. The "Manual" gives it as having occurred at Newcastle-on-Tyne, and Mr. Maling recorded it in the Transactions for 1875, p. 282. Mr. Sang does not appear to have met with it, but Mr. Gardner took it at Greatham.

104. *D. badiella*, Hub.*Depressaria badiella*. Staint. Man., vol. ii., p. 328.

,, ,, Meyr. Hdbk. Brit. Lep., p. 627.

Meyrick gives Yorkshire as its most northerly known station, but it occurs both in Northumberland and Durham, though I have but few records. Mr. Maling includes it in his list in the Transactions for 1875, p. 282. Mr. Sang took it on the railway banks at Darlington in 1878, and it was captured at Hawthorn Tower, near Seaham Harbour, by Mr. Bankes in 1885.

105. *D. pastinacella*, Stain.*Depressaria pastinacella*. Staint. Man., vol. ii., p. 328.,, *discipunctella*. Meyr. Hdbk. Brit. Lep., p. 630.

A local species, and only taken in these counties by Mr. Gardner, who captured it at Greatham.

106. *D. heracliiana*, De Geer.*Depressaria heracliiana*. Staint. Man., vol. ii., p. 328.

,, ,, Meyr. Hdbk. Brit. Lep., p. 629.

A very common insect, no doubt occurring wherever the food plant grows. The "Manual" gives it as being abundant both at Newcastle-on-Tyne and at Darlington. Mr. Maling recorded it in the Transactions for 1875, p. 282. Mr. Corder has taken it at Sunderland, and it is very plentiful all around Hartlepool. The larva feeds in the seed heads of *Heracleum sphondylium*.

GELECHIA, Hub.

107. *Gelechia cinerella*, Cl.*Gelechia cinerella*. Staint. Man., vol. ii., p. 329.*Recurvaria* ,, Meyr. Hdbk. Brit. Lep., p. 607.

The only Northumbrian record I have of this insect is that the late J. B. Hodgkinson marked it in a list he supplied me of insects he had taken in the west of that county. In Durham Mr. Backhouse got it at Shotley, the "Manual" marks it as occurring regularly at Darlington, and Mr. Sang took it there

as well as in Castle Eden Dene, where Mr. Banks also took it in 1885. Mr. Gardner took it at Hartlepool in 1879, and more recently in Upper Teesdale.

108. *G. rufescens*, Haw.

Gelechia rufescens. Staint. Man., vol. ii., p. 329.

Brachmia „ Meyr. Hdbk. Brit. Lep., p. 606.

An insect that appears to have been seldom taken in these counties. Mr. Maling recorded it in the Transactions for 1875, p. 282. In Durham Mr. Sang met with it at Seaton Carew over fifty years ago. Since then Mr. Gardner has taken it at Greatham, not far from Seaton Carew, and also at Hartlepool.

(*Gelechia populella* is marked by Mr. Hodgkinson as having been taken by him in West Northumberland. I am inclined to think he has made a mistake, and therefore do not include it in the list. It does not occur in Lancashire, nor is there any record in Yorkshire north of Scarborough and York. Perhaps some of the Northumbrian collectors will make special search for this insect, the larva of which feeds on willow, birch, or poplar, rolling up the leaves).

109. *G. nigra*, Haw.

Gelechia nigra. Staint. Man., vol. ii., p. 330.

„ „ Meyr. Hdbk. Brit. Lep., p. 599.

This insect is given in the "Manual" as having occurred at Newcastle-on-Tyne. Meyrick gives its range as from "Kent to Norfolk, Hereford, Northumberland." Wailes, who supplied the Newcastle-on-Tyne list, collected not only in Northumberland, but in North Durham, and even in Castle Eden Dene. But I am inclined to doubt the correctness of the record altogether, only I cannot well exclude it here. May I direct the attention of the Newcastle collectors to the need of confirming the occurrence of the species. Wailes collected chiefly in Meldon Park and the Morpeth district, and in the valley of the Derwent. This is the *Gelechia cautella* of Doubleday's list. The larva feeds on poplar between united leaves.

110. *G. velocella*, Dup.*Gelechia velocella*. Staint. Man., vol. ii., p. 331.

,, ,, Meyr. Hdbk. Brit. Lep., p. 602.

Mr. J. B. Hodgkinson's list is the only notice I have of this species. It is an insect that occurs on the west of the island, and not so unlikely to occur as *populella*. I therefore include it here, making this note.

111. *G. fumatella*, Dgl.*Gelechia fumatella*. Staint. Man., vol. ii., p. 331.,, *distinctella*. Meyr. Hdbk. Brit. Lep., p. 601

(partim).

Two specimens, taken at Hartlepool by Mr. Gardner, have been identified as undoubtedly belonging to this species by Mr. Banks, who adds that Meyrick is certainly in error in treating *fumatella*, Dgl., as identical with *distinctella*, Z., these two species being abundantly distinct in all their forms. *Fumatella* is marked by Mr. Hodgkinson as occurring in West Northumberland, but Mr. Banks tells me that the unconfirmed entry must not be accepted, for (1) *fumatella* seems to be entirely confined, in Britain, to the coast line, and (2) Hodgkinson's determinations of the more obscure and less well-known microlepidoptera, such as this, were frequently proved to be erroneous, to say nothing of the fact that he relied upon his memory, instead of upon notes, for details about his captures.

112. *G. ericetella*, Hub.*Gelechia ericetella*. Staint. Man., vol. ii., p. 331.

,, ,, Meyr. Hdbk. Brit. Lep., p. 603.

An abundant insect on heathery moors, probably occurring wherever there is heather or heath. Mr. Finlay says "on the moors, plentiful, May and June." Mr. Maling also recorded it in the Transactions for 1875, p. 282. Mr. Gardner found it common on the borders of Hardwick Dene, also near Sheraton, and very common on the moors in Teesdale, and Mr. Backhouse got it at St. John's.

113. *G. mulinella*, Zell.*Gelechia mulinella*. Staint. Man., vol. ii., p. 331.

" " Meyr. Hdbk. Brit. Lep., p. 603.

A common insect among whin and broom, the larva living on the flowers. The "Manual" gives it as occurring at Newcastle-on-Tyne and Darlington. Mr. Maling also recorded it in the Transactions for 1875, p. 282. Mr. Sang found it on the railway side at Darlington, and larvæ at Coniscliffe. Mr. Gardner reports it as common in Crimdon Cut, near Hartlepool. It probably occurs in most places where the food grows freely.

114. *G. longicornis*, Curt.*Gelechia longicornis*. Staint. Man., vol. ii., p. 332.

" " Meyr. Hdbk. Brit. Lep., p. 603.

Rather a common insect, recorded in the "Manual" as occurring at Newcastle-on-Tyne. Mr. Finlay says it is scarce to the west of Netherwitton. Mr. Hodgkinson also marked it in his list of West Northumberland captures. In Durham the only places where it has been taken are Wolsingham, where Mr. Sang met with it in June, 1872, and St. John's, where Mr. Backhouse got it.

115. *G. terrella*, Hub.*Gelechia terrella*. Staint. Man., vol. ii., p. 333.

" " Meyr. Hdbk. Brit. Lep., p. 590.

A very abundant species everywhere. The larva is said to feed on grass at the base of the stems, which may account for its abundance, as well as for the length of time it was not known.

116. *G. desertella*, Dgl.*Gelechia desertella*. Staint. Man., vol. ii., p. 333.

" " Meyr. Hdbk. Brit. Lep., p. 590.

This is given in the "Manual" as occurring regularly at Darlington, but the specimens referred to were taken at Seaton Carew. Mr. Sang also found it at South Shields, and it is

common on the sandhills at Hartlepool, and probably all along the coast. There is no record for Northumberland, but I see no reason why it should not occur there also.

117. *G. politella*, Dgl.

Gelechia politella. Staint. Man., vol. ii., p. 333.

„ „ Meyr. Hdbk. Brit. Lep., p. 590.

This is the *expolitella* of Doubleday. Mr. Hodgkinson reported it from the west of Northumberland, and Mr. Finlay found it plentiful at Needless Hall Moor. The only Durham record is that of Mr. Gardner, who found it both in Upper Teesdale and at Hartlepool. It is a local species, not occurring either in the extreme north or the extreme south of our island.

118. *G. intaminatella*, Stain.

Gelechia intaminatella. Staint., Ent. Wk. Int., vii., p. 140.

Aristotelia pulveratella. Meyr. Hdbk. Brit. Lep., p. 576.

This species was introduced to our lists shortly after the publication of the "Manual." It was first taken in Britain by Mr. C. Eales on the railway banks some two miles from Darlington, and was noticed by Mr. Stainton in the "Entomologist's Weekly Intelligencer," vol. vii., p. 140, and there named *Gelechia intaminatella*. It has since been recognised as identical with *pulveratella*, which had been previously described by Herrich-Schäffer. Sang found the larva at Darlington feeding between united leaves of *Lotus corniculatus*, and on the Continent it also feeds in the same way on *Coronilla varia* and *Medicago sativa*, whilst a single specimen is recorded (Ent. Ann. 1864, p. 165) as having been bred from *Achillea millefolium*, though this does not appear to have been confirmed as a food plant.

119. *G. acuminatella*, Sirc.

Gelechia acuminatella. Staint. Man., vol. ii., p. 333.

„ „ Meyr. Hdbk. Brit. Lep., p. 590.

Mr. Finlay found this insect "fairly common" in Meldon Park. Mr. J. B. Hodgkinson also included it in his list

of West Northumberland captures. Mr. Sang's captures in Durham were at Castle Eden Dene, at Black Hall Rocks, at Aycliffe Station and Aycliffe quarry, and at several places near Darlington; Mr. Gardner also has taken it near Greatham. Mr. Sang found a larva on a plant he did not know, which Mr. Stainton said seemed to be a *Cirsium*. The larva appears always to feed on thistles.

120. *G. gracilella*, Stain.

Gelechia gracilella. Staint. Ent. Ann., 1871, p. 97.

„ *acuminatella*. Meyr. Hdbk. Brit. Lep., p. 590

(*partim*).

Respecting this insect Mr. Stainton says, "Mr. C. Eales, of South Shields, has sent me three specimens of a *Gelechia* which he believes to be new, and for which he proposes the above name. They were taken in a green lane, about a mile from South Shields, on the 29th May, flying at dusk among hawthorn. I am strongly of opinion that these specimens really do represent a *Gelechia* hitherto unknown to us; certainly I know of no species to which they can be referred." "Two of them come very close to the male of *G. acuminatella*, but the hind margin of the anterior wings is more rounded; moreover, one of these two is a female, and therefore very different from the small pointed-winged female of *G. acuminatella*." (Ent. Ann., 1871, p. 97).

Mr. Eales writes concerning it—"Ever since I took the first specimen of this insect in 1870, I have done my best to make it common; but up to the present season I have not obtained more than a dozen specimens; the locality where I took most of them has been taken for building ground, and the hedgerows replaced with brick walls. There yet remain two other places where it has occurred singly, and where I hope to obtain specimens for my friends." (Ent., viii., 197).

Mr. Stainton's note shows clearly that he believed it to be a distinct species, but I know no more about it, nor whether it has been taken at Shields recently.

121. *G. senectella*, Zell.*Gelechia senectella*. Staint. Man., vol. ii., p. 334.

" " Meyr. Hdbk. Brit. Lep., p. 589.

The only local record of this insect is that of Mr. Gardner, who has taken it both at Greatham and Hartlepool. The only Yorkshire localities are Redcar and Scarborough.

122. *G. obscurella*, Hein.*Bryotropha obscurella*. Brt., Ent. Mo. Mag., ser. 2, i., p. 112.*Gelechia* " Meyr. Hdbk. Brit. Lep., p. 589.

A species taken rarely in Kent, Suffolk, Westmorland, and Durham, and introduced as British since the publication of the "Manual" by Mr. C. G. Barrett in Ent. Mo. Mag., ser. 2, i., 112, in which he says of this species, writing in 1890, "more recently Mr. Sang sent me specimens taken by himself in the Darlington district which have been recognised by Mr. Warren, from Heinemann's description, as the same species." More recently Mr. Gardner has taken *obscurella* in Crimdon Cut above Hart Station.

123. *G. mundella*, Dgl.*Gelechia mundella*. Staint. Man., vol. ii., p. 334.

" " Meyr. Hdbk. Brit. Lep., p. 589.

This is given in the "Manual" as occurring at Newcastle-on-Tyne, and Mr. Hodgkinson includes it in his West Northumberland list. Those recorded for Newcastle-on-Tyne would be taken on the sandhills at the mouth of Castle Eden Dene, or on the coast north of Tynemouth. It has not yet been taken in the Hartlepool area, but is sure to occur. Mr. Sang has taken it at Redcar, and I expect it will be found at Greatham and Seaton Carew, and on the sandbanks north of Hartlepool.

124. *G. similis*, Stain.*Gelechia similis*. Staint. Man., vol. ii., p. 334.

" " Meyr. Hdbk. Brit. Lep., p. 589.

" *confinis* Sta. Staint. Ent. Ann., 1871, pp. 98-9.

The only known localities for this species in these counties

appear to be Crimdon Cut, where Mr. Gardner has met with it, and Teesdale, where it has been taken freely by Messrs. Gardner and B. A. Bower. In Ent. Mo. Mag., ser. 2, ix., pp. 196-8 (1898) Mr. Bankes proved that *confinis*, which was described by Stainton as a new species in Ent. Ann. 1871, pp. 98-9, and erroneously sunk by Meyrick in Hdbk. Brit. Lep. 589 (1895) as a variety of *Gelechia affinis*, is in reality a dark northern form of *similis*, Sta., and he tells me that his Teesdale examples include var. *confinis* as well as the typical form. The larva feeds on moss growing on old walls, roofs, etc.

125. *G. affinis*, Haw.

Gelechia affinis. Staint. Man., vol. ii., p. 334.

" " Meyr. Hdbk. Brit. Lep., p. 589 (*partim*).

Given in the "Manual" as occurring at Darlington Mr. Sang took it there in 1872 on the embankment of the North-Eastern Railway. I have no other record.

126. *G. tetragonella*, Stain.

Gelechia tetragonella. Ent. Mo. Mag., xxii., 99.

Aristotelia " Meyr. Hdbk. Brit. Lep., p. 577.

Another new species, discovered by Mr. Sang at Greatham. Owing to Mr. Sang announcing that he had taken it "down Redcar way," this is given in the supplement to Porritt's list of Yorkshire Lepidoptera as having been taken there. This was not so, and the entries are quite clear in Sang's diary "July 21. 1881. 1." "July 23. 1881. 2." It is a salt marsh insect, the larva feeding, as discovered by Mr. Bankes, in *Glaux maritima* (see Ent. Mo. Mag., ser. 2, viii., pp. 5-7), and could only have occurred at Redcar by accident, as did *Adactyla bennetii*, q. v. This species is extremely local, and has only been found elsewhere in one locality in Dorset and one in Norfolk.

127. *G. domestica*, Haw.

Gelechia domestica. Staint. Man., vol. ii., p. 335.

" " Meyr. Hdbk. Brit. Lep., p. 588.

The only notice of the occurrence of this rather common

species is that of the "Manual" that it had occurred at Newcastle-on-Tyne. The larva feeds on moss on old walls, and the west of either county might readily produce it, but I cannot more specifically locate it at present, except that it is also marked in Mr. Hodgkinson's list of West Northumberland species.

128. *G. umbrosella*, Zell.

Gelechia umbrosella. Staint. Ent. Ann., 1864, p. 169.

„ „ Meyr. Hdbk. Brit. Lep., p. 588.

This also was introduced since the publication of the "Manual." It is principally a coast species, and had up to 1864 been mixed with *affinis* in collections. The differences between the two species are given in the 1864 Annual, and again in that for 1874, p. 15. There is but one local record to my knowledge. Mr. Sang took it at South Shields on July 23rd, 1871; although its recorded range is only given by Meyrick as extending northwards as far as Yorkshire.*

129. *G. rhombella*, W.V.

Gelechia rhombella. Staint. Man., vol. ii., p. 335.

„ „ Meyr. Hdbk. Brit. Lep., p. 601.

Rather a local species, but very common around Darlington. The larva feeds between leaves of apple, and Mr. Sang appears to have found it about crab-apple in almost every lane there—Grange Road, Coniscliffe Lane, Baydales, Teeside near Blackwell, etc., etc. He reared it in 1867 (see E. M. M., iv., 153), and in 1869 (E. M. M., vi., 170), he said, "The larva of *Gelechia rhombella* is very abundant in the apple bushes in hedges about the town. The moths are all of a very dark grey colour, none of them being light like southern specimens." I have no other knowledge of its occurrence here.

* I have since bred the species (in 1907) from moss got on the sand hills near Hartlepool.—J. G.

130. *G. proximella*, Hub.*Gelechia proximella*. Staint. Man., vol. ii., p. 335.

" " Meyr. Hdbk. Brit. Lep., p. 597.

A common insect generally, the larva feeding on birch. It is given in the "Manual" as occurring regularly both at Newcastle-on-Tyne and Darlington. Mr. Finlay found it "plentiful among birch in the Old Park, Netherwitton, in August and September"; Mr. Hodgkinson also met with it in West Northumberland. In Durham, Mr. Backhouse took it at Shotley; Mr. Sang at High Force in 1870, and at Wolsingham in 1872; Mr. Gardner has also taken it in Hezleden Dene. No doubt it will be found in all birch woods in both counties.

131. *G. notatella*, Hub.*Gelechia notatella*. Staint. Man., vol. ii., p. 335.

" " Meyr. Hdbk. Brit. Lep., p. 597.

Probably much more common than the records imply. Mr. Hodgkinson reported it from West Northumberland, the only notice I have of it from that county. The "Manual" gives it as occurring regularly at Darlington where Mr. Sang took larvæ in 1880. Mr. Gardner has found it in Hezleden Dene. The larva feeds between united leaves of sallow, and as it is generally a common insect, it will probably be found in most places.

132. *G. humeralis*, Zell.*Gelechia humeralis*. Staint. Man., vol. ii., p. 336.*Xenolechia* " Meyr. Hdbk. Brit. Lep., p. 584.

This species is local and often uncommon, and has only been taken here at Castle Eden Dene by Mr. Sang. It is the *lyellella* of Doubleday's list.

133. *G. vulgella*, Hub.*Gelechia vulgella*. Staint. Man., vol. ii., p. 336.

" " Meyr. Hdbk. Brit. Lep., p. 598.

Another species probably more plentiful than the records show. The only Northumbrian notice I have is that of Mr. J. B. Hodgkinson for the west of the county. Mr. Sang took

it on the railway side near Croft and elsewhere near Darlington, and Mr. Gardner has met with it in Hezleden Dene.

134. *G. fugitivella*, Zell.

Gelechia fugitivella. Staint. Man., vol. ii., p. 336.

„ „ Meyr. Hdbk. Brit. Lep., p. 597.

Mr. Hodgkinson includes this insect in his West Northumberland list. The "Manual" gives it as occurring at Newcastle-on-Tyne, and regularly at Darlington, where Mr. Sang met with it in July from 1853 to 1881. I have no other notice, but it may be expected elsewhere amongst elm.

135. *G. æthiops*, Westw.

Gelechia æthiops. Staint. Man., vol. ii., p. 337.

Xenolechia „ Meyr. Hdbk. Brit. Lep., p. 583.

Neither Mr. Finlay nor Mr. Maling ever met with the species, and the "Ne!" of the "Manual" which is reproduced by Meyrick as "Northumberland," may possibly refer to some Durham locality. Mr. Sang took the insect at Waskerley in 1858 and 1859, at Wolsingham in 1872-3 and -4, and at Egglestone, Upper Teesdale, in 1880. Mr. Gardner has taken it there more recently. Mr. Backhouse has also met with it at St. John's.

136. *G. solutella*, Zell.

Gelechia solutella. Staint. Man., vol. ii., p. 337.

„ „ Meyr. Hdbk. Brit. Lep., p. 601.

A very local species, and only occurring with us at Wolsingham, in Durham, where Mr. Sang took it in June from 1872 to 1882. It seems widely distributed in Britain, occurring among *Genista* both at the Lizard, Cornwall, and in Perthshire, but its known haunts are very few.

137. *G. distinctella*, Zell.

Gelechia distinctella. Staint. Man., vol. ii., p. 337.

„ „ Meyr. Hdbk. Brit. Lep., p. 601
(*partim*).

This also is a very local species, and it does not appear to have any book record north of Yorkshire. Mr. Hodgkinson, however, included it in his West Northumberland list, and Mr. Sang took it at South Shields as long ago as 1881.

138. *G. maculea*, Haw.

Gelechia maculea. Staint. Man., vol. ii., p. 337.

" " Meyr. Hdbk. Brit. Lep., p. 593.

Rather a common species, and recorded in the "Manual" as occurring regularly at Darlington. Mr. Sang took it there in Coniscliffe Lane, and found larvæ "in shoots of *Cerastium*" on 16th June, 1869, but Mr. Banks doubts the accuracy of this entry, the experience of others having always been that *G. maculea* feeds on *Stellaria holostea* only, and suggests that Sang probably wrote *Cerastium* in mistake for *Stellaria*.

139. *G. tricolorella*, Haw.

Gelechia tricolorella. Staint. Man., vol. ii., p. 338.

" " Meyr. Hdbk. Brit. Lep., p. 594.

Tricolorella is given in the "Manual" as occurring at Newcastle-on-Tyne, and regularly at Darlington. Mr. Hodgkinson also includes it in his West Northumberland list; and Mr. Maling recorded it in the Transactions for 1875, p. 282. In Durham I only know of Darlington as a locality where it is found. Mr. Sang got it in Coniscliffe Lane there in 1859 and larvæ in 1877.

140. *G. fraternella*, Dgl.

Gelechia fraternella. Staint. Man., vol. ii., p. 338.

" " Meyr. Hdbk. Brit. Lep., p. 594.

Darlington is given in the "Manual" as one of the places where this species occurs. Mr. Sang found the larvæ in the North Road there in April and May, and the moth later. Mr. Gardner has taken it on the railway banks, Hartlepool. These are the only localities I know of, and it appears to be rather a local species generally.

141. *G. viscariella*, Stain.*Gelechia viscariella*. Staint. Man., vol. ii., p. 338.

" " Meyr. Hdbk. Brit. Lep., p. 594.

A northern species, and rather local. Mr. Hodgkinson appears to be the only collector who has taken it in Northumberland—in the west of that county. Mr. Sang took it at Darlington nearly thirty years ago. More recently Mr. Gardner has met with it in Hezleden Dene, and bred the insect from larvæ found feeding in shoots and stems of *Lychnis*.

142. *G. marmorea*, Haw.*Gelechia marmorea*. Staint. Man., vol. ii., p. 339.

" " Meyr. Hdbk. Brit. Lep., p. 596.

A coast species, abundant on many sandy shores, where the larva lives in a tube below the sand, feeding on *Cerastium*. It is given as a local species in Mr. Maling's list in the Transactions for 1875, p. 282. In Durham Mr. Sang took it at Seaton Carew in 1853, at Castle Eden Dene mouth, and at Black Halls in 1861. Mr. Gardner has taken it more recently at Hartlepool and Hezleden Dene.

143. *G. instabilella*, Dgl.*Gelechia instabilella*. Staint. Man., vol. ii., p. 340

(partim: nec larva).

" " Meyr. Hdbk. Brit. Lep., p. 592.

At the time of, and for fifty years after, the discovery of *G. instabilella*, other closely allied species, showing like it great variation but now recognised as distinct, were confused with it under the name *instabilella* by all our leading authorities, including Mr. Douglas himself as well as Mr. Stainton. In 1894, however, in his monograph entitled "*Lita instabilella*, Dgl. and its nearest British allies," and published in the Ent. Mo. Mag., ser. 2, vol. v., p. 80, etc., Mr. Bankes dispelled the deplorable confusion of ideas that had accumulated round the group to which this and the four following species belong, and his conclusions were adopted in

Staudinger and Rebel's "Catalog" and in Meyrick's Handbook. Unfortunately, owing to all this confusion, and the consequent inconsistent and largely erroneous use of the name *instabilella*, it is impossible to say to which of several distinct species each of Mr. Sang's entries really applies, nor are his specimens, which in any case would be without data labels, available for submission to an expert, both of his collections having by now been dispersed piecemeal. We must therefore ignore his references to *instabilella*, which would only perpetuate error; but reliance can be placed on the correct identification of Mr. Gardner's captures in this group, as these have been named by Mr. Bankes. Mr. Gardner forwarded a long series of his captures (taken in the locality) to Mr. Bankes, who identified only two specimens out of the lot as true *instabilella*, so that this is the only local record we can at present rely upon. The true *G. instabilella* mines the leaves, not of *Plantago maritima* as stated in the "Manual," but of the saltmarsh-loving *Atriplex portulacoides*; this plant grows "about the mouths of the Tyne, Wear and Tees sparingly" (Transactions 1868, p. 238), so that we may expect the species to be found on the Greatham marshes.

144. *G. salicorniæ*, Hering.

Gelechia salicorniæ. Meyr. Hdbk. Brit. Lep., p. 592.

A local coast species, taken here so far only at Greatham by Mr. Gardner. The larva feeds in and on the leaves of various marine plants, *Aster*, *Salicornia*, etc. This insect was only added to the British list by Mr. Bankes in 1894.

145. *G. atriplicella*, F. R.

Gelechia atriplicella. Staint. Man., vol. ii., p. 340.

" " Meyr. Hdbk. Brit. Lep., p. 591.

A widely and pretty generally distributed species in England. Mr. Gardner found the species abundant at Hartlepool and at Greatham. I have no other record, but Mr. Bankes states that he has good reasons to believe that Sang's allusions to "*obsoletella*" are really referable to *atriplicella*, in which case

the insect under notice was taken by him at Darlington and at Seaton Carew.

146. *G. obsoletella*, F.R.

Gelechia obsoletella. Staint. Man., vol. ii., p. 340.

" " Meyr. Hdbk. Brit. Lep., p. 591.

Somewhat similar to the last in choice of localities, but I have no knowledge of its occurrence away from the coast in this country, though it occurs inland on the Continent. Mr. Sang notes its capture by himself near Darlington and at Seaton Carew, but Mr. Banks believes that the species met with was *atriplicella* (which he certainly obtained in plenty, although, be it noted, it is never mentioned in his diary, and could not be so generally common as to prompt such omission) by the name "*obsoletella*," and he so far failed to find any evidence of the capture by Sang of the true *obsoletella*, which is decidedly local and seems confined in Britain to the coast. Its occurrence near Darlington would therefore, in any case, be highly improbable. If Sang ever met with the true *obsoletella* at Seaton Carew or elsewhere, it is obvious that he must have mistaken it for a pale variety of the genuine *atriplicella*, for his diary only contains the one name *obsoletella*, which refers mainly, if not entirely, to *atriplicella*. Mr. Gardner has met with the true *obsoletella* at Greatham, his specimens having been verified by Mr. Banks.

147. *G. plantaginella*, Stain.

Gelechia plantaginella. Sta., Ent. Mo. Mag., xix., p. 253.

" " Meyr. Hdbk. Brit. Lep., p. 591.

Rather a common species, and much of a coast species, the larvæ feeding usually on *Plantago coronopus* or *maritima*, though occasionally on *P. lanceolata*. Mr. Gardner found it very abundant at Greatham, and Mr. Banks informs us that Sang, whilst living at Darlington, certainly met with the large dark saltmarsh form of the insect commonly in our district, and that he has little doubt but that some of Sang's entries about *instabilella* refer in reality to *plantaginella*.

148. *G. sequax*, Haw.*Gelechia sequax*. Staint. Man., vol. ii., p. 341.

" " Meyr. Hdbk. Brit. Lep., p. 599.

Rather a common species. Recorded in the "Manual" as occurring at Newcastle-on-Tyne. I have no idea where Mr. Wailes met with it, possibly in Castle Eden Dene, where Mr. Sang took it, as well as at Black Halls, in 1876. Sang found it nearer Hartlepool than this in 1884, but it could not be much south of the Rocks, as the food plant, *Helianthemum vulgare*, does not grow much closer to the town. Mr. Gardner has taken it at Black Halls more recently, and also bred it from *Helianthemum*.

149. *G. mouffetella*, W.V.*Gelechia mouffetella*. Staint. Man., vol. ii., p. 342.*Epitheatis* " Meyr. Hdbk. Brit. Lep., p. 581.

This is given in the "Manual" as occurring at Newcastle-on-Tyne, and Mr. Hodgkinson claims to have taken it in West Northumberland. In Durham Mr. Backhouse took it at Shotley. Mr. Sang bred it from Darlington larvæ in 1869 (see Ent. Mo. Mag., vol. vi., p. 170). Mr. John Laws also bred it from there in 1873. I have no other records.

150. *G. dodecella*, Linn.*Gelechia dodecella*. Staint. Man., vol. ii., p. 342.

" " Meyr. Hdbk. Brit. Lep., p. 598.

Durham is given in Meyrick's Handbook as the northern limit of this species, but Mr. Bankes says that it certainly extends far into Scotland, for he has proof of its occurrence not only in Dumbartonshire but even in Morayshire, N.B. Mr. Sang took the insect, and larva also, near Darlington (see Ent. Mo. Mag., vol. vi., p. 178.) Mr. Gardner has taken it at Cole Hill, near Sheraton, which so far is the most northerly known station in this district.

151. *G. tenebrella*, Hub.*Gelechia tenebrella*. Staint. Man., vol. ii., p. 342.*Aristotelia* ,, Meyr. Hdbk. Brit. Lep., p. 575.

A common insect generally, and no doubt occurring nearly all over both counties, but at present only noticed in Durham. It is given in the "Manual" as occurring at Darlington, but the only record in Sang's diary is that he took the insect at Wolsingham fifteen years after the publication of the second volume of that work. The only other note of the insect I have seen is that Mr. Gardner took it on the railway embankment at Hartlepool. The larva feeds on sheep's sorrel (*Rumex acetosella*), a common enough plant in dry places.

152. *G. tenebrosella*, Zell.*Gelechia tenebrosella*. Staint. Man., vol. ii., p. 342.*Aristotelia tenebrella*. Meyr. Hdbk. Brit. Lep., p. 575.

This differs from *tenebrella* only in having the tip of the antennæ white, and Meyrick makes but one species of the two. The only place where this has been found here is Hedley Lane, Darlington, where Mr. Sang took it long ago. In giving them separately, I do not express any opinion on their distinctness, but give them so because Stainton, whom I am following, did so. Mr. Banks, however, says that it has been abundantly proved that the so-called *tenebrosella* is merely the female of *tenebrella*.

153. *G. ligulella*, Zell.*Gelechia ligulella*. Staint. Man., vol. ii., p. 342.*Anacamptis vorticella*. Meyr. Hdbk. Brit. Lep., p. 582
(*partim*).

Not a common species, and one that apparently does not reach Scotland. Mr. Hodgkinson, however, has marked it in his list of West Northumberland insects, but this is the only record for that county. In Durham I have no records except in the extreme south of the county. Mr. Sang took it in several places around Darlington, and Mr. Gardner met with it at Greatham.

154. *G. vorticella*, Sc.*Gelechia vorticella*. Staint. Man., vol. ii., p. 343.*Anacamptis* ,, Meyr. Hdbk. Brit. Lep., p. 582
(partim).

Stainton differentiates this from *ligulella* by its smaller size and straighter fascia, although Mr. Meyrick treats them as identical. I learn from Mr. Banks that they are certainly distinct. Mr. Sang records this species in his diary as taken near Darlington.

155. *G. tæniolella*, Zell.*Gelechia tæniolella*. Staint. Man., vol. ii., p. 343.*Anacamptis* ,, Meyr. Hdbk. Brit. Lep., p. 581
(partim).

In this species I have no Northumberland records except that Mr. Hodgkinson gives it as a West Northumberland insect in the list with which he supplied me. As a Durham species I only have the record of the "Manual" that it had occurred at Darlington.

156. *G. sircomella*, Stain.*Gelechia sircomella*. Staint. Man., vol. ii., p. 343.*Anacamptis tæniolella*. Meyr. Hdbk. Brit. Lep., p. 581
(partim).

Mr. J. B. Hodgkinson gives this in his list of species occurring in West Northumberland. Mr. Sang records it from various places around Darlington from 1861 to 1882. In the Entomologist's Monthly Magazine, vol. iv., it is recorded as captured there by him. In Meyrick's Handbook *sircomella* is said to be a variety of *tæniolella* with the fascia obsolete; this statement is, we believe, open to question, and in any case our rule is to follow Stainton.

157. *G. anthyllidella*, Hub.*Gelechia anthyllidella*. Staint. Man., vol. ii., p. 344.*Anacamptis* ,, Meyr. Hdbk. Brit. Lep., p. 582.

Rather a common insect, but not recorded from Northumber-

land, except the west of the county, where Mr. Hodgkinson has met with it. In Durham too it is only from the south that I have any records. The "Manual" gives it as having occurred at Darlington, and it is recorded in Sang's diary from there. Mr. Gardner has also taken it at Greatham.

158. *G. sangiella*, Stain.

Gelechia sangiella. Staint. Ent. Ann., 1863, p. 149.

Anacamptis ,, Meyr. Hdbk. Brit. Lep., p. 582.

Another species described after the completion of the "Manual." Mr. Stainton (Ent. Ann., 1863, p. 149) says "taken by Mr. Sang at Darlington at the end of June amongst clover and *Lotus corniculatus*; the larva has not yet been noticed." In the Annual for 1867, p. 21, the larva is briefly described from "specimens received from Mr. Sang on the 20th June. The larva feeds between the united leaves of *Lotus corniculatus*." In Ent. Mo. Mag., ser. 2, ix., 2-3, detailed descriptions of the larva and pupa appeared from the pen of Mr. Bankes, who believes that this species has, in Britain, never been taken outside the county of Durham. The records in Mr. Sang's diary are from 1854 to 1874. The larvæ were found on 20th May, the imago from 30th May to 3rd July in various years. On June 13th, 1885, Mr. Bankes received from Mr. Sang some larvæ that had been collected by him at Darlington a day or so previously. I have no other record except that Mr. Gardner has bred it from larvæ got in Crimdon Cut and on the railway banks at Hartlepool, not uncommonly.

159. *G. albipalpella*, H. S.

Gelechia albipalpella. Staint. Man., vol. ii., p. 344.

Anacamptis ,, Meyr. Hdbk. Brit. Lep., p. 582.

The only notice of the occurrence of this species in these counties is that Mr. Sang found larvæ in Coniscliffe Lane, near Darlington, on 15th April, 1860, and bred the insect. Mr. Meyrick limits its northward range to York, and this Durham habitat is not far from the Tees, the boundary between the counties. The larva feeds on *Genista anglica*.

160. *G. atrella*, Haw.

Gelechia atrella. Staint. Man., vol. ii., p. 344.

Aristotelia „ Meyr. Hdbk. Brit. Lep., p. 575.

Somewhat local and uncommon, and not extending very far to the north. The only Northumberland record I have is one for the west of the county by Mr. Hodgkinson. The "Manual" gives it as found at Darlington, where Mr. Sang met with it, as also at Castle Eden Dene. Mr. Gardner has met with it in Hezleden Dene and in Crimdon Cut.

161. *G. næviferella*, Dup.

Gelechia næviferella. Staint. Man., vol. ii., p. 345.

Aristotelia stipella. Meyr. Hdbk. Brit. Lep., p. 574.

Rather common generally, but here only recorded from Barnard Castle, where Mr. Sang met with it in 1873. Mr. Meyrick puts *næviferella* as merely a variety of *stipella*, and states that the typical form of the insect, which is much yellower than var. *næviferella*, is confined to Southern Europe.

162. *G. pictella*, Zell.

Gelechia pictella. Staint. Man., vol. ii., p. 346.

Aristotelia „ Meyr. Hdbk. Brit. Lep., p. 574.

This species, like *hermanrella*, swarms at Redcar, and has been taken on Hartlepool sandhills by Mr. Gardner.

163. *G. brizella*, Tr.

Gelechia brizella. Staint. Man., vol. ii., p. 346.

Aristotelia „ Meyr. Hdbk. Brit. Lep., p. 575.

A coast insect, the larva feeding in flower heads of thrift (*Armeria maritima*). It is very common at Greatham where thrift grows freely. This plant grew formerly on Hartlepool Moor, at Black Hall Rocks, and in many places along the coast. It has completely disappeared from Hartlepool Moor and is now very scarce at Black Halls. Both Mr. Sang and Mr. Gardner have taken *brizella* at Greatham and bred it freely from there.

164. *G. osseella*, Stain.*Gelechia osseella*. Staint. Ent. Ann., 1861, p. 87.*Ptocheuusa* „ Meyr. Hdbk. Brit. Lep., p. 579.

Discovered in 1860 by Mr. Wilkinson at Scarborough, and described and named by Mr. Stainton in the Entomologist's Annual for 1861, p. 87. He there speaks of it as not being a true *Gelechia*, but it still remains on some of our lists, at all events, under this genus. Mr. Sang took it near Darlington in 1872. I have no other record. *Osseella* is extremely local and decidedly uncommon, and its larva and food plant are quite unknown.

165. *G. subocellea*, Steph.*Gelechia subocellea*. Staint. Man., vol. ii., p. 347.*Ptocheuusa* „ Meyr. Hdbk. Brit. Lep., p. 579.

Meyrick gives this species as not recorded from further north than Yorkshire, but Mr. Gardner has taken it abundantly in Hezleden Dene, which is, however, less than 10 miles from the Yorkshire boundary. The larva feeds in a case on seed heads of marjoram, which is very abundant in and about the Dene.

PARASIA, Dup.

166. *Parasia lappella*, Linn.*Parasia lappella*. Staint. Man., vol. ii., p. 348.

„ „ Meyr. Hdbk. Brit. Lep., p. 571.

A local species, the larva feeding on burdock (*Arctium lappa*). The only record I have found of its occurrence here is the "Ne" of the "Manual," signifying that it has occurred at Newcastle-on-Tyne.

167. *P. metzneriella*, Stain.*Parasia metzneriella*. Staint. Man., vol. ii., p. 348.

„ „ Meyr. Hdbk. Brit. Lep., p. 570.

The only Northumberland notice of this insect that I have seen is that of Mr. Hodgkinson, who includes it in his list of

those occurring in the west of that county. In Durham the "Manual" marks it as occurring regularly at Darlington. Mr. Sang took it there in July, 1872. He had previously taken it at Seaton Carew. Mr. Backhouse took it in the north-west of Durham at Shotley Bridge. Mr. Gardner has found it on the railway embankment at Hartlepool. Although the larva feeds in the seed-heads of *Centaurea nigra*, which abounds almost everywhere, the species is, like all its near allies, strangely local.

168. *P. carlinella*, Stain.

Parasia carlinella. Staint. Man., vol. ii., p. 348.

„ „ Meyr. Hdbk. Brit. Lep., p. 571.

The only notice of the occurrence of this insect here is the "Manual" "Da," implying that it has been found there. It is never entered in Sang's diary, and since he was glad to receive Dorset imagines and larvæ from Mr. Bankes as recently as 1885, it is obvious that he knew no locality for it in this district.

CLEODORA, Curt.

169. *Cleodora cytisella*, Curt.

Cleodora cytisella. Staint. Man., vol. ii., p. 349.

Paltodora „ Meyr. Hdbk. Brit. Lep., p. 572.

Like the last, the only knowledge I have of the occurrence of this insect here is the "Ne" of the "Manual" signifying that it has occurred in the Newcastle-on-Tyne district.

CHELARIA, Haw.

170. *Chelaria huebnerella*, Don.

Chelaria hübnerella. Staint. Man., vol. ii., p. 349.

„ *huebnerella*. Meyr. Hdbk. Brit. Lep., p. 610.

Rather a common species, and marked in the "Manual" as occurring at Newcastle-on-Tyne, and abundantly at Darlington. Mr. Maling also recorded it in the Transactions for 1875, p. 282.

Mr. Backhouse took it at Shotley; Mr. Sang in Castle Eden Dene. Meyrick gives the imago as being out during August and September, Stainton during September and October; but the latter especially mentions in the "Manual" its occurrence at Newcastle-on-Tyne in July, which is also the time of its appearance in Hezleden Dene, where it is very common. Mr. Bankes has taken it at the end of August both in Hawthorn Dene and not uncommonly in Castle Eden Dene.

YPSOLOPHUS, Fab.

171. *Ypsolophus marginellus*, Fab.

Ypsolophus marginellus. Staint. Man., vol. ii., p. 350.

" " Meyr. Hdbk. Brit. Lep., p. 608.

A local species. The "Manual" gives but two places where half a century ago it was known to occur, one of which is Newcastle-on-Tyne. Meyrick's Handbook gives its range as covering Northumberland, viz., "Lancashire to Northumberland." Doubtless, however, Meyrick merely copied Stainton, and entered it in this way for want of a Durham record, but it is quite likely that the specimens in question were taken in Durham. I have no other notice of its occurrence.

PLEUROTA, Hub.

172. *Pleurota bicostella*, Cl.

Pleurota bicostella. Staint. Man., vol. ii., p. 352.

" " Meyr. Hdbk. Brit. Lep., p. 614.

Rather common among heather, and generally plentiful on moors and heaths. It is given in the "Manual" as occurring regularly at Newcastle-on-Tyne; this of course refers to some of the moors near, perhaps Greenleighton Moor, where Mr. Finlay found *bicostella* very abundant. In Durham it also occurs on the higher moors. Mr. Sang took it at High Force in 1874, and Mr. Gardner has more recently met with it in the same district. Mr. Backhouse took it at St. John's.

HARPELLA, Schrk.

173. *Harpella bractella*, Linn.

Harpella bracteella. Staint. Man., vol. ii., p. 353.

„ *bractella*. Meyr. Hdbk. Brit. Lep., p. 632.

This insect, which is very bright in colour, appears almost confined in this country to the county of Durham. It was originally taken in 1857 by a young collector near Gateshead; I believe the exact place was Shotley Bridge. It was introduced in the Entomologist's Weekly Intelligencer, vol. iii., p. 179, and in the Entomologist's Annual for 1859, p. 152, in the frontispiece to which volume it is most beautifully figured. Mr. Wailes subsequently bred the insect, the larva feeding in rotten wood. In 1880 I was fortunate enough to take the insect at light in my garden at Bellerby Terrace, West Hartlepool (see E.M.M., xvii, 237). I had a large greenhouse at the bottom of the garden, and frequently took a light down there, to which *bractella* was attracted. I only got one specimen, which I gave to Sang. Those at Shotley, my specimen, and one taken in Wales, are all I know of except for a single example which Mr. Bankes informs me was captured in Notts. in 1901, and recorded in Entom., vol. xxxv., 75.

HYPERCALLIA, Steph.

174. *Hypercallia christiarnana*, Linn.

Hypercallia christiarnana. Staint. Man., vol. ii., p. 353.

„ „ Meyr. Hdbk. Brit. Lep., p. 613.

This very pretty little species was taken by Mr. Sang in Castle Eden Dene on 19th June, 1853. I do not know of any more recent captures. The larva on the Continent feeds on *Polygala chamæbuxus*, which is not a British plant, but on some Continental larvæ being sent to Mr. Stainton, he gave them *Polygala vulgaris* (milkwort), which they ate readily. This was announced in the Entomologist's Annual for 1858, but it was not until 1869 that Lord Walsingham (then the Hon. Thos. De Grey) found larvæ in England feeding on *P. vulgaris*.

They draw the shoots together at the end of May. The larva has a "prettily speckled head and second segment," which will enable any one to recognise it, *if they find it*. It is extremely local, but not nearly so rare as the last, though quite as beautiful.

DASYCERA, Stain.

175. *Dasycera sulphurella*, Fab.

Dasycera sulphurella. Staint. Man., vol. ii., p. 355.

Æcophora ,, Meyr. Hdbk. Brit. Lep., p. 633.

A very common species, the larva feeding in rotten wood. It is abundant everywhere about old hedges, and probably occurs plentifully in all parts of both counties. Mr. Gardner informs me that he has seen it flying freely between seven and eight o'clock in the morning.

ÆCOPHORA, Latr.

176. *Æcophora minutella*, Linn.

Æcophora minutella. Staint. Man., vol. ii., p. 356.

Acompsia ,, Meyr. Hdbk. Brit. Lep., p. 636.

A local species, and, so far, undetected here, except in the west of Northumberland, where Mr. Hodgkinson tells me he has met with it. It is marked in the "Manual" as occurring in the Cumberland lake district, so that its capture in West Northumberland is what might be expected, but I see no reason why it should not occur elsewhere. It has been taken at Scarborough.

177. *Æ. flavimaculella*, Stain.

Æcophora flavimaculella. Staint. Man., vol. ii., p. 356.

Cataplectica fulviguttella. Meyr. Hdbk. Brit. Lep., p. 689.

Rather a common species, recorded in the "Manual" for both Newcastle-on-Tyne and Darlington. I do not know of any other Northumberland records. In Durham it is common in the south of the county at all events. Mr. Sang took it at Darling-

ton, Castle Eden and Hartlepool, and Mr. Gardner has met with it at Black Hall Rocks. I have no doubt it is common in most places in both counties, the larva feeding in seed heads of *Angelica*, *Heracleum*, and *Ægopodium*.

178. *Æ. similella*, Hub.

Ecophora similella. Staint. Man., vol. ii., p. 356.

Acompsia ,, Meyr. Hdbk. Brit. Lep., p. 636.

Not a very common species, and here it does not appear to occur near the coast or on the east side of either county. The records are West Northumberland, J. B. Hodgkinson; Shotley, Mr. Backhouse; Wolsingham and Eggleston, John Sang. Mr. Gardner also says it is not very uncommon in Upper Teesdale. This is the *stipella* of Doubleday's list.

179. *Æ. subaquilea*, Stain.

Ecophora subaquilea. Staint. Man., vol. ii., p. 357.

Acompsia ,, Meyr. Hdbk. Brit. Lep., p. 636.

An insect frequenting moors and heaths, rather local, and not recorded from any county south of Cheshire. Mr. Hodgkinson records it from West Northumberland. Mr. Sang has taken it at Wolsingham and at High Force in June. Mr. Gardner has also met with it in Teesdale, but not commonly. He has also taken one specimen at Black Halls. Heather grows there in fields by the cliff edge, but the food plant is unknown.

180. *Æ. fuscescens*, Haw.

Ecophora fuscescens. Staint. Man., vol. ii., p. 358.

Acompsia ,, Meyr. Hdbk. Brit. Lep., p. 637.

Generally a common species, but only recorded here by Mr. Hodgkinson, from West Northumberland, and by Mr. Gardner, who found it common in and near Hezleden Dene.

181. *Æ. pseudo-spretella*, Stain.

Ecophora pseudo-spretella. Staint. Man., vol. ii., p. 358.

Acompsia pseudospretella. Meyr. Hdbk. Brit. Lep., p. 637.

A very abundant species everywhere, both indoors and out-

side. A few years ago a provision merchant brought me some larvæ which he said were destroying his flour in the sacks. I expected they would be *Ephestia kuehniella*, but they proved to be this species, which I believe will eat almost anything in the way of soft dead matter, etc.

ENDROSIS, Hub.

182. *Endrosis fenestrella*, Stain.

Endrosis fenestrella. Staint. Man., vol. ii., p. 359.

„ *lacteella*. Meyr. Hdbk. Brit. Lep., p. 688.

Like the last, an excessively abundant species, both in houses and outside. The larva will eat almost any dry rubbish, and the insect is much too common everywhere. I once saw it sitting in countless myriads on the outside wall of a grain warehouse at Newcastle-on-Tyne. The wall was absolutely covered with the moths.

BUTALIS, Tr.

183. *Butalis fuscocuprea*, Haw.

Butalis fuscocuprea. Staint. Man., vol. ii., p. 360.

Scythris „ Meyr. Hdbk. Brit. Lep., p. 687.

Mr. Sang took this insect at Darlington repeatedly during a long succession of years. There appears to be no other record of its appearance here. In Yorkshire it is only recorded at Scarborough. The larva lives in a web on shoots of *Lotus corniculatus*.

184. *B. incongruella*, Stain.

Butalis incongruella. Staint. Man., vol. ii., p. 361.

Amphisbatis „ Meyr. Hdbk. Brit. Lep., p. 638.

A local species, apparently preferring the western portion of the district. Mr. Hodgkinson took it in West Northumberland, and Mr. Sang met with it at Waskerley in April, 1857, and 1858.

ATEMELIA, H. S.

185. *Atemelia torquatella*, Zell.*Atemelia torquatella*. Staint. Man., vol. ii., p. 361.

" " Meyr. Hdbk. Brit. Lep., p. 694.

Rather a local species, and apparently not occurring in England south of these counties. Mr. Hodgkinson has taken it in West Northumberland, but I have no other records from that county. In Durham Mr. Sang has taken it in Castle Eden Dene, and at Wolsingham. He found larvæ in Castle Eden Dene in September, 1880. Mr. Gardner has also bred it from there and from Hezleden Dene.

PANCALIA, Curt.

186. *Pancalia leuwenhoekella*, Linn.*Pancalia leuwenhoekella*. Staint. Man., vol. ii., p. 361." " Meyr. Hdbk. Brit. Lep., p. 676
(partim).

This species is not recorded for Northumberland. In Durham Mr. Sang has taken it at Wolsingham and in Castle Eden Dene. Mr. Gardner has met with it in Hezleden Dene, local, but not scarce.

GLYPHIPTERYGIDÆ.

ACROLEPIA, Curt.

187. *Acrolepia granitella*, Tr.*Acrolepia granitella*. Staint. Man., vol. ii., p. 363.

" " Meyr. Hdbk. Brit. Lep., p. 771.

Meyrick gives Durham as the recorded northern limit of this insect, but Mr. Hodgkinson marked it in his list of West Northumberland species. I do not know anything of his localities. The "Manual" gives it as having occurred at Darlington, where Mr. Sang took it as long ago as 1856. I have no other records.

188. *A. pygmæana*, Haw.*Acrolepia pygmæana*. Staint. Man., vol. ii., p. 363.

,, ,, Meyr. Hdbk. Brit. Lep., p. 772.

Meyrick says of this insect, "England to Durham, local." I have been quite unable to find any published notice of this as a Durham species, though presumably there must be one, as Mr. Meyrick told me he had no private lists supplied in compiling his work. It is not in any of the MS. lists I have in my possession. The larva feeds in the leaves of *Solanum dulcamara*, which is comparatively common in both counties, and extends far up the western dales, though the food plant abounds in many English districts from which the insect is absent.

189. *A. betulella*, Curt.*Acrolepia betulella*. Staint. Man., vol. ii., p. 363.

,, ,, Meyr. Hdbk. Brit. Lep., p. 771.

This pretty little species was first discovered on birch trees in Castle Eden Dene in August by Mr. J. C. Dale, and was described and figured by his friend Curtis in 1838. Mr. Sang appeared to have some special knowledge of its haunts or habits, for he not only took it regularly there, but he also found it at High Force, Upper Teesdale, and took it there as regularly, though it was scarce in both localities. The "Manual" gives August as the date of its appearance, but it remains out a long time, probably hibernating as an imago, and Sang's dates run from the 16th August to 9th October. I was with him in Castle Eden Dene on 2nd October, 1862, when he took three specimens, and I was fortunate enough to capture one. They were all, as were most of Sang's specimens, beaten out of yew. The larva is not known, but an allied Continental species, *A. assectella*, feeds in flower-stems and leaves of onions and leeks. It is suggested in the Entomologist's Annual for 1867, p. 25, that the larva of *betulella* may feed on some species of *Allium*. *Allium ursinum* occurs commonly in Castle Eden Dene, and *Allium scorodoprasum* also grows freely in many parts. These are also

abundant in Hezleden Dene, but no one has taken *betulella* there. I do not know that it has been taken since 1878, the date of Sang's last capture.

GLYPHIPTERYX, Hub.

190. *Glyphipteryx fuscoviridella*, Haw.

Glyphipteryx fuscoviridella. Staint. Man., vol. ii., p. 364.

" " Meyr. Hdbk. Brit. Lep.,
p. 704.

A very abundant species, generally among flowering grasses, yet the only record of it in the more northerly county is the "Ne!" of the "Manual," signifying its abundance at Newcastle-on-Tyne. It is also marked there as occurring regularly at Darlington. It is too common, I expect, for entry in Sang's diary. Mr. Backhouse got it at St. John's, Weardale. Mr. Gardner says, "common on dry banks in the district." It does not appear to reach Scotland, and notice of localities for it in Northumberland, especially North Northumberland, are worth publication. It must be remembered that the "Ne" of the "Manual" rather refers to the residence of the collector who supplied Stainton with his list of captures than to the actual capture of the species there.

191. *G. cladiella*, Stain.

Glyphipteryx cladiella. Staint. Man., vol. ii., p. 364.

" *thrasonella*. Meyr. Hdbk. Brit. Lep., p. 704
(partim).

The "Manual" gives *cladiella* as occurring only at Wicken Fen, near Cambridge. Mr. Sang found it in a bog near Darlington. There is no other record.

192. *G. thrasonella*, Sc.

Glyphipteryx thrasonella. Staint. Man., vol. ii., p. 364.

" " Meyr. Hdbk. Brit. Lep., p. 704
(partim).

This is marked in the "Manual" as being abundant at

Newcastle-on-Tyne, and occurring regularly at Darlington. The only additional notice I have is that Mr. Gardner says it is common in Hezleden Dene. Meyrick gives this and the preceding as being but one species, and this opinion seems now very generally held.

193. *G. fischeriella*, Zell.

Glyphipteryx fischeriella. Staint. Man., vol. ii., p. 365.

„ „ Meyr. Hdbk. Brit. Lep., p. 705
(partim).

Probably common everywhere throughout both counties. It is given in the "Manual" as being abundant both at Newcastle-on-Tyne and at Darlington. Mr. Backhouse took it at St. John's, and it is very common around Hartlepool. The larva feeds on *Dactylis glomerata* and can find food everywhere, and though these are all the notices of it I can find, it is probably because it has proved too common to mention

TINAGMA, Dup.

194. *Tinagma sericiellum*, Haw.

Tinagma sericiellum. Staint. Man., vol. ii., p. 367.

Heliozela sericiella. Meyr. Hdbk. Brit. Lep., p. 683.

This species, which is generally rather a common one, has so far only been taken by Mr. J. B. Hodgkinson in West Northumberland. It should be looked for in oak woods or where oak is plentiful.

195. *T. stanneellum*, F. v. R.

Tinagma stanneellum. Staint. Man., vol. ii., p. 367.

Heliozela stanneella. Meyr. Hdbk. Brit. Lep., p. 683.

A very local insect, although the larva feeds on oak, which grows everywhere. The only recorded locality for this species in our counties is Darlington, near which Mr. Sang found it.

196. *T. resplendellum*, Stain.*Tinagma resplendellum*. Staint. Man., vol. ii., p. 367.*Heliozela resplendella*. Meyr. Hdbk. Brit. Lep., p. 683.

Rather a local species, and here reported once only from each county. Mr. Hodgkinson met with it in West Northumberland, and Mr. Sang found larvæ at Hell Kettles, near Darlington, in leaves of alder. The "Manual" marks it as occurring at Darlington.

DOUGLASIA, Stain.

197. *Douglasia ocnerostomella*, Stain.*Douglasia ocnerostomella*. Staint. Man., vol. ii., p. 367.

" " Meyr. Hdbk. Brit. Lep., p. 685.

This would appear to be strictly a south and east of England species, but Mr. Sang records it in his diary as taken in Headley Lane, near Darlington, on 26th June, 1859. There is no subsequent entry of the insect, the only food plant of which is viper's bugloss (*Echium vulgare*).

ARGYRESTHIDÆ.

ARGYRESTHIA, Hub.

198. *Argyresthia ephippella*, Fab.*Argyresthia ephippella*. Staint. Man., vol. ii., p. 369.

" " Meyr. Hdbk. Brit. Lep., p. 766.

Rather a common species, but not ranging very far to the north. I have no notice of it in Northumberland, and for Durham only that Mr. Backhouse got it at Shotley, except the "Manual" note that it is abundant at Darlington. I expect it will occur in most parts of the district. There is no notice in Sang's diary, but that is generally the case with abundant species, and I learn from Mr. Banks that Sang certainly obtained the insect freely.*

* This species is common about the cherry trees in Mr. C. O. Trechmann's garden at Hudworth Tower, Castle Eden.—J. G.

199. *A. nitidella*, Fab.*Argyresthia nitidella*. Staint. Man., vol. ii., p. 369.

,, ,, Meyr. Hdbk. Brit. Lep., p. 766.

A very abundant species everywhere. It is marked so in the "Manual" for both Newcastle-on-Tyne and Darlington, and is probably abundant by every hawthorn hedge in both counties. Mr. Backhouse, however, is the only collector who marks its occurrence.

200. *A. semitestacella*, Curt.*Argyresthia semitestacella*. Staint. Man., vol. ii., p. 369.

,, ,, Meyr. Hdbk. Brit. Lep., p. 767.

Generally common. Occurring both at Newcastle-on-Tyne and Darlington according to the "Manual." Round the latter town Mr. Sang took it in many places, also at Castle Eden Dene and Black Halls. Mr. Gardner has also taken it in Hezleden Dene. Sang's Black Halls record is somewhat curious, for beech, which certainly does not grow at Black Halls, is the only known food plant. Mr. Bankes also took the species both at Castle Eden and at Hawthorn Tower in 1885.

201. *A. spiniella*, Zell.*Argyresthia spiniella*. Staint. Man., vol. ii., p. 369.

,, ,, Meyr. Hdbk. Brit. Lep., p. 766.

The larva of this species feeds on mountain ash (*Pyrus aucuparia*)* and the insect is necessarily confined to woods and hilly districts. It is given in the "Manual" as occurring regularly at Darlington, but the captures were made at High Force in July and August by Mr. Sang. Mr. Gardner has bred it freely from flower-stems of mountain ash which he collected in Upper Teesdale, and Mr. Backhouse has taken it at Shotley, all in the west of the county.

* But in Ent. Mo. Mag., xxii., 263 (1886) Sang records a case in which the larvæ had "undoubtedly" fed on *Prunus padus*, and gives the very strong circumstantial evidence upon which his statement was based. He does not mention the locality, but his words prove conclusively that it was not in the neighbourhood of Darlington.—E. R. B.

202. *A. albistria*, Haw.*Argyresthia albistria*. Staint. Man., vol. ii., p. 370.

,, ,, Meyr. Hdbk. Brit. Lep., p. 766.

A very common species, occurring freely among sloe. It is marked in the "Manual" as being found at Newcastle-on-Tyne, and abundantly at Darlington. Mr. Finlay found it not scarce among sloe in the Morpeth district; Mr. Backhouse took it at Shotley; and Mr. Gardner has met with it in Hezleden Dene. These are all the records, but I have no doubt it abounds almost everywhere.

203. *A. conjugella*, Zell.*Argyresthia conjugella*. Staint. Man., vol. ii., p. 370.

,, ,, Meyr. Hdbk. Brit. Lep., p. 765.

This, like *spiniella*, is to be found among mountain ash, on the berries of which the larva feeds. It is given in the "Manual" as abundant at Newcastle-on-Tyne, the locality probably being on the higher land to the west. In Durham Mr. Gardner has found it commonly in Upper Teesdale.

204. *A. semifusca*, Haw.*Argyresthia semifusca*. Staint. Man., vol. ii., p. 370.

,, ,, Meyr. Hdbk. Brit. Lep., p. 765.

Recorded by Stainton from the Lake District of Cumberland and Westmorland, but so far as I know, not reaching Northumberland. Indeed, the few records I have are of South Durham. The "Manual" marks Darlington as a place where it occurs regularly. Mr. Sang took it there by the Tees-side and elsewhere. Mr. Gardner marks it doubtfully as occurring in Hezleden Dene.

205. *A. mendica*, Haw.*Argyresthia mendica*. Staint. Man., vol. ii., p. 370.

,, ,, Meyr. Hdbk. Brit. Lep., p. 765.

Though this is probably very common in most places in both counties among sloe, I have no record of its occurrence except

the one in the "Manual," which signifies that it is abundant at Newcastle-on-Tyne, and occurs regularly at Darlington. Neither Mr. Finlay in Northumberland, nor Mr. Gardner in Durham, both of whom supplied full lists of all they had taken, appear to have met with this species.

206. *A. retinella*, Zell.

Argyresthia retinella. Staint. Man., vol. ii., p. 371.

" " Meyr. Hdbk. Brit. Lep., p. 765.

This also is probably common amongst birch and willow in most parts of both counties. I have no records, however, for the more northerly of the two, beyond the "Ne!!" of the "Manual." Mr. Finlay never met with it in his district. In Durham Mr. Backhouse took it at Shotley; Mr. Sang got it in Castle Eden Dene, at Darlington, and in Dinsdale Wood; Mr. Gardner has met with it at Cole Hill, near Hartlepool, Hezleden Dene, and a plantation near Hart Station; and Mr. Banks at Castle Eden in 1885.

207. *A. dilectella*, Zell.

Argyresthia dilectella. Staint. Man., vol. ii., p. 371.

" " Meyr. Hdbk. Brit. Lep., p. 763.

Dilectella has only been taken at High Force by Mr. Sang. He notes having found larvæ there in juniper berries. Meyrick, copying Stainton, says in *shoots* of juniper. It may occur in shoots also. The species is likely to be found in all high land in the west of both counties.

208. *A. andereggiella*, Dup.

Argyresthia andereggiella. Staint. Man., vol. ii., p. 371.

" " Meyr. Hdbk. Brit. Lep., p. 763.

A very local species, the larva feeding on hazel and apple. It is marked in the "Manual" as occurring at Newcastle-on-Tyne; and Mr. J. B. Hodgkinson says he took it in West Northumberland. I have no other records.

209. *A. curvella*, Stain.*Argyresthia curvella*. Staint. Man., vol. ii., p. 371.,, *cornella*. Meyr. Hdbk. Brit. Lep., p. 764.

A common species and extending far into Scotland. I have no records of its occurrence in Northumberland, but it is certain to occur. In Durham Mr. Backhouse has found it at St. John's. It is marked as abundant at Darlington, too common, I expect, for Mr. Sang to enter in his diary. Mr. Gardner has also taken it at Cole Hill, near Hartlepool. The larva feeds on apple.

210. *A. sorbiella*, Tr.*Argyresthia sorbiella*. Staint. Man., vol. ii., p. 371.

,, ,, Meyr. Hdbk. Brit. Lep., p. 764.

Rather a local species, the larva feeding in shoots of mountain ash (*Pyrus aucuparia*). Mr. Hodgkinson marks it as a West Northumberland insect. Mr. Sang has taken it at Wolsingham, and Mr. Gardner and Mr. B. A. Bower in Upper Teesdale—both in West Durham. Mr. Gardner has also found it not uncommon in Hezleden Dene.

211. *A. pygmæella*, Hub.*Argyresthia pygmæella*. Staint. Man., vol. ii., p. 371.

,, ,, Meyr. Hdbk. Brit. Lep., p. 764.

A very widely distributed species, and probably to be found everywhere among willow. The "Manual" gives it as occurring at Newcastle-on-Tyne, and abundant at Darlington, but I have no records except that Mr. Backhouse took it at Shotley and Mr. Gardner at Edder Acres near Hartlepool, and in Hezleden Dene.

212. *A. gædarta*, Linn.*Argyresthia gædarta*. Staint. Man., vol. ii., p. 372.

,, ,, Meyr. Hdbk. Brit. Lep., p. 764.

A very common species among birch and alder, but I have very few records. The "Manual" gives it as abundant both at

Newcastle-on-Tyne and at Darlington. Mr. Backhouse took it at Shotley, and Mr. Gardner found it very common both at Cole Hill, near Hartlepool, and in Hezleden Dene. I have no doubt it may be found plentifully in all parts of both counties.

213. *A. brockeella*, Hub.

Argyresthia brockeella. Staint. Man., vol. ii., p. 372.

„ „ Meyr. Hdbk. Brit. Lep., p. 763.

A common species among birch. It is given in the "Manual" as being abundant at Newcastle-on-Tyne, and occurring regularly at Darlington. I would expect it to be plentiful in all birch woods. Mr. Finlay found it generally distributed around Morpeth. Mr. Wailes recorded it nearly seventy years ago in Castle Eden Dene (see Stephens' Illustrations, vol. iv., p. 253), where Mr. Sang took it in 1854, and where I have met with it much more recently; Mr. Backhouse also took it at St. John's, and Mr. Gardner at Edder Acres.

214. *A. arceuthina*, Zell.

Argyresthia arceuthina. Staint. Man., vol. ii., p. 372.

„ „ Meyr. Hdbk. Brit. Lep., p. 763.

The larva of this species feeds on juniper, and the insect need only be looked for where that grows. It has been taken at Wolsingham by Mr. Sang, and should also occur in Teesdale and on the Northumberland hills.

CEDESTIS, Zell.

215. *Cedestis farinatella*, Dup.

Cedestis farinatella. Staint. Man., vol. ii., p. 373.

„ „ Meyr. Hdbk. Brit. Lep., p. 760.

Mr. Hodgkinson took *farinatella* in West Northumberland. In the "Manual" it is given as being abundant at Darlington, but I think the specimens were taken in the Teesdale woods, where Mr. Gardner also met with it. There is not very much Scotch fir in Hezleden Dene, but Mr. Gardner has taken *farinatella* there also. I expect it will be found in most or all of the fir woods of both counties.

OCNEROSTOMA, Zell.

216. *Ocnerostoma piniariella*, Zell.

Ocnerostoma piniariella. Staint. Man., vol. ii., p. 373.

„ „ Meyr. Hdbk. Brit. Lep., p. 760.

Rather common in Scotch fir woods, etc. In Northumberland it has only been met with in the west by Mr. Hodgkinson. In Durham the few records I have are from the south of the county. Mr. Gardner found it very common in a young Scotch fir wood near Cole Hill. Mr. Sang took it in several places around Darlington, Dinsdale Wood, Coniscliffe Moor, Elders, etc.

ZELLERIA, Stain.

217. *Zelleria hepariella*, Stain.

Zelleria hepariella. Staint. Man., vol. ii., p. 374.

„ „ Meyr. Hdbk. Brit. Lep., p. 767

(*partim*).

Castle Eden Dene is given in the "Manual" as one of the habitats of this insect. There Mr. Sang took it as long ago as 1853, his notes reaching down to 1874. It is noted among his captures at Darlington in the Entomologist's Monthly Magazine, vol. vi., p. 170, where he took it in 1873 and 1874. Mr. Gardner has taken it in Castle Eden Dene still more recently.

218. *Z. insignipennella*, Stain.

Zelleria insignipennella. Staint. Man., vol. ii., p. 374.

„ *hepariella* Meyr. Hdbk. Brit. Lep., p. 767

(*partim*).

Stainton suggests that this is perhaps not truly distinct from *hepariella*, and their identity is now considered beyond question, but I give them separately because he did. The larger insect has been taken at the same places as the smaller, viz., Castle Eden Dene, where Mr. Sang took it from 1862 to 1879; and Elders, Darlington, where he met with it in 1874. Mr. Gardner also took it in Castle Eden Dene with *hepariella*.

GRACILARIIDÆ.

GRACILARIA, Haw.

219. *Gracilaria swederella*, Thunb.*Gracilaria swederella*. Staint. Man., vol. ii., p. 376.,, *alchimiella*. Meyr. Hdbk. Brit. Lep., p. 751.

Generally common among oak, but I have few records. The "Manual" gives it as abundant at both Newcastle-on-Tyne and Darlington. Mr. Finlay found it generally distributed around Morpeth, and always common. Mr. Backhouse found it at St. John's; it is very abundant in Hezleden Dene, where Mr. Gardner has taken it freely.

220. *G. stigmatella*, Fab.*Gracilaria stigmatella*. Staint. Man., vol. ii., p. 376.

,, ,, Meyr. Hdbk. Brit. Lep., p. 751.

I have no records for the occurrence of this insect in North-umberland, and Meyrick limits its recorded range northwards to Durham. Mr. Backhouse got it at St. John's; the "Manual" marks it as occurring regularly at Darlington, and Mr. Sang appears to have taken it at several places around that town. In August, 1860, he took it at street lamps. I have no other records. The larva feeds on willow and poplar, and I see no reason why it should not be found in the more northern county.

221. *G. stramineella*, Stain.*Gracilaria stramineella*. Staint. Man., vol. ii., p. 376.,, *elongella*. Meyr. Hdbk. Brit. Lep., p. 752
(*partim*).

Described by Stainton as distinct from *elongella*, but now recognised as an uncommon variety of it. The only records I have of its occurrence here are from the west of the county, High Force, and Egglestone, where Mr. Sang took it in 1878 and 1879. His dates do not agree closely with those in the "Manual," as he got it on 1st August, 1878, at High Force. The Egglestone dates, 14th and 15th September, show the ordinary time of the appearance of the second brood.

222. *G. elongella*, Linn.*Gracilaria elongella*. Staint. Man., vol. ii., p. 377.

" " Meyr. Hdbk. Brit. Lep., p. 752

(partim).

Generally a common species, the larva feeding on birch or alder. The insect is given in the "Manual" as occurring at Darlington, and regularly at Newcastle-on-Tyne. It has been taken in West Northumberland by Mr. Hodgkinson. Mr. Sang took it in Castle Eden Dene and at Black Halls in 1860, and at High Force in August or September, 1878. Mr. Backhouse got it in a garden at Darlington and also at St. John's. Mr. Gardner reports it scarce in Hezleden Dene.

223. *G. tringipennella*, Zell.*Gracilaria tringipennella*. Staint. Man., vol. ii., p. 377.

" " Meyr. Hdbk. Brit. Lep., p. 752.

A common insect, the larva feeding on *Plantago lanceolata*. It is given in the "Manual" as occurring regularly at Newcastle-on-Tyne and abundantly at Darlington. Mr. Hodgkinson found the species in West Northumberland, and Mr. Finlay found it not uncommon in the Morpeth district. In Durham it is common on the railway side both at Hartlepool and Darlington, and in other places around. Mr. Sang also took it in Castle Eden Dene, and Mr. Backhouse records it from St. John's.

224. *G. syringella*, Fab.*Gracilaria syringella*. Staint. Man., vol. ii., p. 378.

" " Meyr. Hdbk. Brit. Lep., p. 752.

A very common species, occurring almost everywhere. It is given in the "Manual" as abundant both at Newcastle-on-Tyne and Darlington. I have no other Northumberland record, but it is widely spread and common in Durham. Mr. Wailes took it at Gibside seventy years ago (see Stephens' Illustrations, vol. iv., p. 364.) Mr. Corder has taken it near Sunderland. Mr. Backhouse took it at St. John's. It is also common in Castle Eden Dene, Hezleden Dene, etc., etc.

225. *G. auroguttella*, Steph.*Gracilaria auroguttella*. Staint. Man., vol. ii., p. 378.

" " Meyr. Hdbk. Brit. Lep., p. 753.

Generally common among some of the species of *Hypericum*, but not very plentiful here. It is marked in the "Manual" as occurring regularly at Newcastle-on-Tyne and Darlington. Mr. J. B. Hodgkinson found it in West Northumberland. It occurs in Hezleden Dene, but Mr. Gardner finds it scarce there.

CORISCIUM, Zell.

226. *Coriscium cuculipennellum*, Hub.*Coriscium cuculipennellum*. Staint. Man., vol. ii., p. 379.

" " Meyr. Hdbk. Brit. Lep., p. 749.

A decidedly local species, and in this district only reported from Durham county. Mr. Backhouse met with it at Shotley, and Mr. Sang took it in Castle Eden Dene in September, from 1862 to 1879. Mr. Gardner has also taken it in Hezleden Dene.

227. *C. sulphurellum*, Haw.*Coriscium sulphurellum*. Staint. Man., vol. ii., p. 379.

" " Meyr. Hdbk. Brit. Lep., p. 749.

A local species, but occurring much further north than these counties. I have, however, no notice of its appearance here except among the papers of the late Mr. Backhouse, who records that he took it at St. John's in West Durham. The moth occurs among oaks, but the larva does not appear to be known.

ORNIX, Tr.

228. *Ornix avellanella*, Stain.*Ornix avellanella*. Staint. Man., vol. ii., p. 380.

" " Meyr. Hdbk. Brit. Lep., p. 748.

(partim).

A very common species. The "Manual" gives it as occurring at Newcastle-on-Tyne, and being abundant at Darlington. I

have no other Northumberland records, and for Durham only that of Mr. Backhouse, who got it at Shotley, and of Mr. Gardner who found it in Hezleden Dene. The larva feeds on hazel, and the insect may be found everywhere, but this and the following five species are more or less difficult to separate except when bred.

229. *O. anglicella*, Stain.

Ornix anglicella. Staint. Man., vol. ii., p. 380.

" " Meyr. Hdbk. Brit. Lep., p. 748 (*partim*).

Another common species, perhaps commoner than the last. It is given in the "Manual" as abundant both at Newcastle-on-Tyne and at Darlington. Mr. Backhouse took it at St. John's, and Mr. Gardner in Hezleden Dene. I have little doubt but that it is plentiful almost everywhere among hawthorn.

230. *O. betulæ*, Stain.

Ornix betulæ. Staint. Man., vol. ii., p. 380.

" " Meyr. Hdbk. Brit. Lep., p. 747 (*partim*).

Also common, the larva feeding on birch. It appears, however, to occur more to the west of the district than the east. It is given for Newcastle-on-Tyne in the "Manual," and Mr. Finlay found it generally distributed about Morpeth. In Durham Mr. Sang took it at Wolsingham, and also at High Force; the first brood at Wolsingham, and the second at High Force.

231. *O. torquillella*, Zell.

Ornix torquillella. Staint. Man., vol. ii., p. 381.

" " Meyr. Hdbk. Brit. Lep., p. 747.

More local than the preceding, and more restricted in its range, Durham being the published northern limit. It is given in the "Manual" as abundant at Darlington. The larva feeds on blackthorn. I know of no other localities.

232. *O. scoticella*, Stain.*Ornix scoticella*. Staint. Man., vol. ii., p. 381.

,, ,, Meyr. Hdbk. Brit. Lep., p. 747.

Not at all common here. Mr. Backhouse took it at St. John's, Weardale; and Mr. Sang met with it at Barnard Castle, where he found it scarce. It probably occurs still further to the west at High Force, Upper Teesdale, and most likely on the high land in West Northumberland also. At present there is no record for that county.

233. *O. loganella*, Stain.*Ornix loganella*. Staint. Man., vol. ii., p. 381.

,, ,, Meyr. Hdbk. Brit. Lep., p. 747.

Apparently not occurring in Northumberland, and scarce in Durham. It is only recorded from Shotley by Mr. Backhouse; from Wolsingham by Mr. Sang, who took it in 1874; and from Hezleden Dene by Mr. Gardner, who says it is rare. The larva feeds on birch. It does not appear to have been found anywhere south of Herefordshire.

234. *O. guttea*, Haw.*Ornix guttea*. Staint. Man., vol. ii., p. 381.

,, ,, Meyr. Hdbk. Brit. Lep., p. 747.

Generally rather a common species, but apparently not recorded from any station to the north of South Durham. Indeed, the only records I have are from Darlington, which is marked in the "Manual" as a place where *guttea* is abundant, and where Mr. Sang has met with it.

COLEOPHORIDÆ.

COLEOPHORA, Zell.

235. *Coleophora laricella*, Hub.*Coleophora laricella*. Staint. Man., vol. ii., p. 384.

,, ,, Meyr. Hdbk. Brit. Lep., p. 649.

No doubt an abundant species among larch. Mr. Hodgkinson

took it in West Northumberland. Mr. Sang got it in Dinsdale Wood, near Darlington. It is marked in the "Manual" as being abundant at the latter place.

236. *C. lutipennella*, Zell.

Coleophora lutipennella. Staint. Man., vol. ii., p. 384.

" " Meyr. Hdbk. Brit. Lep., p. 648.

A very common species, one that probably occurs all over both counties. So far, however, it is only recorded for West Northumberland by Mr. Hodgkinson. In Durham it is given in the "Manual" as having been taken at Darlington; Mr. Sang took it at Barnard Castle, and Mr. Gardner in Upper Teesdale and in Hezleden Dene.

237. *C. fuscadinella*, Zell.

Coleophora fuscadinella. Staint. Man., vol. ii., p. 385.

" " Meyr. Hdbk. Brit. Lep., p. 648.

No doubt a plentiful species in most places in both counties, yet as is often the case with common insects, I have no records except that the "Manual" marks it as being abundant at Darlington. This insect, however, does not appear to reach Scotland, in which case the northern limit of its range will be somewhere within these counties.

238. *C. viminetella*, Zell.

Coleophora viminetella. Staint. Man., vol. ii., p. 385.

" " Meyr. Hdbk. Brit. Lep., p. 648.

A common insect generally, and probably occurring everywhere. I have no record excepting from the west of Northumberland, where Mr. Hodgkinson met with it. In Durham it is given in the "Manual" as appearing regularly at Darlington. Mr. Backhouse took it at St. John's; and Mr. Gardner has bred it freely from cases on willow collected in Crimdon Cut, above Hart Station.

239. *C. siccifolia*, Stain.*Coleophora siccifolia*. Staint. Man., vol. ii., p. 385.

" " Meyr. Hdbk. Brit. Lep., p. 647.

Not a generally distributed species, though the larva feeds on birch, hawthorn, and apple. The only record I have of its occurrence here is that Mr. Hodgkinson met with it in West Northumberland, but Mr. Banks informs me that in Nat. Hist. Tin., iv., 88 (1859) Stainton recorded it as common at Stockton-on-Tees. It is entered in Sang's diary, without locality, as taken (no doubt in the larval state) on 5th September, 1880, but from the adjoining entries I do not think it was met with in these counties.

240. *C. gryhipennella*, Bouché.*Coleophora gryhipennella*. Staint. Man., vol. ii., p. 385.

" " Meyr. Hdbk. Brit. Lep., p. 647.

Doubtless a common species, yet I have very few records, especially from Northumberland. It is given in the "Manual" as being abundant at Newcastle-upon-Tyne, and occurring regularly at Darlington. I have no other Northumbrian record, but feel sure the insect must occur, more particularly on the coast sandhills on the spiny rose (*Rosa spinosissima*). On this it is very abundant on Hartlepool sandhills, and I have also found it freely on the dog rose in the hedges and on garden rose. Mr. Sang records it from Coniscliffe Lane, evidently by the date, April 10th, in the larval state, on the hedge roses there. I would expect it to occur all over both counties.

241. *C. nigricella*, Steph.*Coleophora nigricella*. Staint. Man., vol. ii., p. 385.

" " Meyr. Hdbk. Brit. Lep., p. 647.

Generally a common species, and probably occurring everywhere. I have, however, only one record beyond those in the "Manual," which gives it as occurring regularly at Newcastle-on-Tyne, and abundantly at Darlington. The one record is that

Mr. Sang took it in June near Darlington. The larva feeds on blackthorn, whitethorn, apple, and other trees, so that it can find food almost anywhere.

242. *C. orbitella*, Zell.

Coleophora orbitella. Staint. Man., vol. ii., p. 386.

„ „ Meyr. Hdbk. Brit. Lep., p. 648.

In the north at least *orbitella* seems to have a preference for the western side of the island. Its range is said to reach Westmorland. Here it has been noticed only in the western part of Durham. Mr. Hodgkinson does not give it as having occurred in West Northumberland. Mr. Sang appears to be the only collector who has met with it here. His captures were at Wolsingham in 1878 and 1879 (the most northern locality), Stanhope in 1874, and at High Force from 1874 to 1878. In Britain it is better known by the synonym *wilkinsoni*, Scott, than by the name *orbitella*, Zell.

243. *C. paripennella*, Zell.

Coleophora paripennella. Staint. Man., vol. ii., p. 386.

„ „ Meyr. Hdbk. Brit. Lep., p. 647.

A local species, and apparently not found north of Durham, in which county it has only been met with by Mr. Sang, who bred it from larvæ found at High Force on 1st August, 1877. He does not appear to have seen it again.

244. *C. albitarsella*, Zell.

Coleophora albitarsella. Staint. Man., vol. ii., p. 386.

„ „ Meyr. Hdbk. Brit. Lep., p. 646.

The range of this species also does not appear to extend beyond Durham, in the south of which it is fairly common locally. The "Manual" gives it as occurring regularly at Darlington. Mr. Sang found larvæ in Grange Road, to the south of Darlington, from 17th to 22nd May, 1872, and in Coniscliffe Lane, to the west of the town, on June 4th of the same year. Stainton and Meyrick give the larvæ as full fed in April, but I learn

from Mr. Bankes that even in South Dorset they may be collected during May and part of June, and he has found them feeding there as late as June 19th. Mr. Gardner has bred the insect from larvæ found, but not commonly, in Hezleden Dene.

245. *C. alcyonipennella*, Koll.

Coleophora alcyonipennella. Staint. Man., vol. ii., p. 386.
 „ „ Meyr. Hdbk. Brit. Lep.,
 p. 646.

Not uncommon locally in England, and the "Manual" gives it as abundant at Newcastle-on-Tyne, but Mr. Finlay never met with it, and I have no other notice for Northumberland. The "Manual" also marks it as occurring regularly at Darlington, but Mr. Sang does not enter it in his diary as occurring there. He took it in Castle Eden Dene as far back as 1857. Mr. John Scott recorded the larvæ on leaves of black knapweed (*Centaurea nigra*) at Stockton-on-Tees (see Entomologist's Weekly Intelligencer, vol. i., p. 20). Mr. Gardner has also bred it freely from larvæ collected in Crimdon Cut and at Greatham.

246. *C. frischella*, Linn.

Coleophora frischella. Staint. Man., vol. ii., p. 386.
 „ „ Meyr. Hdbk. Brit. Lep., p. 646.

Not being a micro-lepidopterist, I have been puzzled as to why this species is now considered identical with *C. melilotella*, Scott, in face of the distinction pointed out in all the earlier notices of the latter between both the imagines and the larval cases. Mr. Bankes, however, in explaining the matter, informs me that in a paper published in Ent. Mo. Mag., xxxv., 1-5 (1888) he proved the identity of *frischella* and *melilotella*, and showed that the supposed imaginal differences were purely imaginary, and that the reputed case of *frischella*, which finally remained as the only obstacle to their union, did not belong to this species but to *conspicuella*. When I first took the insect, about 1862, we called it *melilotella*. By this name it was taken all around this district, viz., at Darlington by Mr. Sang, at Stockton-on-Tees by Mr. Scott, at Hartlepool by myself, and

at Hartlepool and also at Greatham by Mr. Gardner. Mr. Hodgkinson, too, marks *frischella* as a West Northumberland insect. Recently the plant (*Melilotus officinalis*) has been collected largely hereabouts for the making of "herb beer" and other purposes, and the insect, which was rather common on railway banks, is now much scarcer, though still to be taken where the plant occurs.

247. *C. fabriciella*, Vill.

Coleophora fabriciella. Staint. Man., vol. ii., p. 387.

" " Meyr. Hdbk. Brit. Lep., p. 645.

Mr. Hodgkinson reports this insect from West Northumberland. I do not know that it has previously been recorded from beyond Durham. The "Manual" gives it as occurring at Darlington, where Mr. Sang found it on the railway embankment as recently as June, 1882.

248. *C. anatipennella*, Hub.

Coleophora anatipennella. Staint. Man., vol. ii., p. 387.

" " Meyr. Hdbk. Brit. Lep., p. 651.

Generally rather common locally. It is given in the "Manual" as occurring both at Newcastle-on-Tyne and at Darlington. Mr. Hodgkinson records it among the insects occurring in West Northumberland. The larva appears to feed on various common trees, including blackthorn, so that if it is rare here it is not for need of food; but I have no other records.

249. *C. albicosta*, Haw.

Coleophora albicosta. Staint. Man., vol. ii., p. 388.

" " Meyr. Hdbk. Brit. Lep., p. 654.

A common and generally distributed species, and probably occurring wherever whin is at all plentiful. Mr. Hodgkinson found it in West Northumberland. The "Manual" gives it as occurring regularly both at Newcastle-on-Tyne and at Darlington. Mr. Backhouse met with it at St. John's, and Mr.

253. *C. genistæ*, Stain.*Coleophora genistæ*. Staint. Man., vol. ii., p. 390.

" " Meyr. Hdbk. Brit. Lep., p. 654.

A very local species, and the only record here within my knowledge is that of the "Manual," which gives Newcastle-on-Tyne as a place where it occurs. The larva feeds on *Genista anglica*, a moor plant, so that it must have been on some of the damp moors that it was taken, but Mr. Finlay never met with it. I would urge upon the Newcastle collectors to find the habitat.

254. *C. onosmella*, Zell.*Coleophora onosmella*. Staint. Man., vol. ii., p. 390.

" " Meyr. Hdbk. Brit. Lep., p. 655.

Mr. Sang entered in his diary that he took this insect in Headley Lane, Darlington, on 26th June, 1859. It is not entered again, nor is there any note or mark of its abundance or otherwise. It may therefore have been but a stray specimen, as Durham is much beyond its range. It does not occur in Yorkshire, nor have I any knowledge of the insect on the east side of the island. Mr. Banks thinks it not improbable that Sang's entry may have been due to an error of identification, and adds that everyone makes at least a few erroneous entries in his diary, especially in his younger days, but it is by no means everyone who, if the errors are afterwards detected, remembers to correct the entries. He points out that in 1859 Sang was only 31 years of age, and was no authority on this difficult genus *Coleophora*, nor is it known that the specimen was submitted to any expert.

255. *C. therinella*, Stain.*Coleophora therinella*. Staint. Man., vol. ii., p. 391.

" " Meyr. Hdbk. Brit. Lep., p. 656.

A very local species, not recorded as extending northward beyond Durham according to Meyrick, but Mr. Hodgkinson entered it as found by himself in West Northumberland. In

Durham I only have the "Manual" record that it has occurred at Darlington, and that Mr. Gardner has taken it at Black Halls. Mr. Sang does not appear to have met with it either about Darlington or elsewhere.

256. *C. troglodytella*, Dup.

Coleophora troglodytella. Staint. Man., vol. ii., p. 391.

" " Meyr. Hdbk. Brit. Lep., p. 656.

Meyrick limits the recorded northward range of this species to York, but it has occurred at Darlington, where Mr. Sang took it, and in Crimdon Cut, where Mr. Gardner met with it.

257. *C. lineolea*, Haw.

Coleophora lineolea. Staint. Man., vol. ii., p. 391.

" " Meyr. Hdbk. Brit. Lep., p. 655.

A local species, but very widely distributed. I have no other knowledge of its occurrence here than the "Manual" record, which gives it as occurring at Newcastle-on-Tyne. As already said, the Newcastle list was supplied by Wailes, who collected in both counties. Here is another enigma for our Newcastle collectors to solve.

258. *C. apicella*, Stain.

Coleophora apicella. Staint. Man., vol. ii., p. 391.

" " Meyr. Hdbk. Brit. Lep., p. 655.

Rather a local species, and not extending very far north. It is not given in Porritt's Yorkshire catalogue, but Mr. Sang took it at Baydales, near Darlington, many years ago. Its rediscovery would be important. This is the *cacuminatella* of Doubleday's list.

259. *C. annulatella*, Tengst.

Coleophora annulatella. Staint. Man., vol. ii., p. 392.

" *laripennella*. Meyr. Hdbk. Brit. Lep., p. 657.

This, which is rather a common species, and was called *tengstromella* by Doubleday, is given in the "Manual" as

occurring at Newcastle-on-Tyne, and regularly at Darlington. There Mr. Sang took it in Neasham Lane, in Whessoe Lane, etc. He also met with it at Seaton Carew, in Castle Eden Dene, and at Black Halls. Mr. Gardner has also taken it commonly at Greatham, and also close to his own house at Hart.

260. *C. artemisiella*, Scott.

Coleophora artemisiella. Meyr. Hdbk. Brit. Lep., p. 658.

This species, which was not discovered until after the publication of the "Manual," is very common amongst *Artemisia maritima* on Greatham marshes. Mr. Gardner has taken the insect, and bred it freely from larvæ collected there. Mr. Sang's records in his diary are all for *Middlesbro'*, but it is certain that he collected larvæ at Greatham when with Mr. Gardner, though he has made no record of doing so.

261. *C. murinipennella*, Dup.

Coleophora murinipennella. Staint. Man., vol. ii., p. 392.

" " Meyr. Hdbk. Brit. Lep., p. 659.

Generally a common species, but its most northern recorded station is given by Meyrick as Yorkshire. Mr. Hodgkinson, however, marks it as taken by him in West Northumberland. In Durham Mr. Sang found it on Coniscliffe Moor, near Darlington, in 1880 and 1881, and Mr. Gardner has taken it at Greatham. The Durham captures are not far from the Yorkshire boundary, but Mr. Hodgkinson's are perhaps a hundred miles beyond it.

262. *C. glaucicolella*, Wood.

Coleophora glaucicolella. Meyr. Hdbk. Brit. Lep., p. 659.

Meyrick says of this species, "S. England to Hereford and Cambridge, common; not yet recognised elsewhere." Mr. Gardner has taken it on Greatham salt marsh, the moths and cases having been identified by Dr. Wood, so that Meyrick's statement is no longer correct. The larva feeds on seeds of *Juncus glaucus*.

263. *C. cæspititiella*, Zell.*Coleophora cæspititiella*. Staint. Man., vol. ii., p. 392.

,, ,, Meyr. Hdbk. Brit. Lep., p. 659.

A very abundant species, the larva feeding on the seeds of various species of rush. Mr. Finlay has taken it on Needless Hall Moor, the only Northumbrian record. Mr. Sang has taken it in several places near Darlington. Mr. Gardner writes, "everywhere about rushes." These are all the records, but there is no doubt of its occurrence "everywhere about rushes."

ELACHISTIDÆ.

(*Bedellia somnulentella*, Zell., may be included among the species that seem likely to occur in Durham, for although omitted from Mr. Porritt's Yorkshire list, it was found, evidently commonly, in the larval state at Middlesbrough by Mr. John Scott in 1857, and recorded by him in Ent. Wk. Int., vol. ii., 149.)

BATRACHEDRA, Stain.

264. *Batrachedra præangusta*, Haw.*Batrachedra præangusta*. Staint. Man., vol. ii., p. 396.

,, ,, Meyr. Hdbk. Brit. Lep., p. 661.

A common species, occurring among poplar and willow. The "Manual" gives it as occurring both at Newcastle-on-Tyne and Darlington. Mr. Sang took it near Darlington and in Castle Eden Dene. Mr. Gardner has found it in Hezleden Dene. Meyrick says larva "in catkins of poplar and salix (seldom between joined leaves)."

265. *B. pinicolella*, Dup.*Batrachedra pinicolella*. Staint. Man., vol. ii., p. 396.

,, ,, Meyr. Hdbk. Brit. Lep., p. 661.

A local species, whose recorded range northwards Meyrick limits to Hereford and Norfolk. Mr. Sang found it on Coniscliffe Moor in 1879. He sought it again in 1881, and took two specimens on 3rd August, and one only on the 7th. He went

again in 1885 on the 2nd August, and was fortunate enough to capture fifteen.

OINOPHILA, Steph.

266. *Oinophila v-flava*, Haw.

Oinophila v-flava. Staint. Man., vol. ii., p. 396.

„ *v-flavum*. Meyr. Hdbk. Brit. Lep., p. 733.

An insect frequenting cellars, and especially wine cellars, the larva feeding there on fungi and on wine corks. The "Manual" gives Newcastle-on-Tyne as one of its habitats, and Mr. Hodgkinson reports it from the west of Northumberland. Mr. Sang found it in "Foster's wine vaults" at Darlington on 12th October, 1878, and makes the note "rather too late." He got it there again on 24th August, 1881, and continued to get it till 11th September. There are no later notes as to this species, and I have no other records.

CHAULIODUS, Tr.

267. *Chauliodus chærophyllella*, Göze.

Chauliodus chærophyllellus. Staint. Man., vol. ii., p. 397.

Epermenia chærophyllella. Meyr. Hdbk. Brit. Lep., p. 691.

A common species, and likely to be found in most parts of both counties. The "Manual" gives it as occurring both at Newcastle-on-Tyne and Darlington. Mr. Hodgkinson has taken it in West Northumberland. In Durham Mr. Sang has met with it in Castle Eden Dene frequently, and on Coniscliffe Moor. Mr. Gardner has found it common in Hezleden Dene. The larva feeds on the underside of the leaves of *Heracleum* and other plants.

LAVERNA, Curt.

268. *Laverna propinquella*, Stain.

Laverna propinquella. Staint. Man., vol. ii., p. 398.

Mompha „ Meyr. Hdbk. Brit. Lep., p. 680.

The only Northumbrian collector who has taken this insect is Mr. Hodgkinson, who met with it in the western district. It

is given in the "Manual" as occurring at Darlington, but it is not mentioned in Sang's diary. It occurs in Castle Eden Dene and Hezleden Dene, in both of which places Mr. Gardner has taken it. Doubleday calls this *paludicolella*.

269. *L. lacteella*, Steph.

Laverna lacteella. Staint. Man., vol. ii., p. 398.

Mompha ,, Meyr. Hdbk. Brit. Lep., p. 681.

A local species generally, and here only recorded from South Durham. Mr. Sang took it in Neasham Lane, Darlington, and in Dinsdale Wood. In Neasham Lane he got it on ragwort flowers. Mr. Gardner has taken it regularly in Hezleden Dene and Crimdon Cut, but not at all commonly.

270. *L. miscella*, W. V.

Laverna miscella. Staint. Man., vol. ii., p. 398.

Mompha ,, Meyr. Hdbk. Brit. Lep., p. 682.

The "Manual" gives the species as occurring regularly at Darlington. There is little doubt that the specimens referred to were taken at Black Hall Rocks, where Mr. Sang took it. *Miscella* is also entered in his diary as taken at Hartlepool in 1884, but there is no *Helianthemum* at Hartlepool, nor nearer than a few hundred yards south of Hezleden Dene mouth. Sang was probably staying at Hartlepool, and the specimens were taken at Black Halls or very near thereto. Mr. Gardner has also taken the insect there, and bred it from *Helianthemum*.

271. *L. ochraceella*, Curt.

Laverna ochraceella. Staint. Man., vol. ii., p. 399.

Mompha ,, Meyr. Hdbk. Brit. Lep., p. 681.

Meyrick gives Durham as the most northerly recorded habitat of this species, but Mr. Hodgkinson has taken it in West Northumberland, the only Northumbrian record however. It is common in South Durham. The "Manual" gives it as occurring at Darlington. Mr. Sang took it on Conisliffe Moor. It is also common in Hezleden Dene, where Mr. Gardner has taken it.

272. *L. atra*, Haw.*Laverna atra*. Staint. Man., vol. ii., p. 399.*Chrysoclista atra*. Meyr. Hdbk. Brit. Lep., p. 678.

The northerly recorded range of this species is limited to Yorkshire by Meyrick, but that is an error. The "Manual" gives it as occurring at Newcastle-on-Tyne, and regularly at Darlington. I have no other Northumbrian record, or even for North Durham, but Mr. Sang bred the insect from larvæ found in Whessoe Lane, near Darlington, and Mr. Gardner states it to be common in most of the hedges near Hartlepool. This is the *hellerella* of Doubleday's list.

CHRYSOCLISTA, Stain.

273. *Chrysoclista schrankella*, Hub.*Chrysoclista schrankella*. Staint. Man., vol. ii., p. 400.*Mompha* „ Meyr. Hdbk. Brit. Lep., p. 680.

A very local species, and only taken by one collector in each county. Mr. J. B. Hodgkinson took it in West Northumberland, and Mr. Gardner got it in Hezleden Dene, and bred it from larvæ found there on *Epilobium montanum*.

274. *C. flavicaput*, Haw.*Chrysoclista flavicaput*. Staint. Man., vol. ii., p. 401.„ *aurifrontella*. Meyr. Hdbk. Brit. Lep., p. 677.

The "Manual" marks this species as being abundant at Newcastle-on-Tyne, and occurring regularly at Darlington. I have no records except that Mr. Gardner has taken it both at Greatham and in Hezleden Dene. I expect it will prove to be common in most places in both counties.

ASYCHNA, Stain.

275. *Asychna profugella*, Stain.*Asychna profugella*. Staint. Man., vol. ii., p. 402.*Cataplectica* „ Meyr. Hdbk. Brit. Lep., p. 689.

A very local species, and only taken here once. Mr. Sang recorded it as "beaten out" in August, 1869, at Elders, near Darlington. The larvæ feed on seeds of several common plants.

276. *A. terminella*, Westw.

Asychna terminella. Staint. Man., vol. ii., p. 402.

Mompha ,, Meyr. Hdbk. Brit. Lep., p. 679.

Another local species, and only recorded here for Castle Eden Dene, where Mr. Sang took larvæ in September, 1878 and 1879, and the Rev. F. G. I. Robinson and Mr. Banks found them in August and September, 1885. The larva feeds in leaves of *Circea lutetiana*, which is common enough in Hezleden Dene and most woods and denes in both counties, and I have little doubt but that the insect will be found in many places.

CHRYSOCORYS, Curt.

277. *Chrysocorys festaliella*, Hub.

Chrysocorys festaliella. Staint. Man., vol. ii., p. 402.

Schreckensteinia ,, Meyr. Hdbk. Brit. Lep., p. 690.

This is generally a common insect, the larva feeding on bramble and raspberry. It is given in the "Manual" as abundant at Newcastle-on-Tyne, and occurring at Darlington. The only notices that I have come across besides these are Sang's bare entry in his diary of his having met with it at High Force on September 5th, 1879, and his fuller note, evidently referring to the same occasion, in the Entomologist's Monthly Magazine, that the larvæ were in thousands at High Force, and that the raspberry bushes were bleached in every direction by them, and formed quite a feature in the landscape. Mr. Backhouse also found it at St. John's. It will probably occur elsewhere in the west.*

* NOTE.—Mr. C. O. Trechmann has more recently (1909) taken the insect at Edderacres near Castle Eden.

STEPHENSIA, Stain.

278. *Stephensia brunnichiella*, Linn.

Stephensia brunnichiella. Staint. Man., vol. ii., p. 403.

„ *brunnichiella*. Meyr. Hdbk. Brit. Lep., p. 674.

This species is only recorded from Northumberland by Mr. Hodgkinson, who took it in the west of the county. In Durham it is given in the "Manual" as occurring at Darlington, where Mr. Sang took it in Coniscliffe Lane, and at Low Coniscliffe. He also got it in Castle Eden Dene, and Mr. Gardner has taken it in Hezleden Dene and bred it from larvæ collected there.

ELACHISTA, Tr.

279. *Elachista trapeziella*, Stain.

Elachista trapeziella. Staint. Man., vol. ii., p. 404.

„ „ Meyr. Hdbk. Brit. Lep., p. 666.

A local species, only reported from one locality in each county. Mr. Hodgkinson took it in West Northumberland, and Mr. Sang in West Durham, at Barnard Castle. The larvæ feed in *Luzula pilosa*, and Mr. Sang got them from April 2nd to May 9th from 1859 to 1881.

280. *E. gleichenella*, Fab.

Elachista gleichenella. Staint. Man., vol. ii., p. 405.

„ „ Meyr. Hdbk. Brit. Lep., p. 667.

Another species only recorded once from each county, and from the same places by the same collectors, namely, from West Northumberland by Mr. Hodgkinson, and from Barnard Castle by Mr. Sang. The larva feeds in leaves of *Carex*, and I do not see why it should not occur elsewhere. Mr. Sang's dates for larvæ are April 2nd and 8th, 1859 to 1877. He went once on May 25th, marking his diary "too late."

281. *E. albifrontella*, Hub.*Elachista albifrontella*. Staint. Man., vol. ii., p. 405.

" " Meyr. Hdbk. Brit. Lep., p. 667.

Generally common throughout the district, and probably to be found everywhere. It is given in the "Manual" as occurring at Newcastle-on-Tyne, and being abundant at Darlington. Mr. Finlay took it in the Old Park, Netherwilton. Mr. Sang got it in Castle Eden Dene as far back as 1857; he also took it in Dinsdale Wood, near Darlington. Mr. Backhouse got it at Shotley; this also being nearly fifty years ago. Mr. Gardner says, "generally common in the district." I have taken it myself near Hezleden Dene.

282. *E. cinereopunctella*, Haw.*Elachista cinereopunctella*. Staint. Man., vol. ii., p. 405.

" " Meyr. Hdbk. Brit. Lep., p. 667.

Not a very common species, and only once recorded from each county. Mr. Hodgkinson reported it from the west of Northumberland, and Mr. John Scott recorded it from Stockton-on-Tees in the Entomologist's Weekly Intelligencer, vol. i., p. 20.

283. *E. luticomella*, Zell.*Elachista luticomella*. Staint. Man., vol. ii., p. 406.

" " Meyr. Hdbk. Brit. Lep., p. 668.

A common species, the larvæ feeding in the stems or leaves of *Dactylis glomerata*. The "Manual" gives it as occurring at Newcastle-on-Tyne, and being abundant at Darlington. Mr. Hodgkinson found it in West Northumberland, the only other Northumbrian record. Mr. Sang found it all around Darlington; Mr. John Scott recorded it from Stockton-on-Tees in the Entomologist's Weekly Intelligencer, vol. i., p. 20. Mr. Gardner has also found it in Hezleden Dene and in Crimdon Cut, and I have no doubt it occurs throughout both counties.

284. *E. atricomella*, Stain.*Elachista atricomella*. Staint. Man., vol. ii., p. 406.

" " Meyr. Hdbk. Brit. Lep., p. 668.

The larvæ of this species also feed in the leaves and stems of *Dactylis glomerata*, and it is a tolerably common insect. It is given in the "Manual" as occurring at Newcastle-on-Tyne, and regularly at Darlington. Mr. Hodgkinson has taken it in West Northumberland; Mr. Backhouse met with it at Shotley; Mr. Sang took it in Castle Eden Dene and several places around Darlington; and Mr. John Scott recorded it for Stockton-on-Tees in the Entomologist's Weekly Intelligencer, vol. i., p. 20. About Hartlepool it is not very common, but Mr. Gardner has taken it on the railway side near Hart Station and also near Thorp Bulmer.

285. *E. kilmunella*, Stain.*Elachista kilmunella*. Staint. Man., vol. ii., p. 406.

" " Meyr. Hdbk. Brit. Lep., p. 668.

This insect has been taken in West Northumberland by Mr. Hodgkinson, and at Egglestone in Teesdale by Mr. Gardner. Meyrick gives its range on the east of the island as only extending to Norfolk. He has certainly overlooked the records in Mr. Porritt's Yorkshire list. The larva feeds in *Carex* in boggy places, and I expect it will be recorded from many such localities in future.

286. *E. alpinella*, Stain.*Elachista alpinella*. Sta. Ins. Brit. Lep. Tin., p. 254.

" " Meyr. Hdbk. Brit. Lep., p. 668.

A moorland insect, the larvæ mining in leaves and stems of *Carex paludosa*. Mr. Hodgkinson found it on moors in West Northumberland, and Mr. Sang on Teesdale moors in West Durham. I learn from Mr. Bankes that this species, generally known as *monticola*, Wck., should be called by the above name, which was bestowed on it twenty-two years before that of

monticola; for although Stainton himself, after describing it (*l.c.*) as *alpinella*, subsequently sunk it, in the index to the "Manual" (ii., 472), as a variety of *kilmunella*, he was in error in doing so.

287. *E. nigrella*, Haw.

Elachista nigrella. Staint. Man., vol. ii., p. 406.

„ „ Meyr. Hdbk. Brit. Lep., p. 669
(*partim*).

Rather a common species generally, but I have few notices of its appearance here. Mr. Hodgkinson took it in West Northumberland, the only record from the county. The "Manual" gives it as being abundant at Darlington—too common probably for Sang to enter in his diary. The only other records I have are that Mr. Gardner has taken it in Hezleden Dene and nearer Hartlepool, and that it has been captured at Sunderland by Mr. Corder. It is probably common in both counties. The larva feeds in several grasses.

288. *E. gregsoni*, Stain.

Elachista gregsoni. Sta. Ent. Ann., 1885, p. 70.

„ *nigrella*. Meyr. Hdbk. Brit. Lep., p. 669
(*partim*).

This was introduced as a new species in the Entomologist's Annual for 1855, having been reared from the larva by Mr. C. S. Gregson; however Mr. Banks informs me that the imaginal and larval differences pointed out by Mr. Stainton between *gregsoni* and *nigrella* are held to be unreliable, and that they are now considered to be one and the same species. But I enter *gregsoni* separately, keeping to my rule to follow Stainton in all such cases. Mr. Sang took it "flying in the sun, 3 to 4 p.m., in Coniscliffe Lane," on May 15th, 1872; he took it again at Hell Kettles, and the next year he found the larvæ there, April 5th to 19th, 1873. In 1877 he found larvæ in Coniscliffe Lane on April 3rd, and the following year he got it again, but earlier, March 1st to 17th.

289. *E. obscurella*, Stain.*Elachista obscurella*. Staint. Man., vol. ii., p. 407.

,, ,, Meyr. Hdbk. Brit. Lep., p. 670.

This species was taken by Mr. Hodgkinson in West Northumberland, and Mr. Gardner reports it as common in Upper Teesdale. These are all the records I have under this name. Mr. Sang notes the occurrence of *subobscurella* on the railway side at Darlington, and at Elders, also near Darlington. This is Doubleday's name for the same insect.

290. *E. perplexella*, Stain.*Elachista perplexella*. Staint. Man., vol. ii., p. 408.

,, ,, Meyr. Hdbk. Brit. Lep., p. 669.

A local species, but occurring in both counties, Mr. Hodgkinson having taken it in West Northumberland. It appears to occur all round the Darlington and Hartlepool districts. Mr. Sang took it in Dinsdale Wood, on the North-Eastern Railway embankment, and at other places near Darlington, also in Castle Eden Dene and at Black Hall Rocks near Hartlepool. Mr. Gardner has taken it in Hezleden Dene, and bred it freely from larvæ collected there.

291. *E. adscitella*, Stain.*Elachista adscitella*. Staint. Man., vol. ii., p. 408.,, *megerlella*. Meyr. Hdbk. Brit. Lep., p. 671
(*partim*).

A very local species, and I have no Northumbrian record. The "Manual" gives Darlington as a place where it occurs. Mr. Sang found it in Castle Eden Dene; Mr. Scott has bred it from Stockton-on-Tees; and Mr. Gardner has taken it in Hezleden Dene, and also bred it from larvæ collected there.

292. *E. megerlella*, Stain,*Elachista megerlella*. Staint. Man., vol. ii., p. 408.,, ,, Meyr. Hdbk. Brit. Lep., p. 671
(*partim*).

The "Manual" gives this insect as occurring both at New-

castle-on-Tyne and Darlington. Mr. Hodgkinson has taken it in the west of Northumberland. Mr. Sang found it regularly in Castle Eden Dene and at Black Halls, as well as near Darlington. Mr. Gardner has taken and bred it from Hezleden Dene. It is rather a common species, and probably occurs in most places. Meyrick has merged the preceding species, as well as *cinctella* and *obliquella*, with *megerlella*.

293. *E. zonariella*, Tgst.

Elachista zonariella. Staint. Man., vol. ii., p. 409.

„ „ Meyr. Hdbk. Brit. Lep., p. 671.

Rather a common species, and probably occurring in most places in both counties. Yet I have only Mr. Hodgkinson's record for West Northumberland for the entire county. In Durham the notices I have are all for the southern and south-eastern portion. Mr. Sang found it in Castle Eden Dene, in Dinsdale Wood near Darlington, on the railway side near Croft, on the Stockton and Darlington railway, and also at Elders. Mr. John Scott bred it from *Aira cæspitosa* at Stockton-on-Tees (see Entomologist's Weekly Intelligencer, vol. i., p. 12), which is given in the "Manual" as one of its places of occurrence. Mr. Gardner has also bred it from Hezleden Dene.

294. *E. tæniatella*, Stain.

Elachista tæniatella. Staint. Man., vol. ii., p. 409.

„ „ Meyr. Hdbk. Brit. Lep., p. 670.

A local species, not extending beyond Durham, according to Meyrick, but taken in West Northumberland by Mr. Hodgkinson. Mr. Sang took it at Darlington and bred it from there (see Entomologist's Monthly Magazine, vol. iv., p. 153). Mr. Bankes tells me that in Nat. Hist. Tin., iii., 70, Mr. Stainton wrote of it—"Mr. Scott met with the larvæ, and also with the perfect insect, near Stockton-on-Tees."

295. *E. cerusella*, Hub.*Elachista cerusella*. Staint. Man., vol. ii., p. 410.

" " Meyr. Hdbk. Brit. Lep., p. 672.

Not a common species generally. It is given in the "Manual" as being abundant at Darlington. Mr. Sang records it in his diary, "Railway, Harrogate Gate, June 18, 1854; side of Skerne Bridge, July 7th, 1854; Skerne side, larvæ, Aug. 8th, 1869; Hell Kettles, larvæ, June 4th, 1872." More recently it has been taken by Mr. T. A. Lofthouse at Haverton Hill.*

296. *E. rhyncosporella*, Stain.*Elachista rhyncosporella*. Staint. Man., vol. ii., p. 410.

" " Meyr. Hdbk. Brit. Lep., p. 672.

A local species, and so far as the Durham records go, it seems to prefer swampy or wet ground.† Mr. Hodgkinson took it in West Northumberland, but I know nothing of the place where he got it. Mr. Sang took it near Darlington in a bog. Mr. Gardner took it on the margin of a pond on Stephenson's farm at Thorp Bulmer, near Hartlepool.

297. *E. paludum*, Frey.*Elachista paludum*. Staint. Man., vol. ii., p. 410.

" " Meyr. Hdbk. Brit. Lep., p. 672.

A decidedly local species. It was taken in West Northumberland by Mr. Hodgkinson. Mr. Sang got it at Hell Kettles. His experience in breeding it is detailed in the Entomologist's

* Mr. Robson seems to have been in doubt as to whether the entries in Sang's diary really referred to this species or to *Crambus cerussellus*; there can however be no question but that they all referred to *Elachista cerusella*, for in the index to his diary, written out by himself, the entries are noted against the latter species. I have therefore cancelled Mr. Robson's notes on the species and included the records.—J. G.

† This is the case everywhere, for its food plants are only found on such ground.—E. R. B.

Monthly Magazine, vol. v., p. 78. He says "they are scarce, and difficult to find, as they seem to grow up all at once, and are fearfully subject to ichneumons." That was in 1868, and down to 1880 he still notes in his diary that the larvæ are rare. On May 16th, 1868, he appends a note that they are then too small to take; in 1880 he got them on the 12th—four days earlier.

298. *E. biatomella*, Stain.

Elachista biatomella. Staint. Man., vol. ii., p. 411.

" " Meyr. Hdbk. Brit. Lep., p. 672.

Rather a local species, and I have unusually few notices of its occurrence here. The "Manual" gives Newcastle-on-Tyne as one of the places where it has been found. I have no idea where the insect was really met with. Mr. Sang got it at Darlington on the railway banks in June, 1880. I have no other notice of it.

299. *E. triatomea*, Haw.

Elachista triatomea. Staint. Man., vol. ii., p. 411.

" " Meyr. Hdbk. Brit. Lep., p. 673.

Rather a common species, but I have few records. It is given in the "Manual" as occurring at Newcastle-on-Tyne and being abundant at Darlington, whence Mr. Banks received larvæ from Mr. Sang in 1885. Mr. Gardner has found it commonly at Greatham, in Crimdon Cut, and elsewhere. It is probably plentiful in most places in both counties.

300. *E. pollinariella*, Stain.

Elachista pollinariella. Staint. Man., vol. ii., p. 411.

" " Meyr. Hdbk. Brit. Lep., p. 673.

This species has only been taken in South Durham. It is recorded for Darlington in the "Manual," and Mr. Sang took it in several places around the town, and in Castle Eden Dene. Mr. Gardner has also taken it on the railway side close to Hezleden Dene. Mr. Banks writes that it is not the true *pollinariella* originally described by Zeller.

301. *E. subocellea*, Steph.*Elachista subocellea*. Staint. Man., vol. ii., p. 411.

,, ,, Meyr. Hdbk. Brit. Lep., p. 673.

Limited in its northerly range to York by Meyrick, but occurring in both these counties. Mr. Hodgkinson took it in West Northumberland, and Mr. Sang took it in July in Castle Eden Dene.

302. *E. rufocinerea*, Haw.*Elachista rufocinerea*. Staint. Man., vol. ii., p. 411.

,, ,, Meyr. Hdbk. Brit. Lep., p. 673.

A most abundant species everywhere.

303. *E. cygnipennella*, Hub.*Elachista cygnipennella*. Staint. Man., vol. ii., p. 412.

,, ,, Meyr. Hdbk. Brit. Lep., p. 674.

Probably abundant everywhere. It is marked so both at Newcastle-on-Tyne and at Darlington in the "Manual." It is in all the lists I have seen, and always marked plentiful or abundant.

TISCHERIA, Zell.

304. *Tischeria complanella*, Hub.*Tischeria complanella*. Staint. Man., vol. ii., p. 412.

,, ,, Meyr. Hdbk. Brit. Lep., p. 759.

A plentiful species among oak. It is given in the "Manual" as occurring regularly at Newcastle-on-Tyne, and abundantly at Darlington. Mr. Finlay also reports it as generally distributed in the Morpeth district, and common among oaks. It probably occurs everywhere if oak is plentiful.

305. *T. marginea*, Haw.*Tischeria marginea*. Staint. Man., vol. ii., p. 413.

,, ,, Meyr. Hdbk. Brit. Lep., p. 759.

A common species, the larva feeding in bramble leaves. The only records I have of its occurrence are those of Mr. Sang,

who took it at Dinsdale Wood and other places in the vicinity of Darlington.

LITHOCOLLETIDÆ.

LITHOCOLLETIS, Hub.

306. *Lithocolletis amyotella*, Dup.

Lithocolletis amyotella. Staint. Man., vol. ii., p. 415.

„ „ Meyr. Hdbk. Brit. Lep., p. 737.

A very local species, yet apparently well distributed here. Mr. Hodgkinson has taken it in the west of Northumberland, and Mr. Finlay in the Morpeth district. In Durham it is given in the "Manual" as occurring at Darlington, where Mr. Sang records it from Baydales. Mr. Gardner has bred it from larvæ found near Hartlepool. He writes, "I have bred six specimens of this good species, but cannot say from where I got the mines; they were however either from Hezleden Dene or Greatham."

307. *L. roboris*, Zell.

Lithocolletis roboris. Staint. Man., vol. ii., p. 415.

„ „ Meyr. Hdbk. Brit. Lep., p. 737.

Another local species, but apparently to be found in both counties. The "Manual" gives it as occurring at Newcastle-on-Tyne abundantly, and regularly at Darlington. I have no further records for Northumberland, and for Durham only that Mr. Sang collected it at Baydales, near Darlington, from 1859 to 1871.

308. *L. sylvella*, Haw.

Lithocolletis sylvella. Staint. Man., vol. ii., p. 415.

„ „ Meyr. Hdbk. Brit. Lep., p. 737.

The northerly range of this insect is limited to York by Mr. Meyrick, although the "Manual" states it has occurred at Newcastle-on-Tyne. I have no other record than that in the "Manual." The maple is only doubtfully indigenous in

Durham, though the trees are plentifully enough planted, and grow apparently wild almost everywhere.

309. *L. cramerella*, Fab.

Lithocolletis cramerella. Staint. Man., vol. ii., p. 415.

" " Meyr. Hdbk. Brit. Lep., p. 737.

A very common species among oaks, in the leaves of which the larvæ feed. It is marked in the "Manual" as occurring regularly at Newcastle-on-Tyne, and plentifully at Darlington. Mr. Hodgkinson found it in the west of Northumberland, and Mr. Finlay in the Morpeth district "plentiful among oaks." Mr. Sang has never entered it in his diary—too common, I expect. Mr. Gardner has taken it in Hezleden Dene.

310. *L. heegeriella*, Zell.

Lithocolletis heegeriella. Staint. Man., vol. ii., p. 416.

" " Meyr. Hdbk. Brit. Lep., p. 738.

A local species generally, and here only recorded from Darlington, where the "Manual" says it occurs regularly, and where Mr. Sang took it in Dinsdale Wood and at Elders, and from Barnard Castle where he also got it.*

311. *L. alnifoliella*, Dup.

Lithocolletis alnifoliella. Staint. Man., vol. ii., p. 416.

" " Meyr. Hdbk. Brit. Lep., p. 738.

A very common insect among alder, in the underside of the leaves of which the larva feeds. It is given in the "Manual" as abundant both at Newcastle-on-Tyne and Darlington. Mr. Hodgkinson has found it in West Northumberland, and Mr. Finlay around Morpeth; he writes "plentiful among alder." In Durham, besides Darlington, Mr. Sang found it at Stanhope, Witton Junction, and Barnard Castle. Mr. Gardner has bred it from Hezleden Dene and from Edder Acres. I have no doubt it is to be got freely wherever there is alder in either county.

* I have taken it not uncommonly in Hezleden Dene.—J. G.

312. *L. insignitella*, Zell.

Lithocolletis insignitella. Robson, Young Nat., xi, p. 54
(1890).

„ „ Meyr. Hdbk. Brit. Lep., p. 739.

The only British locality known for this insect at present is in the neighbourhood of Hartlepool. It occurs very freely on the railway side from a quarter of a mile above Hart Station nearly as far as Hezleden Station. It may also be found in the larval stage on hedge banks and waste places between the railway and the sea. In places in this district it is so common that it would be easy to collect a thousand mines of the larva within a radius of ten yards. Yet it does not appear to occur elsewhere in Britain. The larva here feeds only on *Trifolium arvense*,* and never appears on either *Trifolium medium* or *repens*, both of which grow in the same places where *insignitella* occurs. The occurrence of this minute species so far away from others of its kind is not very easy to explain. Mr. Sang appears to have been the first to discover this species in Britain. His diary contains an entry that he took it near Hartlepool on July 28th, 1861, but no detailed notice of its discovery in this country was published until 1890!

* I have no doubt that "*arvense*" is a *laps. cal.* for "*pratense*," for Mr. Gardner tells me that the food plant in the Hartlepool district is "the common red clover (?*pratense*)," whereas *T. arvense* has only white or pale pink minute flowers. But, even so, Mr. Robson's statement is very puzzling, for in 1890 he wrote me word that he could only find the mines on *T. medium*, that *pratense* was not common where *insignitella* occurred, but that *arvense* was plentiful, though it had not yielded a single mine! Moreover, he described the larval habits, and added that "a narrow-leaved plant like *medium* is therefore more convenient for it than a broader one like *pratense*." When writing the above notice, Mr. Robson evidently became confused as to names of the various species of clover and used them incorrectly. In order to settle the point, Mr. Gardner has kindly sent me specimens of the only clover upon which *L. insignitella* has been found in the Hartlepool district; these bear upon them some mines of *insignitella*, and are certainly *T. medium*.—E. R. BANKES.

313. *L. nigrescentella*, Logan.*Lithocolletis nigrescentella*. Staint. Man., vol. ii., p. 416." " Meyr. Hdbk. Brit. Lep., p. 738
(partim).

When Stainton's "Manual" was issued in 1859 this insect was only known from a single specimen taken at Morpeth.* It has since been taken by Mr. Hodgkinson in West Northumberland, and by Mr. Sang on the railway side at Whessoe.

314. *E. irradiella*, Stain.*Lithocolletis irradiella*. Staint. Man., vol. ii., p. 416." *lautella*. Meyr. Hdbk. Brit. Lep., p. 738
(partim).

Rather a local species,† but well distributed. I have only one record for each county, Mr. Hodgkinson having taken it in West Northumberland and Mr. Sang at Elders, near Darlington. The larvæ feed in oak leaves.

315. *L. lautella*, Zell.*Lithocolletis lautella*. Staint. Man., vol. ii., p. 416." " Meyr. Hdbk. Brit. Lep., p. 738
(partim).

Meyrick makes the preceding but a synonym of this species, though both Stainton and Doubleday gave them as distinct. *Lautella* is also very local, and the larva, like that of *irradiella*, feeds in the underside of oak leaves. The only

* In Ins. Brit. Lep. Tin., p. 269 (1854), Stainton tells us that this specimen was taken "in May by Mr. Scott." Our author is mistaken in saying that "the insect" was only known in 1859 from this single specimen, for in its ordinary form, which was then regarded as a distinct species under the name *bremiella*, it was well known, and is given in the "Manual" as common or abundant in three out of the four English localities there mentioned. The much less common dark northern form happens to have been the one first described, and is therefore the typical form, while the much more common one must be called var. *bremiella*, Frey.—E. R. B.

† See footnote to the following notice.—E. R. B.

record I have of the present species is that Mr. Hodgkinson took it in West Northumberland. Of course, if these be but one species,* Mr. Sang's capture must be added here.

316. *L. bremiella*, Frey.

Lithocolletis bremiella. Staint. Man., vol. ii., p. 417.

„ *nigrescentella*. Meyr. Hdbk. Brit. Lep., p. 738
(partim).

Another local species.† The “Manual” only gives four localities, Newcastle-on-Tyne marked for the insect occurring regularly, and Darlington, where it is marked as abundant, being two of the four.‡ Mr. Hodgkinson found it in West Northumberland, and Mr. Sang got it at Barnard Castle, besides in the immediate neighbourhood of Darlington. The larva mines in leaves of *Vicia sepium* and occasionally in those of other plants.

317. *L. ulmifoliella*, Hub.

Lithocolletis ulmifoliella. Staint. Man., vol. ii., p. 417.

„ „ Meyr. Hdbk. Brit. Lep., p. 739.

Rather a common insect, and I expect well distributed over both counties. It is given in the “Manual” as occurring regularly at Newcastle-on-Tyne and abundantly at Darlington. Mr. Hodgkinson has also taken it in West Northumberland. In Durham Mr. Gardner has found it common in Hezleden Dene. I have no other records, but have no doubt as to its occurrence wherever there is plenty of birch.

* The form originally described as distinct under the name *irradiella* is a dark northern variety of *lautella*, Z., and is now known as var. *irradiella*, Staint.—E. R. B.

† But see footnote to notice of *L. nigrescentella*.—E. R. B.

‡ In Nat. Hist. Tin., ii., 188 (1857), Stainton says that *L. bremiella* “has been found at Castle Eden, near Durham,” but does not mention who found it there.—E. R. B.

318. *L. spinolella*, Dup.*Lithocolletis spinolella*. Staint. Man., vol. ii., p. 417.

" " Meyr. Hdbk. Brit. Lep., p. 739.

Rather a local insect, though often common amongst its food plant *Salix caprea*. The "Manual" gives it as occurring regularly at Newcastle-on-Tyne and abundantly at Darlington. Mr. Hodgkinson found it in West Northumberland, and Mr. Gardner has met with it in Hezleden Dene and elsewhere about Hartlepool.

319. *L. sorbi*, Frey.*Lithocolletis sorbi*. Meyr. Hdbk. Brit. Lep., p. 741.

A new species, introduced since the publication of the "Manual." It is given in Meyrick's "Handbook" as occurring in Durham, and the only record I know of is that Mr. Sang took it on June 2nd and 3rd, 1879, and on May 16th, 1880. There must be some published record, or Meyrick would not have it, as he had no private aid; but I have not found it.*

320. *L. salicicolella*, Sirc.*Lithocolletis salicicolella*. Staint. Man., vol. ii., p. 418.

" " Meyr. Hdbk. Brit. Lep., p. 740.

Rather a common species. It is marked as abundant at Newcastle-on-Tyne, and is probably plentiful in both counties

* In Ent. Mo. Mag., xxii., 262-3 (1886), a note by Sang was published, in the course of which he says that in the upper part of Weardale, on the edge of the moors, in the autumn of 1854, "*L. sorbi* was plentiful on the mountain ash, as it usually is with us, at high elevations," and that he then collected, in the same locality, some mines on *Prunus padus* which yielded *L. sorbi* in the following spring. The comma after "us" in the above quotation should obviously have been omitted, for Sang proceeds to emphasize the fact that he found this species "on the high grounds" only, and never at Darlington. His note contains the first record of *L. sorbi*, Frey., formerly more generally known in this country by Scott's name "*aucupariella*," as a British species.—E. R. B.

wherever there is plenty of common willow. Mr. Hodgkinson found it in West Northumberland. Mr. Sang got it at Black Hall Rocks. These are all the records I have, but that is probably more on account of its abundance than its scarcity.

321. *L. pomifoliella*, Zell.

Lithocolletis pomifoliella. Staint. Man., vol. ii., p. 418.

„ „ Meyr. Hdbk. Brit. Lep., p. 740
(*partim*).

This insect is very plentiful in most places, the larva feeding in hawthorn and apple leaves. It is doubtless common all over both counties, but I have no records. It is marked in the "Manual" as being abundant both at Newcastle-on-Tyne and Darlington.* It is plentiful also both in Hezleden Dene and at Greatham. Mr. Gardner has taken it at both places.

322. *L. spinicolella*, Stain.

Lithocolletis spinicolella. Staint. Man., vol. ii., p. 418.

„ „ Meyr. Hdbk. Brit. Lep., p. 741.

A common insect almost everywhere. It is given in the "Manual" as being abundant both at Newcastle-on-Tyne and at Darlington. I have no further Northumberland record, and in Durham only from Grange Road and Coniscliffe Lane, near Darlington, where Mr. Sang found it, and from Hezleden Dene, where Mr. Gardner got it. The larva feeds in sloe leaves, and wherever blackthorn is plentiful this species will be found.†

* See Ent. Mo. Mag., xxii., 262, where Sang states both *pomifoliella* (i.e., at any rate *oxyacanthæ*) and *spinicolella* are common enough at Darlington, but he never finds either on the high grounds where he gets *sorbi*.

† This statement clearly requires some modification, for in Ent. Mo. Mag., xxii., 262 (1886), Sang wrote—"Now I never find *spinicolella* . . . on the high grounds"; he adds, however, that it is "common enough" at Darlington.—E. R. B.

323. *L. faginella*, Zell.*Lithocolletis faginella*. Staint. Man., vol. ii., p. 418.,, ,, Meyr. Hdbk. Brit. Lep., p. 741
(partim).

An abundant species, swarming about beech everywhere, the larvæ feeding in the leaves. It is marked in the "Manual" as being abundant both at Newcastle-on-Tyne and at Darlington. Mr. Hodgkinson also marks it as occurring in West Northumberland. Mr. Gardner has taken it in Upper Teesdale and in Hezleden Dene, and no doubt it occurs everywhere in both counties, the paucity of records being an evidence in this case of its being too plentiful to be worth noticing.*

324. *L. coryli*, Nic.*Lithocolletis coryli*. Staint. Man., vol. ii., p. 419.

,, ,, Meyr. Hdbk. Brit. Lep., p. 742.

Rather a common species. It is given in the "Manual" as occurring at Newcastle-on-Tyne, and being abundant at Darlington. Mr. Hodgkinson reports it from West Northumberland, and Mr. Finlay found it not uncommon in Coal Law Wood. In Durham Mr. Sang got it at Barnard Castle, and Mr. Gardner says it "swarms in Hezleden Dene."†

325. *L. vacciniella*, Stain.*Lithocolletis vacciniella*. Staint. Man., vol. ii., p. 419.,, *junoniella*. Meyr. Hdbk. Brit. Lep., p. 742.

This is given in the "Manual" as being abundant at Newcastle-on-Tyne. As the larva lives in the leaves of *Vaccinium vitis-idaea*, the reference must be to some of the

* One locality in Northumberland, viz., Morpeth, and one in Durham, viz., Stockton-on-Tees, are given by Stainton in Nat. Hist. Tin., ii., 154 (1857), probably on the authority of Messrs. John Finlay and John Scott respectively.—E. R. B.

† In Nat. Hist. Tin., ii., 114 (1857), Mr. Stainton, probably on the authority of Mr. John Scott, records its occurrence at Stockton-on-Tees.—E. R. B.

higher moors where the food plant abounds. The same remark applies to the Stockton-on-Tees record (Entomologist's Weekly Intelligencer, vol. i., p. 20). Mr. Scott probably found it in Upper Teesdale, though, as he had been in Scotland the previous year, he may have brought it from there. Mr. Gardner, however, has found it in Upper Teesdale.

326. *L. quinqueguttella*, Stain.

Lithocolletis quinqueguttella. Staint. Man., vol. ii., p. 419.

„ „ Meyr. Hdbk. Brit. Lep.,
p. 742.

Of this species Meyrick says "England to York, local." It certainly occurs very much further north, for Mr. Hodgkinson records it from West Northumberland. For Durham I have no records except from the Hartlepool district, Castle Eden and Black Halls, where Mr. Sang took it commonly. Mr. Gardner also has bred it from larvæ got at Black Halls on *Salix repens*.

327. *L. quercifoliella*, Zell.

Lithocolletis quercifoliella. Staint. Man., vol. ii., p. 420.

„ „ Meyr. Hdbk. Brit. Lep., p. 743.

A common species among oak. The "Manual" gives it as being abundant both at Newcastle-on-Tyne and Darlington. Mr. Hodgkinson met with it in West Northumberland. Mr. Gardner found it common in Hezleden Dene. There are no other records, probably because of its great abundance.

328. *L. messaniella*, Zell.

Lithocolletis messaniella. Staint. Man., vol. ii., p. 420.

„ „ Meyr. Hdbk. Brit. Lep., p. 743.

Generally common, and probably occurring in most parts of both counties, but I have very few records indeed. The "Manual" gives it as abundant both at Newcastle-on-Tyne and Darlington, and Mr. Hodgkinson marks it as occurring in the west of Northumberland. No one else has recorded it, perhaps, like others, because of its abundance.

329. *L. scopariella*, Zell.*Lithocolletis scopariella*. Staint. Man., vol. ii., p. 420.

" " Meyr. Hdbk. Brit. Lep., p. 743.

A local species, the larva feeding in broom. It has only been taken here by Mr. Sang, who met with it first in 1866 on the railway side at Whessoe. He afterwards (1878 to 1881) got it on Tees-side and on Coniscliffe Moor.

330. *L. viminiella*, Stain.*Lithocolletis viminiella*. Staint. Man., vol. ii., p. 420.

" " Meyr. Hdbk. Brit. Lep., p. 743.

Another species of which the larva feeds on willow, and rather a common insect in most places. Yet the only Northumbrian record is that of Mr. Hodgkinson, who found it in the west of the county. The "Manual" marks it as occurring at Darlington, and Mr. Gardner has taken it in Hezleden Dene.*

331. *L. corylifoliella*, Haw.*Lithocolletis corylifoliella*. Staint. Man., vol. ii., p. 421." " Meyr. Hdbk. Brit. Lep., p. 744
(partim).

A widely distributed species, common in some parts of the country among hawthorn, etc. It is given in the "Manual" as being abundant at Newcastle-on-Tyne,† and as occurring at Darlington. Mr. Hodgkinson marked it as being found in West Northumberland. About Hartlepool it swarms on every hedge. I have no other records, but it is abundant wherever I have been.

* In Nat. Hist. Tin., ii., 86 (1857), it is recorded, though without the name of the observer, who was presumably Mr. John Scott, as occurring at Stockton-on-Tees.—E. R. B.

† Another Northumbrian locality, viz., Morpeth, is recorded in Stainton's Nat. Hist. Tin., ii., 98 (1857). It seems natural to suppose that it had been taken there by Mr. John Finlay.—E. R. B.

332. *L. caledoniella*, Stain.*Lithocolletis caledoniella*. Staint. Man., vol. ii., p. 421.,, *corylifoliella*. Meyr. Hdbk. Brit. Lep., p. 744
(partim).

This, as suggested by Stainton, is now known to be but a darker form of *corylifoliella*. The larva feeds in the same way, in the upper side of hawthorn and other leaves, and the insect appears at the same time. It would seem to be a northern form, though *corylifoliella* occurs in the north also. Mr. Finlay found *caledoniella* generally distributed and common in those parts of Northumberland where he collected. It is given in the "Manual" as occurring at Darlington. Mr. Sang took it at Dinsdale, as well as nearer Darlington. Mr. Gardner records it for Hezleden Dene only. I think it occurs on all our hedges.

333. *L. nicellii*, Stain.*Lithocolletis nicellii*. Staint. Man., vol. ii., p. 421.,, ,, Meyr. Hdbk. Brit. Lep., p. 744
(partim).

A common species among hazel, on which the larva feeds. It is entered by Mr. Hodgkinson in his list of West Northumberland species. It is given in the "Manual" as being abundant at Darlington. Mr. Gardner finds it commonly in Hezleden Dene. It is one of those abundant species that Mr. Sang never entered in his diary.

334. *L. dunningiella*, Stain.*Lithocolletis dunningiella*. Staint. Man., vol. ii., p. 421.,, *nicellii*. Meyr. Hdbk. Brit. Lep., p. 744
(partim).

This insect is considered by Meyrick to be the same as the preceding. The book description in Stainton ought to be sufficient to distinguish them.* The present species is reported from West Northumberland by Mr. Hodgkinson, and from Barnard Castle (West Durham) by Mr. Sang. I have no further record.

* They are readily distinguishable, *nicellii* being light and *dunningiella* dark in colour, but the latter is, nevertheless, a dark northern variety of the former, and should be known as *L. nicellii* var. *dunningiella*, Stn.—
E. R. B.

335. *L. froelichiella*, Zell.*Lithocolletis froelichiella*. Staint. Man., vol. ii., p. 421.,, *froelichiella*. Meyr. Hdbk. Brit. Lep., p. 744.

Rather a local species, the larva mining in the leaves of alder. It is given for West Northumberland by Mr. Hodgkinson, the only Northumbrian record I have seen. The "Manual" gives Darlington as a place where the insect occurs, but I have no other notice of it there. Mr. Sang found it at Stanhope. Mr. Gardner has taken it at Edder Acres, near Hartlepool, but not commonly.

336. *L. stettinensis*, Nic.*Lithocolletis stettinensis*. Staint. Man., vol. ii., p. 421.

,, ,, Meyr. Hdbk. Brit. Lep., p. 744.

Another alder-feeder, and rather a local species. Mr. Hodgkinson took it in West Northumberland—the only notice I have for that county. The "Manual" gives it as occurring at Darlington, and Mr. Gardner has taken it at Edder Acres. These are all the records.* Mr. Sang does not appear to have met with it.

337. *L. kleemannella*, Fab.*Lithocolletis kleemannella*. Staint. Man., vol. ii., p. 422.,, *kleemannella*. Meyr. Hdbk. Brit. Lep., p. 744.

The larva of this insect feeds also in leaves of alder. It is rather a local insect, and the only Northumbrian record is that of Mr. J. B. Hodgkinson, who found it in the west of that county. The "Manual" gives it as occurring at Darlington. Mr. Sang took it at Stanhope, to which the "Da." of the "Manual" may refer, and Mr. Gardner has found it at Edder Acres, near Hartlepool.

* But in Nat. Hist. Tin., ii., 196 (1857), Mr. Stainton recorded it from another Durham locality, viz., Stockton-on-Tees. He does not give the name of the captor, who was most probably Mr. John Scott.—E. R. B.

338. *L. emberizæpennella*, Bch.

Lithocolletis emberizæpennella. Staint. Man., vol. ii., p. 422.

„ *emberizipennella*. Meyr. Hdbk. Brit. Lep.,
p. 745.

A tolerably common species, probably occurring in most places in both counties. The only record, however, of the insect in Northumberland is that of Mr. Hodgkinson from the west of that county. The "Manual" gives it as being abundant at Darlington. Mr. Sang took it at Barnard Castle, and Mr. Gardner has taken it freely in Hezleden Dene.

339. *L. tristrigella*, Haw.

Lithocolletis tristrigella. Staint. Man., vol. ii., p. 422.

„ „ Meyr. Hdbk. Brit. Lep., p. 745.

The larva of this insect feeds in the leaves of elm. It is said by Meyrick to be a rather local species, but I believe it to be generally distributed in these counties. The "Manual" gives it as abundant both at Newcastle-on-Tyne and Darlington. Mr. Hodgkinson found it freely in the west of Northumberland. It also occurs in Hezleden Dene, where Mr. Gardner has taken it. The absence of records in Mr. Sang's diary is an evidence of its common occurrence.

340. *L. trifasciella*, Haw.

Lithocolletis trifasciella. Staint. Man., vol. ii., p. 422.

„ „ Meyr. Hdbk. Brit. Lep., p. 745.

Generally a common species, the larva feeding in leaves of honeysuckle. It is recorded in the "Manual" as occurring at Newcastle-on-Tyne, and Mr. Hodgkinson has taken it in the west of Northumberland. I have no records for Durham, but it is certain to be found, probably in most places where honeysuckle grows freely.

341. *L. comparella*, Zell.*Lithocolletis comparella*. Staint. Man., vol. ii., p. 423.

" " Meyr. Hdbk. Brit. Lep., p. 746.

This is considered exclusively a southern species, and Meyrick gives it as occurring only in Kent, Surrey, Berks, and Hereford. Mr. Sang, however, enters it as having been met with at Aycliffe Station and Quarry on September 20th, 1879. I have no comment to make beyond recording the note.*

342. *L. concomitella*, Banks.

Introduced as a new species by Mr. E. R. Banks after the publication of the "Manual"; see Ent. Mo. Mag., ser. 2, x., pp. 241-255 and 284-288 (1899). The only record that I have is that Mr. Gardner bred a long series in 1892, from mines got at Greatham the previous autumn in crab apple leaves, and which Mr. Banks identified as this species.

LYONETIDÆ.

LYONETIA, Hub.

343. *Lyonetia clerckella*, Linn.*Lyonetia clerckella*. Staint. Man., vol. ii., p. 424." *clerkella*. Meyr. Hdbk. Brit. Lep., p. 757.

Generally a common species, and apparently well distributed over both counties. In Northumberland, Mr. Finlay bred it freely from leaves of cherry and apple collected in Meldon Park, and Mr. Hodgkinson took it in the west of that county. In Durham, the "Manual" marks it as being abundant at Darlington. Mr. Sang took it in Castle Eden Dene and at Black Hall Rocks; he also met with it in Dinsdale Wood, near Darlington, and Mr. Gardner has taken it at Greatham.

* Upon reference to Mr. Sang's diary I find that the entry of *comparella* is really for *Abbots Wood, South Kent*, Mr. Robson having included it in the line upon which the Aycliffe records are entered instead of upon the line below referring to *Abbots Wood*—the entry of *comparella* being between the lines, but with a $\wedge$ from the lower line. We cannot therefore claim the species as a resident of these counties.—J. G.

CEMIOSTOMA, Zell.

344. *Cemiostoma spartifoliella*, Hub.*Cemiostoma spartifoliella*. Staint. Man., vol. ii., p. 425.*Leucoptera* „ Meyr. Hdbk. Brit. Lep., p. 755.

Common and generally distributed. It probably occurs in both counties where there is plenty of broom. The "Manual" gives it as abundant both at Newcastle-on-Tyne and at Darlington. Mr. Hodgkinson has taken it in West Northumberland, and Mr. Sang records it for Darlington in his diary on July 27th, 1874. I have no other records. Broom is not common near the coast, and does not occur at all near Hartlepool, nor yet in Upper Teesdale or Weardale.

345. *C. laburnella*, Stain.*Cemiostoma laburnella*. Staint. Man., vol. ii., p. 425.*Leucoptera* „ Meyr. Hdbk. Brit. Lep., p. 755.

The only record of this species in these counties that I have seen is that of Mr. Gardner, who took it at Barnard Castle. Meyrick limits its range to Yorkshire, the boundary of which county is the river Tees, which flows past Barnard Castle. The insect, however, is likely enough to occur elsewhere.*

346. *C. wailesella*, Stain.*Cemiostoma wailesella*. Staint. Man., vol. ii., p. 426.*Leucoptera* „ Meyr. Hdbk. Brit. Lep., p. 755.

A very local species, the larva feeding in *Genista tinctoria*. It is given in the "Manual" as occurring regularly at Newcastle-on-Tyne, and Mr. Hodgkinson found it in the west of Northumberland. Mr. Sang found larvæ at Elders, near Darlington, in 1873, and again in 1880, by the footpath through the fields to Hurworth. I have no other records.

347. *C. scitella*, Zell.*Cemiostoma scitella*. Staint. Man., vol. ii., p. 426.*Leucoptera* „ Meyr. Hdbk. Brit. Lep., p. 756.

* I now find that this species is common in my own garden at Hart, and also in every garden in the district where laburnum grows—probably the lack of records is owing to its being too common to mention.—J. G.

Said to be local in England, but apparently well distributed in these counties. Mr. Hodgkinson got it in West Northumberland, and it is given in the "Manual" as being abundant about Newcastle-on-Tyne and Darlington. Mr. Sang also took it at Barnard Castle, and Mr. Gardner bred it from hawthorn at Greatham.

OPOSTEGA, Zell.

348. *Opostega salaciella*, Tr.

Opostega salaciella. Staint. Man., vol. ii., p. 426.

" " Meyr. Hdbk. Brit. Lep., p. 729.

Meyrick says this species extends to Westmorland, but gives no range on the eastern side of the island. The only record I have of its appearance here is that Mr. Hodgkinson took it in West Northumberland, a region beyond Meyrick's habitat, but quite in accordance with it.

349. *O. crepusculella*, Zell.

Opostega crepusculella. Staint. Man., vol. ii., p. 427.

" " Meyr. Hdbk. Brit. Lep., p. 729.

This insect does not appear to extend further north than Durham; indeed, I might say, than the south of Durham. The "Manual" gives it as occurring at Darlington, where Mr. Sang took it, and also in Castle Eden Dene. Mr. Gardner has also taken it in Hezleden Dene. The larva does not appear to be known, but the insect occurs among *Mentha palustris*.

BUCCULATRIX, Zell.

350. *Bucculatrix aurimaculella*, Stain.

Bucculatrix aurimaculella. Staint. Man., vol. ii., p. 427.

" *nigricomella*. Meyr. Hdbk. Brit. Lep., p. 730.

Rather a common species, but not much recorded here. The only notice of it in Northumberland is that of Mr. Hodgkinson in the west of the county. It is given as occurring at Darlington in the "Manual," and Mr. Sang found it there on the railway side, as well as in Dinsdale Wood and other places near that town. Mr. Gardner has also found it in Crimdon Cut, near Hartlepool.

351. *B. cidarella*, Zell.*Bucculatrix cidarella*. Staint. Man., vol. ii., p. 427.

,, ,, Meyr. Hdbk. Brit. Lep., p. 732.

Generally rather common amongst alder, but here only found, by Mr. Sang, at Hell Kettles, near Darlington. He found the larvæ on September 7th, 1870, and again on the same day in 1880. I have seen no other record.

352. *B. cratægi*, Zell.*Bucculatrix cratægi*. Staint. Man., vol. ii., p. 428.

,, ,, Meyr. Hdbk. Brit. Lep., p. 732.

Of this insect, Meyrick says, "England to Durham, rather local." It would almost appear that the species barely reaches Durham county. The "Manual" gives it as occurring at Darlington regularly, but the only place mentioned in Sang's diary is Dinsdale Wood, which is close to the river Tees at Middleton-one-Row.

353. *B. maritima*, Stain.*Bucculatrix maritima*. Staint. Man., vol. ii., p. 428.

,, ,, Meyr. Hdbk. Brit. Lep., p. 731.

This insect is given in the "Manual" as occurring at Newcastle-on-Tyne, but that is clearly an error,* for the larva feeds on *Aster tripolium*, a salt marsh plant, while Newcastle is some miles from the sea. The insect is very common at Greatham saltmarsh, where the food plant abounds. Mr. Sang took the species there more than once, and Mr. Gardner also found it very abundant.

* I certainly do not think that Stainton can, with fairness, be accused of "error" for giving Newcastle-on-Tyne as a locality for this species in the "Manual" (*l.c.*), and in Nat. Hist. Tin., vii., 94 (1862), where he again includes it. He was perfectly well aware both of the requirements of the insect, and also of the precise position of Newcastle-on-Tyne, but, as Mr. Robson himself has repeatedly pointed out in this Catalogue, the term "Newcastle-on-Tyne," as used in the "Manual," denotes the whole of a wide district surrounding that town, and extending eastwards to the coast.—E. R. B.

354. *B. cristatella*, Zell.*Bucculatrix cristatella*. Staint. Man., vol. ii., p. 429.

" " Meyr. Hdbk. Brit. Lep., p. 730.

A local species, though the larva feeds on yarrow, a plant occurring everywhere. The insect appears to have rather a western distribution, for Meyrick says, "England to Westmorland," ignoring the east side. It has, however, been taken abundantly at Scarborough ("Manual," *l.c.*). Here it has only been taken by Mr. Gardner, who found it very abundant at Greatham on the railway embankment.

NEPTICULIDÆ.

NEPTICULA, Zell.

355. *Nepticula atricapitella*, Haw.*Nepticula atricapitella*. Staint. Man., vol. ii., p. 431." " Meyr. Hdbk. Brit. Lep., p. 714
(*partim*).

For the *Nepticula* I have very few records. Mr. Sang collected them assiduously. Mr. Finlay and Mr. Hodgkinson give very few Northumberland records. This list must be taken but as a beginning, and others must add to it in the future.

This species is pretty generally distributed among oaks, in the leaves of which it makes an irregular, slender gallery. Mr. Finlay found it in the oak leaves around Morpeth, and Mr. Hodgkinson reported it from West Northumberland. The "Manual" gives it as occurring regularly at Darlington.

356. *N. ruficapitella*, Haw.*Nepticula ruficapitella*. Staint. Man., vol. ii., p. 431." *atricapitella*. Meyr. Hdbk. Brit. Lep., p. 714
(*partim*).

Generally common among oaks. It is only distinguishable from the preceding species by the colour of the head, which is red, as the names implies, instead of black. The "Manual" gives this insect as occurring at Newcastle-on-Tyne, and regularly at Darlington. Mr. Hodgkinson took it in West Northumberland, but I have no other record.

357. *N. pygmæella*, Haw.*Nepticula pygmæella*. Staint. Man., vol. ii., p. 431.

,, ,, Meyr. Hdbk. Brit. Lep., p. 714.

The larva of this insect feeds in leaves of hawthorn. It is said to be rather local. It is given in the "Manual" as occurring regularly both at Newcastle-on-Tyne and Darlington. Mr. Hodgkinson met with it in the west of Northumberland. Mr. Sang got it on the railway side and in Grange Road and Coniscliffe, near Darlington, and also in Castle Eden Dene. I think it will be found in most parts of both counties.

358. *N. pomella*, Vaughan.*Nepticula pomella*. Staint. Man., vol. ii., p. 431.

,, ,, Meyr. Hdbk. Brit. Lep., p. 714.

Pomella is limited by Meyrick in its northward range to the county of York, but Mr. Hodgkinson has met with it in the West of Northumberland. Mr. Sang also found it in Grange Road and in Coniscliffe Lane, near Darlington. These latter places are not many miles from the Yorkshire boundary, but when the *Nepticulæ* are more collected I quite expect this species will be found widely spread.

359. *N. oxyacanthella*, Staint.*Nepticula oxyacanthella*. Staint. Man., vol. ii., p. 431.

,, ,, Meyr. Hdbk. Brit. Lep., p. 716.

This insect is given in the "Manual" as occurring regularly at Darlington, but Mr. Sang never recorded it in his diary. Meyrick also says, "England to Durham," but that would probably be taken from Stainton, as he had no original lists of species. It is likely enough to occur, being abundant at Scarborough, but it would be desirable that future *Nepticulæ* collectors should turn it up. The larva makes a long gallery in hawthorn* leaves.

* Other trees from which this species has been bred in Britain are *Cotoneaster affinis*, *Pyrus aucuparia*, *P. communis*, and *P. malus*, as recorded in Tutt's Brit. Lep., i., 203.—E. R. B.

360. *N. viscerella*, Stain.

Nepticula viscerella. Staint. Man., vol. ii., p. 431.

„ „ Meyr. Hdbk. Brit. Lep., p. 715.

This insect is in the same position as the last, viz., recorded in the "Manual" as occurring at Darlington, but not given in Sang's diary or other list to which I have access.

361. *N. aucupariæ*, Frey.

Nepticula aucupariæ. Meyr. Hdbk. Brit. Lep., p. 715.

I find no notice of this species in the "Manual" or in the "Entomologist's Annual," except that it is mentioned in the volume for 1870 of the latter work in some remarks on *N. minusculella* as somewhat resembling that insect, but having a yellow instead of a black head. It was found by Mr. Sang at Barnard Castle as long ago as 1856, and at other dates down to 1878. He also found it at Stanhope* in 1873. Mr. Hodgkinson also got it in West Northumberland. I have no further knowledge of its occurrence, but from these places would judge it to occur in the west only. Lancashire and Sutherland are given by Meyrick as the only places where it can be found in Britain.

362. *N. anomalella*, Göze.

Nepticula anomalella. Staint. Man., vol. ii., p. 432.

„ „ Meyr. Hdbk. Brit. Lep., p. 715.

This is given in the "Manual" as occurring regularly both at Newcastle-on-Tyne and at Darlington. Mr. Hodgkinson has met with it in West Northumberland, and Mr. Finlay bred it from rose leaves at Meldon Park. I have no record of it in

* Another Durham locality, viz., High Force, is recorded for this species, on the authority of Mr. B. A. Bower, in Mr. Tutt's Brit. Lep., i., 197 (1899).—E. R. B.

Durham beyond that of the "Manual." It is not entered in Sang's diary.*

363. *N. cryptella*, Stain.

Nepticula cryptella. Staint. Man., vol. ii., p. 432 (*partim*).

" " Meyr. Hdbk. Brit. Lep., p. 726.

Cryptella is marked by Mr. Hodgkinson as having† been met with by him in West Northumberland. The larva blotches the leaves of *Lotus corniculatus*, and though the species is said to be "local," I think it will be found in many other parts of these counties.

364. *N. eurema*, Durrant.

Nepticula eurema, Drnt., in Tutt's N. H. Brit. Lep., i., 332 (1899). This species, whose very existence was unknown to

* Sang's reason for not mentioning it was, without doubt, that he considered it too common. I know that he bred it plentifully, and notice in a series of his supposed "*anomalella*" before me, all unfortunately without data, some examples of the closely-allied *N. fletcheri*, which, after having been confused with *anomalella* for many years, was at last separated therefrom, and described as *n. sp.* in Tutt's Nat. Hist. Brit. Lep., i., 211 (1899). It is quite likely, therefore, that Sang's *fletcheri* were collected in Durham, but proof is wanting, so we cannot include this species. Some of the records given above may, of course, really refer to *fletcheri* rather than to *anomalella*, but only an examination of all the individuals that were captured and bred could settle this point.—E. R. B.

† Without seeing Mr. Hodgkinson's Northumberland specimens, it is quite impossible to tell whether they were referable to the *cryptella*, Stn., or to the closely-allied *eurema*, Drnt., which was for many years confused with *cryptella*, and was only separated therefrom in 1899. Mr. Robson, unaware of this separation, and copying Mr. Sang's diary, stated above that Sang found *cryptella* in Castle Eden Dene and at Darlington, but I have reason for transferring these entries to my notice of *eurema* (*q.v.*). We have therefore no proof that the true *cryptella*, described by Stainton in Ent. Ann., 1856, p. 41 (*N.B.* The "Manual" description is made from *both* species), occurs in these counties, but Sang perhaps took it in Durham. I possess a lengthy series, bred, and perhaps partly taken, by him, of his supposed *cryptella*, unfortunately without data, and although the majority are *eurema*, there are some *cryptella* mixed with them.—E. R. B.

Mr. Robson, is entered here for the following reason. In his Nat. Hist. Brit. Lep., i., 333, Mr. Tutt records it as found by Mr. Sang both at Castle Eden and Darlington, and it is there stated, on Mr. Gardner's authority, that Sang collected larvæ of *eurema* on *Lotus* on July 11th, 1858, at Castle Eden, and on June 28th, 1862, June 14th, 1872, and September 7th, 1873, at Darlington. The evidence that Sang's entries in his diary relating to "*cryptella*" really refer to *eurema* is not before me, but it was evidently convincing, and, on the strength of Mr. Tutt's decision, I have removed them from the preceding notice where they had been inserted by Mr. Robson, who mentioned that Sang's Darlington localities for "*cryptella*," i.e., for *eurema*, were the railway banks around the town. No other records of the occurrence of *eurema* in these counties are known to me.—E. R. Banks.

365. *N. ulmivora*, Fologne.

Nepticula ulmivora. Sta. Ent. Wk. Int., ix., p. 13.

„ „ Meyr. Hdbk. Brit. Lep., p. 718.

This species was first recorded as British in the Entomologist's Weekly Intelligencer, vol. ix., p. 13 (1860), and the earliest known British capture was published on p. 187 of the same volume. It is a double-brooded species, and Mr. Sang found a few larvæ on July 13th, 1873, near Darlington. In September of the same year, and of 1874, he found them again more freely. I have no other record of its occurrence here.

366. *N. septembrella*, Stain.

Nepticula septembrella. Staint. Man., vol. ii., p. 432.

„ „ Meyr. Hdbk. Brit. Lep., p. 724.

Mr. Hodgkinson found this in West Northumberland, which is an extension of the range given in Meyrick's Handbook, which limits it to Durham. It is given in the "Manual" as being abundant at Darlington, but there is no Darlington record in Sang's diary. He found it, however, in Castle Eden Dene.

367. *N. subbimaculella*, Haw.*Nepticula subbimaculella*. Staint. Man., vol. ii., p. 433.

,, ,, Meyr. Hdbk. Brit. Lep., p. 725.

A common species among oaks, given in the "Manual" as occurring regularly at Newcastle-on-Tyne, and abundantly at Darlington. Mr. Hodgkinson got it in the west of Northumberland, and Mr. Sang found it very plentifully near Darlington. Probably occurring everywhere among oaks.

The next two species, as entered in Mr. Robson's MS., are (1) *N. argyropeza*, Zell., with one Durham locality, and (2) *N. apicella*, Stn., with a single Northumbrian habitat. In spite, however, of the frequent errors made in the applications of these names, *apicella*, Stn., is in reality identical with the true *argyropeza*, Zell., and the former name must sink as a synonym of the latter. The very rare closely-allied species, wrongly called "*argyropeza*" by Stainton, and now known as *subapicella*, Stn., of which the life-history is unknown, has never been met with in these counties. In place, therefore, of Mr. Robson's separate notices and comments on the distribution, etc., of the supposed two species, I must offer the following synonymy and notice:

368. *N. argyropeza*, Zell.*Nepticula apicella*. Staint. Man., vol. ii., p. 433.,, *argyropeza*. ,, ,, (partim).,, *apicella*. Meyr. Hdbk. Brit. Lep., p. 726.

This local species, of which the larva feeds in the leaves of aspen, was found commonly on Needless Hall moors in Northumberland by Mr. Finlay, and was met with by Mr. Sang in several places round Darlington, *e.g.*, Grange Road, Elders, etc. There appear to be no other ascertained localities in these counties.—E. R. Banks.

369. *N. trimaculella*, Haw.*Nepticula trimaculella*. Staint. Man., vol. ii., p. 433.

" " Meyr. Hdbk. Brit. Lep., p. 725.

This is limited in its northerly range to Durham by Meyrick, but Mr. Hodgkinson got it in the west of Northumberland. The "Manual" gives Darlington as a place where it occurs regularly, and Mr. Sang found it freely all around that town, Grange Road, Whessoe Lane, Neasham Lane, etc., being all in his diary as places where he took it.

370. *N. salicis*, Stain.*Nepticula salicis*. Staint. Man., vol. ii., p. 434.

" " Meyr. Hdbk. Brit. Lep., p. 723.

Generally a common species, but scarcely recorded here. Mr. Hodgkinson got it in West Northumberland. The "Manual" marks it as being abundant at Darlington. Probably it was too plentiful for Mr. Sang to consider it worth an entry in his diary. I have no more records.

371. *N. myrtillella*, Stain.*Nepticula myrtillella*. Staint. Man., vol. ii., p. 434.

" " Meyr. Hdbk. Brit. Lep., p. 723.

Locally common on some northern moors, but only noticed twice here, once in each county. Mr. Hodgkinson found it in West Northumberland, and Mr. Sang got it at Barnard Castle, where he notes that it was scarce. Both these habitats are on the westward side of our district.*

372. *N. floslactella*, Haw.*Nepticula floslactella*. Staint. Man., vol. ii., p. 434.

" " Meyr. Hdbk. Brit. Lep., p. 723.

Rather a common species. It is given in the "Manual" as

* Mr. B. A. Bower has also met with it in West Durham, for from larvæ collected plentifully by him in Teesdale in 1891, I bred a long and beautiful series in the following year.—E. R. B.

occurring at Newcastle-on-Tyne, and being abundant at Darlington. Mr. Hodgkinson found it in West Northumberland. Mr. Sang got it at Barnard Castle, and at Baydales, near Darlington. It feeds in hazel and hornbeam, but the latter tree is a rarity with us.

373. *N. luteella*, Stain.

Nepticula luteella. Staint. Man., vol. ii., p. 434.

„ „ Meyr. Hdbk. Brit. Lep., p. 721.

This is given by Meyrick as only reaching Durham, but that is an error, as Mr. Hodgkinson found it in the west of Northumberland. The "Manual" gives it as occurring regularly at Darlington. Mr. Sang took it there, and also at Wolsingham and Barnard Castle. These records show rather a western tendency, but it may yet be turned up on the coast. The larva lives in birch leaves, and is generally common where birch occurs.

374. *N. ignobilella*, Stain.

Nepticula ignobilella. Staint. Man., vol. ii., p. 434.*

„ „ Meyr. Hdbk. Brit. Lep., p. 720.

Rather a local species, and only recorded from West Northumberland by Mr. Hodgkinson, and from Darlington by Mr. Sang, who found it both in Grange Road and Coniscliffe Lane.

375. *N. arcuatella*, H.-S.

Nepticula arcuata. Staint. Man., vol. ii., p. 434.

„ *arcuatella*. Meyr. Hdbk. Brit. Lep., p. 723.

A local species, found by Mr. Hodgkinson in West Northumberland, and by Mr. Sang in Whessoe Lane, Darlington. It is tolerably certain to occur elsewhere.

* Stainton was in error in saying in the "Manual" (*l.c.*)—"Head reddish" (*i.e.* in both sexes), for whereas the head of the male is red, that of the female, as pointed out in Ent. Mo. Mag., ser. 2, v., 47 (1894), is, in reality, black.—E. R. B.

376. *N. angulifasciella*, Stain.*Nepticula angulifasciella*. Staint. Man., vol. ii., p. 435.

" " Meyr. Hdbk. Brit. Lep., p. 722.

This species is given by Meyrick as only reaching Durham, but he is wrong, as it was met with by Mr. Hodgkinson in West Northumberland. The "Manual" marks it as being abundant at Darlington, and Mr. Sang got it in Grange Road there. The larva feeds in rose leaves, and the insect is tolerably certain to occur elsewhere.

377. *N. atricollis*, Stain.*Nepticula atricollis*. Staint. Man., vol. ii., p. 435.

" " Meyr. Hdbk. Brit. Lep., p. 722.

Meyrick is still further wrong in the range of this species, which he limits northwards to Lancashire and York. Mr. Hodgkinson found it in West Northumberland. Mr. Sang got it in both Coniscliffe Lane and Grange Road, Darlington. The larva feeds in leaves both of apple and hawthorn, and the insect is double-brooded.

378. *N. microtheriella*, Stain.*Nepticula microtheriella*. Staint. Man., vol. ii., p. 435.

" " Meyr. Hdbk. Brit. Lep., p. 720.

Generally a plentiful species, and given in the "Manual" as being abundant both at Newcastle-on-Tyne and at Darlington. I have no other record, except that Sang got it at Barnard Castle, as well as near Darlington.

379. *N. argentipedella*, Zell.*Nepticula argentipedella*. Staint. Man., vol. ii., p. 435." " Meyr. Hdbk. Brit. Lep., p. 721
(*partim*).

Probably common throughout both counties. Mr. Hodgkinson found it in West Northumberland, and Mr. Finlay in the Morpeth district, where he marks it as "not uncommon amongst birch." In Durham, Mr. Sang got it at Wolsingham, at High Force, Upper Teesdale, at Barnard Castle, and around Darlington.

380. *N. betulicola*, Stain.*Nepticula betulicola*. Staint. Man., vol. ii., p. 436.

" " Meyr. Hdbk. Brit. Lep., p. 720.

A tolerably common species, and probably occurring in most places in both counties. Mr. Hodgkinson records it from the west of Northumberland, and Mr. Finlay from the Morpeth district; the latter found it particularly common in the Old Park, Netherwitton. In Durham Mr. Sang has taken it in several places in the west of the county, at Wolsingham, High Force, Egglestone, Barnard Castle, etc. The larva of this species also mines in birch leaves.

381. *N. plagicolella*, Stain.*Nepticula plagicolella*. Staint. Man., vol. ii., p. 436.

" " Meyr. Hdbk. Brit. Lep., p. 720.

Meyrick limits the northerly range of this species to Durham county, but Mr. Hodgkinson has met with it in West Northumberland. The "Manual" marks it as occurring regularly at Darlington, and Mr. Sang has taken it both in Grange Road and Coniscliffe Lane.

382. *N. malella*, Stain.*Nepticula malella*. Staint. Man., vol. ii., p. 436.

" " Meyr. Hdbk. Brit. Lep., p. 722.

Another species limited in its range northwards to Durham by Mr. Meyrick, but taken in West Northumberland by Mr. Hodgkinson. It is given in the "Manual" as being abundant at Darlington, and Mr. Sang took it in Grange Road and other places near that town. The larva feeds in the leaves of apple, and probably occurs in many other places.

383. *N. tityrella*, Stain.*Nepticula tityrella*. Staint. Man., vol. ii., p. 436.

" " Meyr. Hdbk. Brit. Lep., p. 721.

" *fulgens*. " " p. 723.

*Tityrella** is given in the "Manual" as being abundant at Newcastle-on-Tyne and Darlington. Mr. Hodgkinson found it in West Northumberland, and Mr. Finlay said it was generally distributed among beech, but uncommon. Around Darlington Mr. Sang got it in Coniscliffe Lane and Baydales. I have no doubt it is common in most places among beech, but I have no further records.

384. *N. glutinosæ*, Stain.

Nepticula glutinosæ. Staint. Man., vol. ii., p. 436.

" " Meyr. Hdbk. Brit. Lep., p. 721.

Another species limited northwards to Durham by Meyrick, which Mr. Hodgkinson has found in West Northumberland. The "Manual" gives it as occurring at Darlington. Mr. Sang has taken it at Stanhope, well into West Durham. He gives no Darlington habitat, and the insect may occur only in the west. The larva feeds in alder leaves.

* This species should be called by its older name *basalella*, H.-S., but of course we respect our author's rule to adhere to the names used in the "Manual."

Great confusion prevailed until recently about our two closely-allied beech-eating *Nepticulæ*. These should be known [See Tutt's N. H. Brit. Lep., i., 297-302 (1899)] as (1) *turicella*, H.-S., which has the pale fascia non-metallic, and (2) *basalella*, H.-S., in which the pale fascia is strongly metallic. The latter is the true *tityrella*, Stn., as described by Stainton in the "Manual" and elsewhere, but in 1888, failing to recognise it as such, he unfortunately redescribed it as "*fulgens*, n. sp.", under which name it stood for some years in British collections, where also *turicella*, H.-S., was wrongly standing as "*tityrella*." As I have shown above in the synonymy, *tityrella*, Stn., i.e. *basalella*, H.-S., is entered as two distinct species in Meyrick's "Handbook," firstly under the name *tityrella*, and secondly under that of *fulgens*.

Presumably the Darlington and Newcastle-on-Tyne records in the "Manual" belong to *basalella*, H.-S., but without seeing Hodgkinson's and Sang's specimens I cannot tell whether their entries are really referable to *basalella* or to *turicella*.—E. R. B.

385. *N. gratiosella*, Staint.*Nepticula gratiosella*. Staint. Man., vol. ii., p. 437*.

,, ,, Meyr. Hdbk. Brit. Lep., p. 718.

Rather a common species, the larva feeding in leaves of hawthorn. Mr. Hodgkinson met with it in West Northumberland. Mr. Sang got it in Coniscliffe Lane and Grange Road, Darlington. It probably occurs in most places.

386. *N. lapponica*, Wocke.*Nepticula lapponica*. Meyr. Hdbk. Brit. Lep., p. 724.

I have not been able to discover when this species was introduced to the British list, but it would be since the discontinuance of the Entomologist's Annual in 1874†. Meyrick gives its range as "Sussex, Hereford, York to Westmorland." The last-named shows a westward tendency, and here it has been met with only in Upper Teesdale, Mr. Sang having found it at High Force and at Eggleston, in the extreme south-west of Durham. The larva feeds in birch leaves.

387. *N. regiella*, H.-S.*Nepticula regiella*. Staint. Man., vol. ii., p. 437.

,, ,, Meyr. Hdbk. Brit. Lep., p. 716.

Mr. Meyrick is wrong also in the northerly range of this insect, which he limits to Lancashire and York. Mr. Hodgkinson met with it in West Northumberland, and Mr. Sang around Darlington, in Grange Road, Coniscliffe Lane, etc. The larva feeds in hawthorn leaves.

* It seems advisable to mention that whereas, in the "Manual," the imago is given as appearing in May, and the larva as being "yellowish" and feeding in September, the real facts are that the former emerges in June, and that the latter is bright green and is to be found in July and August, but becomes full-fed before September. [See Ent. Mo. Mag., ser. 2, v., 47 (1894)].—E. R. B.

† *N. lapponica* was added to the British list in Ent. Mo. Mag., xv., 239 (1879), but the yellow larva feeds in June, and not in October as there stated.—E. R. B.

388. *N. æneofasciella*, H.-S.*Nepticula æneofasciata*. Staint. Ent. Ann., 68, p. 48.,, *æneofasciella*. Meyr. Hdbk. Brit. Lep., p. 717.

The northerly range of this insect is erroneously limited to Lancashire by Meyrick. Mr. Sang took it at Castle Eden in 1878, in Dinsdale Wood, near Darlington, in 1868, and at Elders, also near Darlington, in 1871. I have no other records, but it is sure to occur elsewhere.

389. *N. alnetella*, Stain.*Nepticula alnetella*. Staint. Man., vol. ii., p. 437.

,, ,, Meyr. Hdbk. Brit. Lep., p. 719.

Mr. Meyrick limits the northerly range of *alnetella* to Durham, but Mr. Hodgkinson met with it in the west of Northumberland. The "Manual" gives Darlington as a place where the species occurs, but I think it occurs considerably further westward. Mr. Sang met with it at Barnard Castle in 1856 and 1871. In the latter year it was very common. He also found it at Stanhope in 1873 and 1874.

390. *N. marginicolella*, Stain.*Nepticula marginicolella*. Staint. Man., vol. ii., p. 437.

,, ,, Meyr. Hdbk. Brit. Lep., p. 719.

Generally a common species, and reaching West Northumberland, where Mr. Hodgkinson got it. The "Manual" marks it as occurring at Darlington, and Mr. Sang took it there, both at Elders and in Coniscliffe Lane. I have no other records.

391. *N. aurella*, Fab.*Nepticula aurella*. Staint. Man., vol. ii., p. 438.

,, ,, Meyr. Hdbk. Brit. Lep., p. 717.

The "Manual" gives this as being abundant both at Newcastle-on-Tyne and at Darlington. Mr. Hodgkinson has found it in West Northumberland, and Mr. Finlay got it in Coal Law Wood, near Morpeth. I have found no Durham records except

the "Darlington" of the "Manual," but it is very common almost everywhere, the larva feeding in bramble.

392. *N. sorbi*, Stain.

Nepticula sorbi. Ent. Ann., 1861, p. 91.

„ „ Meyr. Hdbk. Brit. Lep., p. 721.

This species appears only in the north and west, so far as I know. Meyrick says it occurs from "Lancashire to Stirling." The only record of it in these counties is that of Mr. Hodgkinson, who got it in West Northumberland.*

393. *N. splendidissimella*, H.-S.

Nepticula splendidissimella. Meyr. Hdbk. Brit. Lep., p. 717.

I have not found any record of the first introduction of this species to the British fauna. The earliest notice of it which I have seen is that Mr. Sang bred it at Darlington (see Ent. Mo. Mag., iv., 153). The note is dated November 5th, 1867.† He met with it again on the Tees-side at Blackwell, on October 13th, 1878. Mr. Hodgkinson also marks it as occurring in West Northumberland. The larva feeds in bramble and raspberry leaves.

TRIFURCULA, Zell.

394. *Trifurcula immundella*, Zell.

Trifurcula immundella. Staint. Man., vol. ii., p. 438.

„ „ Meyr. Hdbk. Brit. Lep., p. 727.

This insect also extends further than Meyrick records. He gives Durham as its northern limit, but Mr. Hodgkinson took it in West Northumberland. In Durham the "Manual" gives

* In Tutt's Nat. Hist. Brit. Lep., i., 289 (1899), *N. sorbi* was recorded as found by Sang in the county of Durham, as well as at Richmond in Yorkshire.

† I believe that this note of Sang's contains the earliest record of the occurrence of *N. splendidissimella* in Britain, though it is stated in Tutt's Nat. Hist. Brit. Lep., i., 245 (1899), that Stainton's collection includes specimens taken at West Wickham in 1857, and others bred by Healy in 1861.—E. R. B.

it as being abundant at Darlington. Mr. Sang found it on the railway bank at Houghton Lane, at Darlington itself, and on Coniscliffe Moor. It probably occurs wherever the food plant, the common broom, grows.

395. *T. pulverosella*, Stain.

Trifurcula pulverosella. Staint. Man., vol. ii., p. 438.

Nepticula „ Meyr. Hdbk. Brit. Lep., p. 726.

York is given by Meyrick as the northern limit of this species, but it extends over Durham to West Northumberland, where Mr. Hodgkinson found it. Mr. Sang also got it around Darlington, in Grange Road and Coniscliffe Lane. The larva feeds in leaves of apple, and is sure to be found elsewhere where there is plenty of crab apple.

We have now arrived at the concluding group of the Lepidoptera—that of the “Plume Moths,” a most interesting group, many of them common in their respective localities, and all of them beautiful. At the time of Mr. Robson’s death (February 28th, 1907) neither manuscript nor records for them were forthcoming. Several of his correspondents who had contributed lists to him of their captures have also passed away, and I am therefore now only able to give the “Manual” records, those from the diary of my old friend the late Mr. Sang, a few which I have recently obtained, and my own.

J. GARDNER.

Hart, January 31st, 1912.

PTEROPHORINA.

ADACTYLA, Stain.

396. *Adactyla bennetii*, Curt.

Adactyla bennetii. Staint. Man., vol. ii., p. 440.

Agdistis „ Meyr. Hdbk. Brit. Lep., p. 441.

This species occurs regularly on the Greatham marshes, but is rarely seen in the imago state in the daytime; larvæ, however, may be readily found in the early spring upon the food plant (*Statice limonium*), the small holes which they gnaw through the leaves drawing attention at once to the plants upon which they are feeding.

This species is not difficult to rear upon potted plants of *limonium*, but it is quite likely that *Tortrix costana* and possibly a *Gelechia* or two will emerge as well, the larvæ of which may have been concealed in the withered leaves of the plant.

PTEROPHORUS, Geoffr.

397. *Pterophorus ochrodactylus*, Hüb.

Platyptilia ochrodactyla. Meyr. Hdbk. Brit. Lep., p. 435.

This species was not recognised as British at the time the

"Manual" was published, and there has been considerable difference of opinion as to whether it and the following species *bertrami* (*ochrodactylus* of the "Manual") were really distinct; this, however, is now generally admitted. The matter was very fully gone into by the late Mr. Tutt in his excellent "Monograph of the *Pterophorina* of Britain," in which the life history of each species is given and the differences between both larva and imago stated in every detail, together with the opinions of our leading entomologists upon the subject (see pp. 23-31 and 31-35.)

Mr. Sang took and bred this species from larvæ got at "Nags Head," near Darlington, and for many years I have found the larvæ in abundance on the banks of the Wear at Chester-le-Street, where tansy is very common. Mr. J. W. H. Harrison (late of Birtley) writes me: "This is the commonest of our plumes by far. The larvæ are to be had in multitudes on tansy, third week in June, Birtley, Chester-le-Street, Lamesley, etc."

398. *Pterophorus bertrami*, Rossl.

Pterophorus ochrodactylus. Staint. Man., vol. ii., p. 440.

Platyptilia bertrami. Meyr. Hdbk. Brit. Lep., p. 434.

This species, the *ochrodactylus* of the "Manual," is now generally known under the name of *bertrami*. Mr. Tutt, in his "Monograph," says "*bertrami* was substituted owing to the *ochrodactylus* of Hübner being referred to the prior species."

The "Manual" gives it as occurring regularly at Newcastle-on-Tyne and commonly at Darlington, the latter being probably Sang's record in his diary for Low Coniscliffe, near Darlington, July 1st and 20th, 1874. I have taken it freely flying about yarrow on the railway side at Hartlepool near the ropery, and sparingly in Hezleden Dene. The larva feeds in shoots of yarrow, but last summer (1911) I took three or four specimens of the moth in my garden at Hart, the larvæ of which had evidently fed on the garden variety of *Achillea ptarmica*.

399. *Pterophorus trigonodactylus*, Stain.*Pterophorus trigonodactylus*. Staint. Man., vol. ii., p. 441.*Platyptilia gonodactyla*. Meyr. Hdbk. Brit. Lep.,
p. 434.

This is one of our commonest plumes; it is recorded in the "Manual" as occurring regularly at Newcastle-on-Tyne and abundantly at Darlington. It is common everywhere in the Hartlepool district wherever there is abundance of coltsfoot, and has also been recorded from Stockton-on-Tees, Seaton Carew, and Upper Teesdale. Mr. Harrison also records it as "very common everywhere at Birtley and neighbourhood, in two broods." No doubt it occurs commonly over the two counties wherever the food plant is abundant.

400. *Pterophorus acanthodactylus*, Hüb.*Pterophorus acanthodactylus*. Staint. Man., vol. ii., p. 441.*Platyptilia acanthodactyla*. Meyr. Hdbk. Brit. Lep.,
p. 433.

The only records that I have for this species are that Mr. Sang took it at Wolsingham, Sept. 28th, 1880, and of a single specimen taken by myself at sugar in Hezleden Dene, October 22nd, 1898.

401. *Pterophorus parvidactylus*, Haw.*Pterophorus parvidactylus*. Staint. Man., vol. ii., p. 441.*Oxyptilus* „ Meyr. Hdbk. Brit. Lep., p. 432.

The late Mr. Sang recorded this species from Castle Eden Dene, July 17th, 1862. I have taken it sparingly at Black Halls, and commonly on a dry bank on the railway side close to Hezleden Dene. Mr. Harrison in his Birtley list writes "odd ones."

402. *Pterophorus bipunctidactylus*, Haw.*Pterophorus bipunctidactylus*. Staint. Man., vol. ii., p. 442.*Stenoptilia bipunctidactyla*. Meyr. Hdbk. Brit. Lep.,
p. 441.

This species is given in the "Manual" as occurring regularly

at Newcastle-on-Tyne and commonly at Darlington. Mr. Sang found it at High Force, Coniscliffe Moor, and Hell Kettles, the last two localities being near Darlington. Mr. Harrison says, "common on Walldridge Fell." It is very common here on the railway banks and at Black Halls. I have seen it in swarms at the mouth of Hezleden Dene on the south bank, where scabious is very common. No doubt it will be found to occur in most places in the two counties wherever this plant is abundant.

The *plagiodactylus* of Stainton's "Manual" is now considered to be only a variety of this species.

403. *Pterophorus loewii*, Zell.

Pterophorus loewii. Staint. Man., vol. ii., p. 442.

Stenoptilia zophodactyla. Meyr. Hdbk. Brit. Lep., p. 440.

In the absence of any Northumberland record I appear to be the only collector who has taken this species. My records are one specimen near the ropery at Hartlepool, and three or four on the borders of Hezleden Dene. It has probably been overlooked owing to its resemblance to the previous species. Its food plant, the common centaury, is abundant everywhere in our district on the railway banks, dry fields and waste land, from the Tees mouth to Castle Eden Dene, and there is little doubt but that this species will be found to occur in many places in the two counties when searched for at the proper time.

404. *Pterophorus fuscus*, Retz.

Pterophorus fuscus. Staint. Man., vol. ii., p. 442.

Stenoptilia pterodactyla. Meyr. Hdbk. Brit. Lep., p. 440.

A common species in the two counties wherever its food plant (*Veronica chamædrys*) grows freely. The "Manual" gives it as occurring regularly at Newcastle-on-Tyne and abundantly at Darlington. Mr. Sang does not mention it in his diary, no doubt owing to its being too common to enter.

The late Mr. Robson recorded it for Killingworth and Harnham in Northumberland. Mr. Harrison writes, "very common everywhere—larvæ equally abundant," that is, in the Birtley district; it is equally common around Hartlepool wherever speedwell grows.

405. *Pterophorus lithodactylus*, Tr.

Pterophorus lithodactylus. Staint. Man., vol. ii., p. 443.

Alucita lithodactyla. Meyr. Hdbk. Brit. Lep., p. 439.

This species is given in the "Manual" as being common at Darlington; there is, however, no entry in Sang's diary of its occurrence there. I have taken it freely at Black Halls, and seen traces of the larvæ in Hezleden Dene.

406. *Pterophorus pterodactylus*, Hüb.

Pterophorus pterodactylus. Staint. Man., vol. ii., p. 443.

Alucita monodactyla. Meyr. Hdbk. Brit. Lep., p. 439.

A species of very general distribution and common in many places. It is given in the "Manual" as occurring regularly at Newcastle-on-Tyne and commonly at Darlington. The only record in Sang's diary is "Castle Eden, Aug. 29th, 1858." Mr. Harrison records for Birtley "odd ones." I used to take a few specimens every autumn at sugar on the borders of Hezleden Dene, but it was never common; also occasional specimens on the railway side.

407. *Pterophorus microdactylus*, Hüb.

Pterophorus microdactylus. Staint. Man., vol. ii., p. 443.

Marasmarcha microdactyla. Meyr. Hdbk. Brit. Lep.,
p. 438.

A common species in Hezleden Dene wherever its food plant (*Eupatorium cannabinum*) grows; also on the railway side above Hart Station.

408. *Pterophorus tetradactylus*, Linn.*Pterophorus tetradactylus*. Staint. Man., vol. ii., p. 444.

" " Meyr. Hdbk. Brit. Lep., p. 436.

This species is given in the "Manual" as occurring regularly at Newcastle-on-Tyne and commonly at Darlington. Mr. Sang, however, has made no entry in his diary as to its occurrence. It is common at Black Halls and near the mouth of Hezleden Dene wherever its food plant, wild thyme, grows.

409. *Pterophorus pentadactylus*, Linn.*Pterophorus pentadactylus*. Staint. Man., vol. ii., p. 444.

" " Meyr. Hdbk. Brit. Lep., p. 436.

This beautiful species is given in the "Manual" as occurring regularly at Newcastle-on-Tyne and also at Darlington, but like the last species, it is not recorded in Sang's diary, no doubt owing to its general occurrence. It is very abundant with us around Hartlepool. I have seen it flitting about by the score on the railway side near the ropery, and in fact all the way up the railway side to and beyond and in Hezleden Dene, wherever convolvulus grew. Mr. Harrison records for Birtley "one only at light in our own garden."

ALUCITINA.

ALUCITA, Linn.

410. *Alucita polydactyla*, Hüb.*Alucita polydactyla*. Staint. Man., vol. ii., p. 445.*Orneodes hexadactyla*. Meyr. Hdbk. Brit. Lep., p. 442.

A common species generally wherever honeysuckle grows. It is given in the "Manual" as occurring regularly at Newcastle-on-Tyne and also at Darlington, but here again there is no mention of the species in Sang's diary. It is common in and around Hezleden Dene, and I have frequently taken it in my own garden at Middlethorpe close to the Dene. Mr. Corder also records it as common in the Sunderland district.

Additional species of *Tineina* to record since Mr. Robson's notes were written :—

15a. *Tinea weaverella*, Scott.

Tinea weaverella. Zoologist, 1858, pp. 5964–5965.

Monopis „ Ent. Mo. Mag., Oct., 1910, pp. 221–228.

Mr. C. O. Trechmann took two fine specimens of this interesting *Tinea* at rest on fir trees in Edderacres Wood in June, 1910.

170a. *Anarsia spartiella*, Schrk.

Anarsia spartiella. Staint. Man., vol. ii., p. 349.

„ „ Meyr. Hdbk. Brit. Lep., p. 609.

I took a single specimen of this insect flying about whin bushes at Black Halls at the end of July or early in August, 1909.

SUPPLEMENTARY NOTES.

BY JOHN GARDNER, F.E.S.

ADDITIONAL SPECIES TO RECORD.

VOL. XII.

65a. *Hadena glauca*, Hüb.*Hadena glauca*. Staint. Man., vol. i., p. 275.

,, ,, Barr. Lep. Brit. Is., vol. iv., p. 191.

Melanchra ,, Meyr. Hdbk. Brit. Lep., p. 82.

This beautiful species has by some means been unaccountably omitted from the list, for I took it regularly for many years previous to its publication, and would be certain to include it in the records I gave to Mr. Robson.

It occurs freely at Egglestone in Teesdale at rest on stone walls, rocks, trees and palings, etc., on the borders of the moors, and also on the moors as well. Mr. Sang has entered it in the index to his diary, but without reference to any record in the diary itself; probably he had not troubled to enter any captures. I expect this species will be found on the moors in both counties if carefully searched for at the end of May and in early June. The moth is, however, not readily seen on the lichen-covered walls.

164a. *Cloantha solidaginis*, Hüb.*Cloantha solidaginis*. Staint. Man., vol. i., p. 281.*Lithomia* ,, Barr. Lep. Brit. Is., vol. vi., p. 44.*Polia* ,, Meyr. Hdbk. Brit. Lep., p. 51.

The late Alfred Pickard, of Wolsingham, has recorded in his copy of the "Manual" that he took this species at Shull, August 22nd, 1897, on the trunks of Scotch fir. I also took a worn specimen at sugar on the borders of Hezleden Dene at Middlethorpe in 1905; probably this had come from the west of

the county in a coke truck. I have no doubt but that the species will be found to occur generally in Teesdale and Wear-dale "on the trunks of Scotch fir" in woods situated on the high moorland.

11a. *Selenia illustraria*, Hüb.

- Selenia illustraria*. Staint. Man., vol. ii., p. 13.
 „ „ Newm. Brit. Moths, p. 55.
 „ *tetralunaria*. Meyr. Hdbk. Brit. Lep., p. 283.

In the December number of the Entomologist (1911), page 413, Mr. Harrison records that he beat a single larva of this species from birch, which yielded a male specimen of the moth—the first record for our counties.

Vol. XV.

MICRO-LEPIDOPTERA.

46a. *Eudorea pallida*, Steph.

- Eudorea pallida*. Staint. Man., vol. ii., p. 163.
Scoparia „ Meyr. Hdbk. Brit. Lep., p. 423.

The late Mr. Sang has recorded in his diary that he took this species at Coatham Bog on August 5th, 1858, August 10th, 1871, and August 2nd, 1881. Mr. Robson was evidently under the impression that the locality was near Coatham in Cleveland *instead of near Aycliffe*, and hence omitted the records.

128a. *Semasia nanana*, Tr.

- Semasia nanana*. Staint. Man., vol. ii., p. 242.
 „ „ Wilk. Brit. Tort., p. 198.
Enarmonia „ Meyr. Hdbk. Brit. Lep., p. 474.

Generally common among spruce fir, and only occurring where that is grown. Mr. Finlay found it on Needless Hall Moor, but it was always scarce there. Mr. Sang gives High Force and Coniscliffe Moor and other places in the same

district, where he took it in June, July, August, and September from 1869 to 1882. See also E. M. M., vi., 170.

NOTE.—The above are Mr. Robson's notes—I cannot understand why he did not include them in the list.

160a. *Grapholita hypericana*, Hüb.

Grapholita hypericana. Staint. Man., vol. ii., p. 254.

Epinotia „ Meyr. Hdbk. Brit. Lep., p. 517.

This has evidently been an accidental omission from the list; it is very common around Hartlepool, wherever *Hypericum* grows, and will no doubt be found generally distributed through both counties where this plant is abundant.

183a. *Eupœcilia angustana*, Tr.

Eupœcilia angustana. Staint. Man., vol. ii., p. 273.

„ „ Wilk. Brit. Tort., p. 303.

Euxanthia „ Meyr. Hdbk. Brit. Lep., p. 357.

Probably generally common, but I have very few records. Mr. Hodgkinson found it in West Northumberland, and Mr. Finlay reported it as generally distributed and not uncommon about Morpeth. It is also very common around Hartlepool. I have no other records—possibly Mr. Sang considered it too common to enter in his diary. The larvæ feed on the seed heads of many different plants, and the insect appears to occur everywhere.

NOTE.—Above are Mr. Robson's notes—I am at a loss to know why the species was not included in the list.

185a. *Eupœcilia manniana*, F. von R.

Phalonia manniana. Meyr. Hdbk. Brit. Lep., p. 549.

This insect does not appear in Stainton's or Wilkinson's books, being introduced after their publication. Mr. Sang met with it on the railway banks (Stockton and Darlington) on 21st June, 1868. It is not recorded for Yorkshire, but

Meyrick says it occurs in Westmoreland. He also considers it synonymous with *luridana*, Gregson. I have no other record.

NOTE.—Above are Mr. Robson's notes—I cannot understand his reason for not including the species in the list.

280a. *Elachista apicipunctella*, Stain.

Elachista apicipunctella. Staint. Man., vol. ii., p. 405.

„ „ Meyr. Hdbk. Brit. Lep., p. 667.

This species appears to have been accidentally omitted by Mr. Robson.

Mr. Sang has frequent entries in his diary of its occurrence in lanes near Darlington—his first entry being June 10th, 1860, and the last one March 2nd, 1878—the latter recording the larva.

It also occurs regularly on the railway banks in Crimdon Cut and close to the plantation near Hart Station.

SPECIES INCLUDED IN THE LIST WHICH REQUIRE TO
BE STRUCK OUT FOR REASONS STATED UNDER EACH.

VOL. XV.

MICRO-LEPIDOPTERA.

Page 31.

Nephopteryx roborella.

The entry in Sang's diary for August 13th, 1874, upon which Mr. Robson depended for its inclusion, is "Larvæ *L. roborella*," referring, of course, to *Lithocolletis roborella*, Doubleday's list=*roboris*, Zell.

Page 32.

Pempelia dilutella.

The entry in Sang's diary for June 27th, 1859, is for *Headley Lane*, one of Stainton's favourite collecting grounds in *Surrey*.

Page 33.

Pempelia davisellus.

The entries in Sang's diary under the name of *genistæcolella* at Waskerley on April 12th, 1874 (should be 1872), and at Wolsingham, June 7th, 1878, and May 27th, 1884, all refer to *Coleophora genistæ=genistæcolella* of Doubleday's list, under which species they are indexed in the diary.

Page 74.

Anchylopera comptana.

The records in Sang's diary are June 26th, 1859, *Headley Lane*, and August 2nd and 3rd, 1871, *Folkestone*.

Page 100.

Chrosis tesserana.

Sang's record is again *Headley Lane*, June 26th, 1859.

Page 101.

Argyrolepis subbaumanniana.

The only records in Sang's diary are June 26th, 1859, *Headley Lane*, and June 15th, 1872, *Richmond*. It is very evident that Mr. Robson was under the mistaken impression that *Headley Lane* was a locality in the *Darlington* district.

NOTES AND ADDITIONAL RECORDS.

VOL. XII.

Page 6.

Gonopteryx rhamni.

The statement on page 7 that *rhamni* "certainly does not occur in Cleveland, etc., etc.," is not borne out by facts, for Mr. J. W. H. Harrison, late of Birtley, but now residing at Middlesbrough, speaking of this species writes to me: "It does occur in North Riding and within sight of Durham too, near this place. We got it last August (1911), and buckthorn grows where we got it."

Pages 23, 24, 25.

Argynnis aglaia.

„ *euphrosyne.*

„ *selene.*

Mr. Harrison states that all three species are very common not far from Birtley.

Page 40.

Deilephila galii.

The statement in the last three lines of the notes upon this species that "In the autumn of that year (1888) Mr. Gardner found two larvæ on the sand hills to the north of Hartlepool, but he failed to rear the perfect insect," is incorrect. One larva unfortunately escaped and was trodden upon—this larva the late Mr. Dobrée, of Beverley, kindly preserved for me. The other larva pupated, and the perfect insect duly emerged in the following June; both it and the preserved larva are now in my collection.

Page 47.

Sesia formicæformis.

With reference to this species Mr. Harrison writes me "very common in willow shoots at Birtley."

Page 75.

Orgyia antiqua.

Mr. Harrison records *antiqua* as common in one limited locality, Birtley.

Page 87.

Cerura furcula.

Another record for Northumberland is given by Mr. J. T. Boocock, who took a specimen of the moth at Whittle Dene near Prudhoe on July 3rd, 1912.

Page 91.

Drymonia chaonia.

My records for this species must have been mis-read. I have taken three or four specimens of the moth both in Hezleden Dene and also in Teesdale, and have reared a fine series from ova deposited by females captured in both districts.

Page 105.

Agrotis suffusa.

I have taken *suffusa* regularly every season for many years. It was comparatively common at sugar every autumn at Middlethorpe on the borders of Hezleden Dene, and it now occurs almost as commonly close to my present residence at Hart.

Page 108.

Agrotis agathina.

The larva of *agathina* occurs not uncommonly both on the Wolsingham and Egglestone moors.

Page 110.

Agrotis saucia.

This species I have taken frequently at sugar on the borders of Hezleden Dene, and also close to my present residence at Hart.

Page 113.

Triphaena janthina.

Somewhat common on the borders of Hezleden Dene. I have also bred large numbers from the egg. Mr. Harrison says both this species and *fimbria* are common at Birtley, the latter in the larval state.

Page 113.

Triphaena interjecta.

Another locality is Birtley. Mr. Harrison writes "my mother got five from an arc lamp in Birtley in 1907."

Page 115.

Noctua glareosa.

I have taken *glareosa* abundantly at sugar on the borders of Hezleden Dene, including one specimen of the dark variety. It also occurs not uncommonly at Hart.

Page 117.

Noctua triangulum.

The statement that *triangulum* "is not by any means a common species in either county, though widely distributed," is far from being correct. It is by no means uncommon in the county of Durham, the larva occurring freely in Hezleden Dene, and the moth even more freely at sugar on the borders of the Dene. Mr. Harrison writes, "Except *xanthographa* and *typica* this is by far the commonest noctuid larva in spring throughout North Durham. I have several times had 200 in a season."

Page 120.

Noctua baja.

This is even commoner than *triangulum* both at Hezleden Dene and close to my house at Hart. Mr. Harrison's experience at Birtley is somewhat similar.

Page 123.

Eurois herbida.

I took this species regularly every season at sugar when living at Middlethorpe, though it was never very common.

Page 127.

Heliophobus cespitis.

I have taken two specimens of *cespitis*, one on palings near the cemetery at Hartlepool and the other at sugar on the borders of Hezleden Dene.

Page 140.

Dryobota protea.

I have taken two or three specimens on trunks of oak in Hezleden Dene, and have little doubt but that it will be found in most woods in both counties if looked for in October.

Page 147.

Xylophasia hepatica.

Mr. Harrison reports this species as common at Birtley.

Page 152.

Euplexia lucipara.

My experience of this species is that it is common in the woods near Hartlepool. I took it freely on the borders of Hezleden Dene for many years, and it is not uncommon at sugar close to my house at Hart.

Page 172.

Dyschorista upsilon.

Other records by Mr. Harrison are, "Very common Chester-le-Street, Winlaton—larvæ in profusion."

Page 173.

Calymnia diffinis.

I cannot understand how the mistake has occurred, but *affinis* and not *diffinis* was the species I took, and which is now in my collection—the latter therefore requires to be struck out and *affinis* substituted.

Page 175.

Orthosia pistacina.

Mr. Harrison records this species as common at Birtley.

Page 182.

Calocampa vetusta.

Since Mr. Robson's list was published I have taken probably

half-a-dozen specimens. Some on the borders of Hezleden Dene, and about the same number near my own house at Hart.

Page 184.

Plusia bractea.

Mr. Harrison writes of this species, "My uncle gets this not uncommonly some years in his garden at Ninebanks, Northumberland."

Page 187.

Habrostola tripartita.

Mr. Harrison records this species as very common at Birtley.

Page 189.

Heliothis peltigera.

I took a worn specimen near Hartlepool in June, a few years ago.

Page 195.

Brephos parthenias.

Another record for this species is given by Mr. Harrison, "one locality near Birtley, very common."

Page 202.

Selenia lunaria.

This occurs much more commonly than Mr. Robson's notes would imply. It was comparatively common in 1896 in the upper part of Hezleden Dene, not very far from Middlethorpe, and in that year I could take six or eight specimens in a morning at rest on trees. I have also bred a few from pupæ found spun up in withered leaves at the foot of cherry trees, to which the larva must be partial as a food plant. Mr. Harrison records it as occurring sparingly at Birtley.

Page 208.

Amphidasis betularia.

The black form of *betularia* appears to be increasing in the county of Durham. Mr. Harrison records it for Birtley as "common all black." I took a pair at rest on my cottage at Middlethorpe in 1895 both black, from which I reared a large number of moths, about two-thirds black, the remainder typical, but with no intermediate forms.

Page 211.

Boarmia repandata.

Melanic specimens seem to be increasing also with *repandata*. Mr. Harrison records it for Birtley, "All black, no types." I take a few of the *conversaria* variety at sugar every season close to my house at Hart.

Page 211.

Boarmia rhomboidaria.

Mr. Harrison also records this species from Birtley, "All dark, no types."

Page 219.

Asthena luteata.

Another locality for *luteata* is Birtley, where Mr. Harrison states it is not uncommon. *Candidata* also occurs.

Page 221.

Eupisteria heparata.

Mr. Harrison also records this species as not uncommon at Birtley as well as at Ebchester.

Page 221.

Venusia cambrica.

Another record for Northumberland is given by Mr. Harrison, namely, Corbridge, where he finds it to be common, but quite typical.

Page 230.

Bradyepetes amataria.

Mr. Harrison informs me that he has seen a specimen from Whitley in Northumberland, which confirms its occurrence in our counties.

Page 231.

Macaria liturata.

Mr. Harrison gives another record for Northumberland, namely, Corbridge, where he states it is uncommon.

Page 242.

Hybernia aurantiaria.

Since Mr. Robson's notes were published I have taken this species, not uncommonly, on the hedges at Middlethorpe by searching with a light at night. Mr. Harrison records it as common but local about Birtley.

Page 243.

Anisopteryx æscularia.

My notes on this species appear to have been omitted altogether. When living at Middlethorpe I took the insect regularly every spring at rest upon the fencing near my cottage—six or seven every morning when it was out.

Page 247.

Oporabia autumnaria.

Another record is given by Mr. Harrison in the Entomologist for 1911, page 412; he states, "I have discovered this species in tolerable abundance in a mixed birch and alder wood at Birtley; the forms were quite typical."

Page 247.

Oporabia filigrammaria.

Mr. Harrison also states in the same note that "This too occurs not uncommonly at Birtley. One locality is on heather, but what it feeds on at the other, unless it is alder or hawthorn,

is a mystery to me." He also states, "One female, *O. christyi*, on a telegraph pole at Birtley."

Page 250.

Larentia olivaria.

The statement that "we never get it around Hartlepool" is incorrect. I took a few specimens every season when living at Middlethorpe, flitting about the hedges on the borders of Hezleden Dene, and no doubt, had I specially desired, could have taken more. I can see no reason why it should not occur near the sea, as various species of *galium* (upon which the larva feeds) are common enough everywhere in the district.

Page 254.

Emmelesia unifasciata.

Mr. Harrison gives two more localities for this species, one for each county, viz., "Birtley a few specimens, larvæ, 1911." "Have seen one from Killingworth."

Page 262.

Eupithecia pygmæata.

Mr. T. A. Lofthouse informs me that he took two specimens of *pygmæata* on Cowpen Marshes near Greatham about the middle of June this year (1912).

Page 266.

Eupithecia innotata.

Mr. Harrison writes of this species in the December number of the Entomologist, p. 412, "I obtained a few larvæ last year in Durham from scabious and rose, that I took to be *E. fraxinata*. However, when the insects emerged this year they proved to be *E. innotata*. My friend Mr. Johnson, of Gateshead, deserves the credit for detecting these larvæ on scabious, for he took a fair number in 1909, from which no moths were reared the following year. These food plants seem unusual, but the larvæ from ova laid by bred females fed readily on a potted plant of *Artemisia absinthium* which I had ready for

them. The females pair readily enough, but they have a decided objection to depositing their ova. I secured about two dozen, and have nine pupæ. A point worthy of note is that the insect is double brooded in captivity, although perhaps the present season has not been suitable for giving one a general rule. I was unable to go for wild larvæ this year."

Page 267.

Eupithecia fraxinata.

Mr. Harrison writes of this species, "Common, Chester-le-Street locality, many pupæ Christmas week, 1911."

Page 280.

Ypsipetes ruberaria.

Mr. Harrison records this species as common at Birtley.

Page 280.

Ypsipetes impluviata.

Mr. Harrison records *impluviata* as also very common at Birtley.

Page 283.

Melanthia albicillata.

Recorded by Mr. Harrison as not uncommon at Birtley.

Page 286.

Melanippe galiata.

Mr. Harrison writes of this species, "I saw about eight very curious looking specimens caught on Birtley Fell, and set on common pins by a beginner this year (1911)."

Page 291.

Scotosia dubitata.

Mr. J. T. Boocock, of Heaton, gives another record for Northumberland; he states, "I only took one specimen. It came into the house here to light, May 19th, 1912. It is in very good condition."

Page 298.

Cidaria dotata.

Another locality is Birtley, where Mr. Harrison has taken a single specimen.

Page 299.

Eubolia cervinata.

Recorded by Mr. Harrison as not uncommon at Birtley. *Cervinata* still occurs in the Hartlepool district—larvæ feed regularly every year upon the hollyhocks in my garden at Hart, and also upon mallow growing in the hedge backs of fields near Hezleden Dene.

VOL. XV.

Page 15.

Psammotis pulveralis, Hüb.

With reference to Mr. Robson's remarks upon the occurrence of this species, Mr. Banks makes the following note :—

"I may mention that in Ent. Mo. Mag., ser. 2, x., 289 (1899), I recorded the capture of a specimen in the Isle of Purbeck, Dorset, by Master Rowley Helps in 1899; and in Ent. Mo. Mag., ser. 2, xiii., 245 (1902), I recorded the capture in the Isle of Purbeck of eight specimens by a friend and myself in 1901, and of a solitary example by myself in 1902."

Page 28.

Ephestia kuehniella.

This insect has appeared in considerable numbers in my house at Hart. Spring cleaning disclosed a small bag of bread meal in a closet, which had been overlooked, and which was found to be swarming with larvæ. As the meal was obtained from Hartlepool it is evident that *kuehniella* has got a footing there. I had a somewhat similar experience several years ago when I collected beetles. On this occasion a very small quantity of meal, which had been left in a bag in a closet, yielded a fine series of *Gibbium scotias*.

Page 31.

Dioryctria splendidella.

Mr. Banks writes *re* larva of *splendidella*, "and also feeds in cones of spruce fir."

Page 35.

Crambus uliginosellus.

Mr. Robson appears to have rejected Sang's records for Coatham Bog, no doubt concluding that it was near Coatham in Cleveland, whereas it is near Aycliffe. Mr. Sang took *uliginosellus* regularly at this place, as the following records from his diary show: June 23rd, 1874, July 7th and 21st, 1876, and July 5th to 12th, 1877.

Pages 43-44.

Hypermezia angustana and *cruciana*.

As to the specific distinctness of *angustana* and *cruciana*, Mr. Banks makes the following notes, "When the present Lord Walsingham wrote his note in Ent. Mo. Mag., v., 251-2, (1869), he naturally adopted the general opinion held on the Continent, and expressed in the first edition of Staudinger's Catalogue which he quotes, that the true *angustana*, Hüb., and *cruciana*, Linn., were distinct, but opinions have changed since then, and the present belief both on the Continent, as expressed in the latest (1901) edition of Staudinger's Catalogue, and in Britain, is that they are specifically identical. I have studied the question and firmly believe them to be identical. None of the differences pointed out by Barrett in E.M.M., ix., 125-6, are at all reliable."

Page 47.

Antithesia dimidiana.

The larva of *dimidiana* must feed upon other plants or shrubs as well as on *Myrica gale*. I took three specimens of the moth on the borders of Hezleden Dene in July, 1906, and one in my

garden at Hart in July, 1910. *Myrica gale* does not occur in the county of Durham, so that Mr. Sang's Wolsingham specimens and also those which I have taken in this district, evidently had another food plant.

Page 47.

Antithesia marginana.

Mr. Bankes writes (line 5 from bottom) "For *Stachys betonica* read *Dipsacus sylvestris* (wild Teasel). *Stachys betonica* is 'Wood betony,' and belongs to an entirely different family from the Teasel."

Page 54.

Lozotania roborana, Hüb. (= *cratægana*, Hüb.)

Mr. Bankes writes, "I do not think that the statement "Rather a common species generally" is at all borne out by facts. In the course of over 25 years of assiduous collecting of micros (chiefly in S. England) I have only met with it in *one* very restricted spot (in Hants), though there it is common. Generally, however, it is scarce even where it occurs, and hardly any species that I have ever taken has been more badly wanted by all my friends and correspondents who collect micros. Stainton (Man.) says "*Rather local*," and only gives three localities. Wilkinson says "*Somewhat local, and occurs but sparingly*." Weston in "Tortrices of Surrey, Kent, and Sussex," in Entom. xii., 217, says "*Widely distributed, but scarce*," and gives four Kent, two Surrey, and two Sussex localities; it is probably more widely distributed in that part of the country than in any other district. Meyrick says "*Local*." I should call it, generally, "Very local and usually scarce."

Page 57.

Spilonota trimaculana.

My remark that "it sits on elm trunks" does not refer to this species but to *Hedya trimaculana*.

Page 62.

Halonota trigeminana.

I took a few specimens of this insect at Egglestone in Teesdale early in June, 1911, but it was decidedly scarce.

Page 65.

Halonota turbidana.

Since Mr. Robson's notes were written I have taken *turbidana* every season at Greatham in fair numbers, and last year, 1911, Mr. Corder and I found the larva (which was hitherto unknown) feeding on the roots of *Petasites* and bred the moth (see Ent. Mo. Mag. for May, 1911, p. 111-112, and August, 1911, p. 192).

Page 66.

Dichrorampha politana.

My records were for *Sericoris politana* and not this species, which I have never met with.

Pages 66 and 67.

Dichrorampha herbosana.

Mr. Banks writes "I greatly regret that I cannot subscribe to your concluding remark that *tanaceti*, Stn., is certainly not identical with *herbosana*, Brt. Mr. Durrant, Lord Walsingham's curator, a very able micro-lepidopterist, worked out very carefully, with the help of all Lord Walsingham's and my own material, the synonymy of the genus *Dichrorampha* and offered his conclusions to Meyrick who accepted them; the only help he accepted (he asked for none). I believe all Durrant's conclusions and synonymy to be quite correct, and that *herbosana* must sink as identical with *tanaceti*, Stn. Sang himself sent me specimens as "*tanaceti* (*herbosana*)."
In Ent. Mo. Mag., xxii., p. 1, and xxiii., p. 1, Barrett readily admits that Warren's conclusion (given in E.M.M., xxi., p. 190) that *herbosana*, Brt., is identical with *tanaceti*, Stn., Wilk., is correct."

Page 70.

Hedya neglectana.

This species occurs in my garden at Hart every year—the larva feeds upon Canadian balsam poplars, and the moth sits upon the trunks of the trees generally, but occasionally on the branches and leaves, flying about the trees on fine still nights. I have also met with it at Greatham on aspen, and Mr. Corder informs me that it is by no means uncommon among poplars at Sunderland.

Page 72.

Anchylopera ramella=lactana.

Mr. C. O. Trechmann has turned up this species commonly among aspens at Edderacres Wood near Castle Eden.

Page 83.

Pæcilochroma boucardana.

Another record is that Mr. T. A. Lofthouse took a specimen at Rothbury, Northumberland, on June 27th, 1909.

Page 91.

Endopisa germanana, Hüb.

Mr. Bankes writes, "for "*E. germanana*, Hüb." read "*E. roseticolana*, Z." While fully realising that you have made it your rule to follow Stainton's (*i.e.* Wilkinson's) nomenclature, and having no criticisms to make wherever the names he uses are either those that should be employed or correct synonyms of them, it is utterly opposed to all laws of zoological nomenclature to adopt a name which he *erroneously* uses, and attach it to the name of the original nomenclator where the latter employed it in a totally different sense. Your species "144" is obviously the one that feeds in the hips of wild rose; it is therefore *not* "*E. germanana*, Hb." as entered—which is an entirely different species—but is "*E. roseticolana*, Z.," by which name it ought to be known. If you are anxious to adhere to the name Stainton uses, the *only* permissible method of doing so is to enter it as "144. *E. germanana*, Stn. (*nec.*

Hüb.)," which clearly explains the matter, and defies criticism, though "*E. roseticolana*, Z." seems to be preferable, especially since you give, immediately below, the Manual name."

Page 95.

Ablabia pratana.

Mr. Bankes writes "*re* Mr. Gardner's idea that *A. pratana* occurs everywhere (in Upper Teesdale) among rushes. If he thinks there is any *connection* between *pratana* and rushes, my experience and that of many others proves the idea to be quite untenable. In our district it is only found in *exceptionally dry spots* on our chalk and limestone hills and downs, and although it is locally abundant, I have never seen it anywhere near rushes. I find that I took a few in *Castle Eden Dene* in 1885, and have no doubt of its being locally common there."

NOTE.—Notwithstanding the above, I have certainly taken *pratana* freely about rushes in Upper Teesdale.

Page 95.

Euchromia ericetana.

I am able to confirm Mr. Robson's records for this district, having during the last few years taken several specimens in Hezleden Dene.

Page 98.

Sericoris politana.

My records for this species have been placed in error to *Dichrorampha politana*, an insect I have never taken; they refer to the above species, which is common on the Teesdale moors

Page 102.

Eupacilia maculosana.

During the last few years I have found *maculosana* abundant on the east bank of the spur from Hezleden Dene leading up to Middlethorpe Cottage; it flits about the wild hyacinth flowers

in the sunshine—and later in the season larvæ are to be found in seed vessels of the same plant.

Page 103.

Eupæcilia nana.

This species occurs in Hezleden Dene among birches, where I have several times taken it—it, however, is not common.

Page 104.

Eupæcilia ruficiliana.

I find that *ruficiliana* is equally common in marshy pastures on the borders of the moors in Teesdale where no cowslip grows. Probably in such situations the larva feeds upon either the seeds of furze or lousewort (*Pedicularia palustris*).

The following additional records for the "*Tineina*" have been received from Mr. J. W. H. Harrison while the present volume has been passing through the press.

Dasystoma salicella.

This species, for which we have hitherto had only one record, viz., that of a single specimen taken by Mr. Finlay at Meldon Park, is now recorded by Mr. Harrison as being abundant at Birtley, the larva feeding upon many plants.

Depressaria assimilella.

Very common at Birtley.

Depressaria weirella.

One specimen at Birtley.

Depressaria nervosa.

Also very common at Birtley.

ERRATA.

- Page 2, line 7, for "has" read "have."
- „ 4, line 16, for "*Zanthoclagna*" read "*Zanclognatha*."
- „ 12, line 3, for "Stephens'" read "Stephens."
- „ 15, line 4, for "*Phylctænia*" read "*Phlyctania*."
- „ 15, line 9 from bottom, for "*Psamotis*" read "*Psammotis*."
- „ 15, line 10 from bottom, for "in Stephens'" read "by Stephens."
- „ 17, line 14, for "abundant" read "abundantly."
- „ 18, line 5-9 from bottom, for "cuculatella" read "cucullatella."
- „ 21, line 4, insert *partim* after Meyr. Hdbk. Brit. Lep., p. 423.
- „ 21, line 16, insert *partim* after Meyr. Hdbk. Brit. Lep., p. 423.
- „ 22, line 11 from bottom, insert *partim* after Meyr. Hdbk. Brit. Lep., p. 423.
- „ 25, line 13 and 14 from bottom, for "augustea" read "angustea, Steph."
- „ 28, line 11 from bottom, for "they" read "the moths."
- „ 29, line 1, for "larva" read "larvæ."
- „ 29, line 9 from bottom, for "Phycilidæ" read "Phycitidæ."
- „ 30, line 7 from bottom, for "*Onocera*" read "*Oncocera*."
- „ 31, line 10, delete "Nephopteryx."
- „ 31, line 7 from bottom, for "Nephopteryx" read "Nephopteryx, Hüb."
- „ 32, line 8, for "Pempelia" read "Pempelia, Hüb."
- „ 33, line 5, for "*Hieracleum sphondylium*" read "*Heracleum sphondylium*."
- „ 33, line 9, for "*betulæ*, Gn." read "*betulæ*, Goetz."

Page 33, line 3 from bottom, for "*Ulex campestris*" read
 "*Ulex europæus*."

- „ 34, line 19, delete ? after *Linn*.
- „ 40, line 21, for "*Eupæcethia*" read "*Eupæcilia*."
- „ 45 et seq., line 15, for "*Encosma*" read "*Eucosma*."
- „ 51, line 5 and 6 from bottom, for "*cinnamoneana*" read
 "*cinnamomeana*."
- „ 56, line 2 and 4, for "*udmanniana*" read "*uddmanniana*."
- „ 56, line 5 and 6 from bottom, for "*rosæcolana*" read
 "*rosæcolana*."
- „ 57, line 17, for "*incarnitana*" read "*incarnatana*."
- „ 58, line 4, for "*nisana*" read "*nisella*."
- „ 60, line 14 and 15 from bottom, for "*ophthalmicana*," read
 "*ophthalmicana*."
- „ 61, line 7 and 11, for "*hohenworthiata*" read "*hohen-*
warthiana."
- „ 67, line 17 and 18, for "*acuminitana*" read "*acumina-*
tana."
- „ 69, line 6 from bottom, for "*Turetocera*" read
 "*Tmetocera*."
- „ 78, line 7 and 8 from bottom, for "*commariana*" read
 "*comariana*."
- „ 79, line 1, for "*perplexana*" read "*perplexana*, Barrett."
- „ 83, line 9, for "*corticana*" read "*corticana*, Hüb."
- „ 84, line 4, for "*ratzburghiana*" read *ratzeburgiana*."
- „ 87, line 5 from bottom, for "*Ecosina*" read "*Eucosma*."
- „ 89, line 12 from bottom, for "*brobana*" read "*buoliana*."
- „ 90, line 8, for "May, 1885," read "August, 1885."
- „ 92, line 17, for "*Epinrota*" read "*Epinotia*."
- „ 92, line 3 from bottom, for "p. 534" read "p. 514."
- „ 94, line 16, for "Woeke" read "Wocke."

- Page 95, line 14, for "*osseata*" read "*osseana*."
,, 106, line 11, for "*Scabrosa*" read "*Scabiosa*."
,, 130, line 1 and 2, for "*sparmanella*" read "*sparmannella*."
,, 165, line 12 from bottom, for "*hermanrella*" read "*hermannella*."
,, 209, line 11 and 12, for "*rhyncosporella*" read "*rhynchosporella*."
-

INDEX TO GENERA.

	Page		Page
Ablabia	95, 270	Botys	12
Acalla...75, 76, 77, 78, 79, 80,	81, 82	Brachmia	147
Acompsia	170, 171	Brachytænia	45
Aerobasis	30	Bradyepetes	262
Aerolepia	107, 173	Brephos	260
Adactyla	153, 244	Bryotropha	152
Adela	125	Bucculatrix	227
Æthia	4	Butalis	172
Agdistis	244	Cacoecia	52, 53, 55
Aglossa	6	Calocampa	259
Agrotis	257	Calosetia	102
Alucita	248, 249	Calymnia	259
Amphidasis	261	Capua	55, 68
Amphisa	42	Carcina	139
Amphisbutis	172	Carpocapsa	91
Anacamptis	163, 163, 164	Cartella... ..	69
Anarsia	250	Cataclysta	10
Anchylopera	72, 255, 269	Cataplectica	170, 201
Ancylis	72, 73, 74	Catoptria	61
Anerastia	27	Cedestis... ..	182
Anesychia	133	Cemiostoma	226
Anisopteryx	262	Cerostoma	136
Anisotænia	84	Cerura... ..	256
Antithesia	45, 266, 267	Chauliodus	199
Aphomia	26	Cheimatophila	77, 106
Argynnis	256	Cheimophila	108
Argyresthia	177	Chelaria	167
Argyrolepia	101, 255	Chilo	33
Argyrotoza	75	Chimabacche	109
Aristotelia ...150, 153, 162, 165		Chlidonia	101
Asthena	261	Chloephora	39
Asthenia	89	Choreutes	20
Asychna	201	Chrosis	100, 255
Atemelia	173	Chrysoelista	201
		Chrysocorys	202
Bactra	74	Cidaria	265
Batrachedra	198	Cleodora	167
Bedellia... ..	193	Clepsis	49
Boarmia	261	Cloantha	251

	Page		Page
Cnephasia	93	Eubolia	265
Coccyx	68	Eucelis	86
Coleophora	188, 255	Euchromia	95, 270
<i>Commophila</i>	100	<i>Eucosma</i> ...45, 46, 47, 48, 87,	
Coriscium	186	95, 96, 97, 98, 99	
Crambus	34, 209, 266	<i>Eudemis</i>	71
Cræsia	76	Eudorea	20, 252
<i>Cydia</i>	69, 71, 100, 102	Eulia	44
		Eupisteria	261
Dasycera	170	Eupithecia	263, 264
Dasytoma	108, 271	Euplexia	259
Deilephila	256	Euplocamus	115
Depressaria	140, 271	Eupœcilia 40, 102, 253, 270, 271	
Dichelia	48	<i>Eurhodope</i>	30
Dichrorampha	66, 268, 270	Eurois	258
Dietypteryx	75	<i>Eurrhypara</i>	14
Dioryctria	31, 266	<i>Euxanthia</i>	105, 253
Diplodoma	113	<i>Evetria</i>	89
Ditula	55	Exæretia	139
Douglasia	177	Exapate	108
Drymonia	257		
Dryobota	259	Gelechia	108, 146, 244
Dyschorista	259	Gibbium	265
		Glyphipteryx	20, 175
Ebulea	14	Gonopteryx	255
Elachista	34, 203, 254	Gracilaria	184
Emmelesia	263	Grapholita	92, 253
<i>Enurmonia</i> ...43, 83, 84, 85, 86,		<i>Gypsonoma</i>	70
90, 100, 252			
Endopisa	90, 269	Habrostola	260
Endrosis	172	Hadena	251
Enmychia	9	<i>Halia</i>	39
<i>Epagoge</i>	48	Halonota	62, 268
<i>Epermenia</i>	199	Harpella	107, 169
Ephestia	27, 265	Hedya	69, 267, 269
Ephippiphora	86	Heliophobus	258
<i>Epiblema</i> ...56, 57, 58, 59, 60,		Heliothis	260
61, 62, 63, 64, 65, 68, 69		<i>Heliozela</i>	176, 177
<i>Epinotia</i>	86, 92, 253	Hemerisia	77
<i>Epithestis</i>	161	<i>Hemimene</i>	66, 67
<i>Eriocephala</i>	127, 128	Herbula... ..	9
Eriopsela	100		

	Page		Page
<i>Herminea</i>	3	<i>Nemophila</i>	18
<i>Homosoma</i>	28	<i>Nemophora</i>	125
<i>Hybernia</i>	262	<i>Nemotois</i>	127
<i>Hydrocampa</i>	11	<i>Nephopteryx</i>	31, 33, 254
<i>Hypena</i>	2	<i>Nepticula</i>	229
<i>Hypercallia</i>	169	<i>Noctua</i>	258
<i>Hypernecia</i>	43, 266	<i>Nola</i>	18
<i>Hypocbalcia</i>	30	<i>Notarcha</i>	13
<i>Hypnomena</i>	132	<i>Notocelia</i>	56, 57, 64
<i>Hysteronia</i>	65	<i>Nymphula</i>	11
<i>Incurvaria</i>	124	<i>Ochsenheimeria</i>	113
<i>Isotrias</i>	93	<i>Ocnorostoma</i>	183
<i>Lampronia</i>	122, 124	<i>Oecophora</i>	170
<i>Larentia</i>	263	<i>Oinophila</i>	199
<i>Laspeyresia</i>	85, 88, 89, 91, 92	<i>Oncocera</i>	30
<i>Laverna</i>	199	<i>Oporabia</i>	262
<i>Lewoptera</i>	226	<i>Opostega</i>	227
<i>Lipoptycha</i>	90	<i>Orgyia</i>	256
<i>Lita</i>	158	<i>Orneodes</i>	249
<i>Lithocolletis</i>	107, 212, 254	<i>Ornix</i>	186
<i>Lithographia</i>	57	<i>Orthosia</i>	259
<i>Lithomia</i>	251	<i>Orthotælia</i>	138
<i>Lobesia</i>	99	<i>Orthotænia</i>	96
<i>Loxostege</i>	16	<i>Oxygrapha</i>	77
<i>Lozopera</i>	105	<i>Oxyptilus</i>	246
<i>Lozotænia</i>	52, 267	<i>Pædisca</i>	59
<i>Lyonetia</i>	225	<i>Paltodora</i>	167
<i>Macaria</i>	262	<i>Pammene</i>	77, 85, 86, 87, 89
<i>Marasmarcha</i>	248	<i>Pamplusia</i>	90
<i>Melanchra</i>	251	<i>Pancalia</i>	173
<i>Melanippe</i>	264	<i>Pandemis</i>	51, 52
<i>Melanthia</i>	264	<i>Paramesia</i>	81
<i>Mesographe</i>	15	<i>Parasia</i>	166
<i>Miana</i>	9, 95	<i>Pardia</i>	56
<i>Micropteryx</i>	127	<i>Pechypogon</i>	3
<i>Mixodia</i>	98	<i>Pempelia</i>	82, 254, 255
<i>Mompha</i>	199, 200, 201, 202	<i>Penthina</i>	48
<i>Monopis</i>	115, 250	<i>Peronea</i>	42, 78
<i>Myelois</i>	30	<i>Phalonia</i>	100, 101, 102, 103, 104, 253

	Page		Page
Phibalocera	139	Semioseopis	110
Philedone	42	Sericoris	96, 268, 270
Phlaodes	58	Sesia	256
Phlyctania ... 13, 14, 15, 16, 17		Simaethis	19
Phtheochroa	100	Solenobia	111
Phycis	32	Spilodes	16
Phycita	31	Spilonota	56, 267
Phylloporia	121	Steganoptycha	71
Pionea	15	Stenopteryx	18
Platyptilia ... 244, 245, 246		Stenoptilia	246, 247
Pleurota	168	Stephensia	203
Plodia	28	Stigmonota	88
Plusia	135, 260	Swammerdamia	130
Plutella	134		
Pœcilochroma	83, 269	Talæporia	110
Polia	251	Teichobia	123
Prays	134	Teras	82
Psaunmotis	15, 265	Tinagma	176
Psecadia	133	Tinea	115, 250
Pterophorus	244	Tineola	121
Ptocheuusa	166	Tischeria	211
Ptycholoma	55	Tmetocera	69
Pyrallis	5	Tortricodes	106
Pyrausta7, 9, 12, 17		Tortrix...44, 45, 49, 75, 76, 93, 94, 95, 98, 244	
Recurvaria	146	Tricophaga	116
Retinia	89	Trifurcula	242
Rhacodia	82	Triphaena	257
Rhodophaea	80		
Rivula	3	Venusia	261
Roeselia	19		
		Xanthosetia	105
Salebria	32, 33	Xenolechia	155, 156
Sarrothripa	41	Xylophasia	259
Scardia	115		
Schreckensteiniæ	202	Yponomeuta	132
Scoparia	20, 252	Ypsipetes	264
Scopula	16	Ypsolophus	168
Scotosia	264		
Scythris	172	Zanclognathu	4
Sclenia	252, 260	Zelleria	183
Semasia	85, 252		

INDEX TO SPECIES.

	Page		Page
<i>acanthodactyla</i> ...	246	<i>andereggiella</i> ...	180
<i>acanthodactylus</i> ...	246	<i>angelicella</i> ...	143
<i>aceriana</i> ...	70	<i>anglicella</i> ...	187
<i>acuminatella</i> ...	150, 151	<i>angulifasciella</i> ...	237
<i>acuminatana</i> ...	67	<i>angustana</i> (Eupœcilia) ...	253
<i>adornatella</i> ...	32	" (Hypermezia) ...	266
<i>adscitella</i> ...	207	<i>angustea</i> ...	25
<i>advenella</i> ...	30	<i>angustiorana</i> ...	55
<i>æneofasciata</i> ...	241	<i>argyrana</i> ...	87
<i>æneofasciella</i> ...	241	<i>annulatella</i> (Plutella) ...	135
<i>æscularia</i> ...	262	" (Coleophora) ...	196
<i>æthiops</i> ...	156	<i>anomalella</i> ...	231
<i>affinis</i> ...	153, 154, 259	<i>antiqua</i> ...	256
<i>affinitana</i> ...	40	<i>anthyllidella</i> ...	163
<i>agathina</i> ...	257	<i>apicella</i> (Swammerdamia) ...	180
<i>aglaia</i> ...	256	" (Coleophora) ...	196
<i>ahenella</i> ...	30	<i>apicella</i> (Nepticula) ...	234
<i>albersana</i> ...	92	<i>apicepunctella</i> ...	254
<i>albicillata</i> ...	264	<i>ap plana</i> ...	144
<i>albicosta</i> ...	193	<i>areella</i> ...	116
<i>albifrontella</i> ...	204	<i>arecuthina</i> ...	182
<i>albipalpella</i> ...	164	<i>arcuata</i> ...	236
<i>al bipunctella</i> ...	118	<i>arcuatella</i> ...	236
<i>albistria</i> ...	179	<i>arenella</i> ...	141
<i>albitarsella</i> ...	191	<i>argentipedella</i> ...	237
<i>alchimiella</i> ...	184	<i>argyropeza</i> ...	234
<i>alcyonipennella</i> ...	192	<i>artemisiella</i> ...	197
<i>allisella</i> ...	139	<i>aruncella</i> ...	127
<i>allionella</i> ...	128	<i>aspersana</i> ...	81
<i>alnfoliella</i> ...	213	<i>assectella</i> ...	174
<i>alpinana</i> ...	66	<i>assimilella</i> ...	141, 271
<i>alpinella</i> ...	205	<i>atomella</i> ...	141
<i>alstroemeriana</i> ...	142, 144	<i>atra</i> ...	201
<i>alternella</i> ...	94	<i>atrella</i> ...	165
<i>amataria</i> ...	262	<i>atricollis</i> ...	237
<i>ambigualis</i> ...	21, 22	<i>atricomella</i> ...	205
<i>amœnana</i> ...	57	<i>atricapitella</i> ...	229
<i>amyotella</i> ...	212	<i>atriplicella</i> ...	159
<i>anatipennella</i> ...	193	<i>aucupariæ</i> ...	231

	Page		Page
<i>aucupariella</i>	217	<i>bouchardana</i>	83, 269
<i>angustana</i>	43	<i>bractea</i>	260
<i>aurana</i>	86	<i>bracteella</i>	107, 169
<i>aurantiaria</i>	262	<i>bractella</i>	169
<i>aurata</i>	7	<i>bremiella</i>	215, 216
<i>aureatella</i>	128	<i>brizella</i>	165
<i>aurella</i>	241	<i>brokecella</i>	182
<i>aurifrontella</i>	201	<i>brunnichella</i>	203
<i>aurimaculella</i>	227	<i>brunnichiana</i>	64
<i>anroguttella</i>	186	<i>brunnichiella</i>	203
<i>autumnana</i>	79	<i>buoliana</i>	89
<i>autumnaria</i>	262		
<i>avellanella</i> (<i>Semioscopis</i>) ...	110	<i>cæsiella</i>	131
„ (<i>Ornix</i>)	186	<i>cæspititiella</i>	198
		<i>caledoniana</i>	82
<i>badiella</i>	146	<i>caledoniella</i>	222
<i>baja</i>	258	<i>calthella</i>	127
<i>barbalis</i>	3	<i>cambrica</i>	261
<i>basalella</i>	239	<i>campoliliana</i>	57
<i>basistrigalis</i>	22	<i>cana</i>	61
<i>bennetii</i>	153, 244	<i>canariella</i>	124
<i>bergmanniana</i>	76	<i>candidata</i>	261
<i>bertrami</i>	245	<i>captinnucula</i>	9
<i>betulæ</i> (<i>Pempelia</i>)	33	<i>carduella</i>	143
„ (<i>Ornix</i>)	187	<i>carlinella</i>	167
<i>betularia</i>	261	<i>caudana</i>	82
<i>betulella</i>	174	<i>cantella</i>	147
<i>betuletana</i>	46	<i>cembræ</i>	20
<i>betuletella</i>	107	<i>cerusella</i>	209
<i>betulicola</i>	238	<i>cerusellus</i>	34
<i>biarcuana</i>	72	<i>cervinata</i>	265
<i>biatomella</i>	210	<i>cespitalis</i>	9
<i>bicostella</i>	168	<i>cespitis</i>	258
<i>bilunana</i>	69	<i>chærophyllella</i>	199
<i>bimaculana</i>	62	<i>chærophyllellus</i>	199
<i>bipunctidactyla</i>	246	<i>chærophylli</i>	145
<i>bipunctidactylus</i>	246	<i>chaonia</i>	257
<i>birdella</i>	113, 114	<i>christiernana</i>	169
<i>biselliella</i>	121	<i>christyi</i>	263
<i>hisontella</i>	114	<i>chrysanthemana</i>	94
<i>bistrigella</i>	121	<i>cidarella</i>	228
<i>boleti</i>	115	<i>ciliella</i>	144

	Page		Page
<i>cinctella</i>	208	<i>corylana</i>	52
<i>cinerana</i>	58	<i>coryli</i>	219
<i>cinerella</i>	146	<i>corylifoliella</i>	221, 222
<i>cinereopunctella</i>	204	<i>costalis</i>	5
<i>cingulalis</i>	9	<i>costana</i>	53, 244
<i>cingulata</i>	9	<i>costella</i>	137
<i>cinnamomeana</i>	51	<i>costosa</i>	140
<i>cirsiana</i>	63	<i>cramerella</i>	213
<i>cladiella</i>	175	<i>cratagana</i>	54, 267
<i>clathrella</i>	111, 112	<i>cratagella</i>	23
<i>clerekella</i>	225	<i>cratagi</i>	228
<i>clerkella</i>	225	<i>crenana</i>	59
<i>cloncella</i>	118	<i>crepusculella</i>	227
<i>cognatellus</i>	133	<i>cretacella</i>	29
<i>colonella</i>	26	<i>cristatella</i>	229
<i>comariana</i>	78	<i>cristulalis</i>	19
<i>combinella</i>	130	<i>crocealis</i>	14
<i>comitana</i>	69	<i>cruciana</i>	43, 266
<i>communana</i>	83	<i>cruciferarum</i>	134
<i>comparana</i>	78	<i>cryptella</i>	232
<i>comparella</i>	225	<i>euculipennellum</i>	186
<i>complanella</i>	211	<i>eucullatella</i>	18
<i>comptana</i>	74, 255	<i>eulmellus</i>	36
<i>concomitella</i>	225	<i>euprella</i>	127
<i>confinis</i>	152	<i>eupriacellus</i>	127
<i>confusalis</i>	19	<i>eurticellus</i>	134
<i>confusella</i>	119	<i>curvella</i>	181
<i>congelatella</i>	108	<i>cygnipennella</i>	211
<i>coniferana</i>	89	<i>cynosbatella</i>	46
<i>conjugella</i>	179	<i>eytisella</i>	167
<i>consortana</i>	67		
<i>conspersana</i>	94	<i>dalella</i>	136
<i>conspicualis</i>	21	<i>davisellus</i>	33, 255
<i>conspicuaella</i>	192	<i>dealbana</i>	70
<i>contaminana</i>	75	<i>desertella</i>	149
<i>conterminella</i>	143	<i>destructor</i>	121
<i>conversaria</i>	261	<i>diffinis</i>	259
<i>conwayana</i>	75	<i>dilectella</i>	180
<i>cornella</i>	131	<i>dilutella</i>	32, 254
<i>corticana</i> (Antithesia)	45	<i>dimidiana</i>	47, 266
" (Pœcilochroma)	83	<i>discipunctella</i>	146
<i>corticella</i>	117	<i>discordella</i>	194

	Page		Page
distinctana	68	fischeriella	176
distinctella	148, 156	flavicaput	201
dodecella	161	flavimaculella	170
domestica	153	fletcheri	232
dorsana	88	floslactella	235
dotata	265	fœnella	65
douglasii	111	forficalis	15
dubitalis	23	formicæformis	256
dubitata	264	forskaleana	76
dunningiella	222	forsterana	50
		fraternella	157
elongella	184, 185	fraxinata	263, 264
emberizæpennella	224	frequentella	24
emberizipennella	224	frischella	192
ephippella	177	froelichiella	223
ericetana	95, 270	fugitivella	156
ericetella	148	fulgens	238
euphrosyne	256	fulvana (Lozotania)	54
eurema	232	„ (Catoptria)	61
evonymellus	133	fulviguttella	170
expallidana	62	fulvimetrella	115
expolita	95	fumatella	148
expolitella	150	funerella	133
		fureula	256
fabriciana	19	fusca	32
fabriciella	193	fuscalis	13
fagella	109	fusedinella	189
faginella	219	fuscceens	171
farinalis	5	fuscipunctella	119
farinatella	182	fuscocuprea	172
favillaceana	68, 80	fuscoviridella	175
fenestrella	172	fuscus	247
ferrugalis	17		
ferrugana	82	galiata	264
ferruginea	45	galii	256
festaliella	202	gamma	135
fibulella	125	gelatella	108
ficulella	27	geminana	71
filigrammaria	262	geniculeus	36
fimbria	257	genistacolella	33, 255
fimbrialis	5	genistæ	195, 255
		genistella	33

	Page		Page
germarana	91, 269	hybridana	93
gerningana	42	hypericana	253
glareosa	258	hypericella	142
glauca	251	hyrciniana	68
glaucolella	197		
glauconalis	6	icterana	49
gleichenella	203	ignobilella	236
glutinosa	239	illustraria	252
gledartella	181	immunella	242
gonodactyla	246	impluviata	264
gracilella	151	incarnatana	57
grandavana	63	incertana	93
granella	118	incongruella	172
granitella	173	inconspicueila	111
gratiosella	240	innotata	263
gregsoni	206	inopiana	65
grisealis	4	insignatella	73
griseo-capitella	131	insignipennella	183
grossulariana	51	insignitella	107, 214
grotiana	48	instabilella	158, 160
gryphipennella	190	intaminatella	150
guttea	188	interjecta	257
		internana	88
hamellus	34	interpunctella	28
hastiana	42, 80	irradiella	215
heegeriella	213		
heparana	51	janthina	257
heparata	261	junoniella	219
hepariella	183		
hepatica	259	kilmunella	205
heracliana	146	kleemannella	223
herbida	258	klemannella	223
herbosana	66, 268	kuchniella	28, 265
hermannella	165		
heroldella	131	laburnella	226
hexadactyla	249	lactana	72, 269
hohenwarthiana	61	lacteella (Endrosis)	172
holmiana	76	lacteella (Laverna)	200
hortuellus	86	laevignana	55
huebnerella	167	lanceolana	74
humeralis	155		
hybridalis	18		

	Page		Page
lapella (Tinea) ...	120	maculea ...	157
„ (Parasia) ...	166	maculosana ...	270
lapponica ...	240	malella ...	238
laricella ...	188	manniana ...	253
lariciana ...	70	margaritellus ...	38
laripennella ...	196	marginana ...	47, 267
latiorana ...	53	marginæa ...	211
lautella ...	215	marginellus ...	168
lechæana ...	55	marginepunctella ...	113
lemnata ...	10	marginicolella ...	241
leuwenhoeckella ...	173	maritima ...	228
lichenella ...	111	marmorea ...	158
ligulella ...	162	megerlella ...	207
lineola ...	25	melilotella ...	192
lineolea ...	196	mendica ...	179
literana ...	77	mercurella ...	24
lithodactyla ...	248	mercuriana ...	90
lithodactylus ...	248	messaniella ...	220
litrata ...	262	metzneriella ...	166
liturella ...	140	microdactyla ...	248
lixella ...	194	microdactylus ...	248
loeflingiana ...	75	microtheriella ...	237
loewii ...	247	ministrana ...	44
loganella ...	188	minusculella ...	231
logiana ...	79	minutella ...	170
longicornis ...	149	miscella ...	200
lotella ...	27	misella ...	119
lucella ...	122	mitterbacheriana ...	72
lucipara ...	259	mixtana ...	77
lunaria ...	260	monodactyla ...	248
lundana ...	73	monticola ...	205
lupulina ...	12	monticolana ...	90
luridana ...	254	mouffetella ...	161
lutarea ...	131, 132	mulinella ...	149
lutealis ...	16	mundella ...	152
luteata ...	261	murana ...	24
luteella ...	236	murinipennella ...	197
luticomella ...	204	musculella ...	124
lutipennella ...	189	musculana ...	52
luzella ...	122	myllerana ...	20
		myrtillana ...	73
maccana ...	80	myrtillella ...	235

	Page		Page
<i>navana</i>	71	<i>olivalis</i>	17
<i>naviferella</i>	165	<i>olivaria</i>	263
<i>nana</i>	271	<i>onosmella</i>	195
<i>nanana</i>	252	<i>ophthalmicana</i>	60
<i>nanatella</i>	141	<i>oppressana</i>	84
<i>nebulana</i>	55	<i>orbitella</i>	191
<i>neglectana</i>	70, 269	<i>osseana</i>	95
<i>nemoralis</i>	4	<i>osseella</i>	166
<i>nemorella</i>	138	<i>ostrinalis</i>	8
<i>nervosa</i>	145, 171	<i>oxyacantha</i>	218
<i>nicellii</i>	222	<i>oxyacanthella</i> (Swammerdamia)	131
<i>nickerlii</i>	111	" (Neptica)	230
<i>nigra</i>	147	<i>padellus</i>	132
<i>nigrella</i>	206	<i>padi</i>	133
<i>nigrescentella</i>	215, 216	<i>paleana</i>	49
<i>nigricana</i>	91	<i>pallescentella</i>	120, 121
<i>nigricella</i>	190	<i>pallida</i>	252
<i>nigricomella</i>	227	<i>paludana</i>	73
<i>nigricostana</i>	87	<i>paludum</i>	209
<i>nimbella</i>	28	<i>palustrana</i>	48
<i>nisella</i>	58	<i>parasitella</i>	117
<i>nitidella</i>	178	<i>pariana</i>	19
<i>noctrella</i>	18	<i>paripennella</i>	191
<i>notatella</i>	155	<i>parthenias</i>	260
<i>nubilalis</i>	12	<i>parvidactylus</i>	246
<i>nymphanta</i>	11	<i>pascuana</i>	94
<i>obliquella</i>	208	<i>pascuellus</i>	35
<i>oblongana</i>	47	<i>pastinacella</i>	146
<i>obscura</i> (Gelechia) ..	152	<i>paykulliana</i>	69
" (Elachista)	207	<i>pectinea</i>	124
<i>obsoletella</i>	159, 160	<i>pellionella</i>	120, 121
<i>occultana</i>	90	<i>peltigera</i>	260
<i>ocellana</i> (Hedya) ...	69, 70	<i>penkleriana</i>	58
" (Depressaria)	144	<i>pentadactylus</i>	249
<i>ochraceana</i>	68	<i>perlillus</i>	38
<i>ochraceella</i>	200	<i>perlepidana</i>	88
<i>ochrodactyla</i>	244	<i>perplexana</i>	79
<i>ochrodactylus</i>	244, 245	<i>perplexella</i>	207
<i>ocnerostomella</i>	177	<i>petiverella</i>	66
<i>octomaculana</i>	94	<i>plugiana</i>	63
<i>octomaculata</i>	10	<i>phragmitellus</i>	39

	Page		Page
phryganella	109	pseudobombycella	110
<i>picana</i>	45	pseudo-spretella	171
picarella	116, 117	<i>pterodactyla</i>	247
piceana	59	pterodactylus	248
pictella	165	<i>pubicornis</i>	124
pinariella	183	pulcherrimella... ..	145
pinguinis	6	<i>pulveralis</i>	15, 265
pinicolana	89, 90	<i>pulveratella</i>	150
pinicolella	198	pulverosella	243
pinivorana	89	punicealis	7
pistacina	259	purpuralis	8
plagiolella	238	purpurella	128
<i>plagiodyctylus</i>	247	pygmæana	174
plantaginella	160	pygmæata	263
plumbagana	67	pygmæella (Argyresthia) ...	181
<i>plumbana</i>	90	" (Nepticula)	230
<i>podana</i>	54	pyralella	23
politana	66, 268, 270	pyrella	132
politella	150	pyrrhulipeunella	194
pollinariella	210		
polydactyla	249	quadripunctella	122
pomella	230	<i>questionana</i>	66
pomonella	92	quercana	139
pomifoliella	218	quercifoliella	220
populana	85	quinqueguttella	220
populella	147, 148		
porrectella	135	radiatella	136
præangusta	198	<i>ramella</i> (Hedya)	69
prælatella	122	<i>ramella</i> (Anchylopera) ...	72, 269
prælongana	46	<i>ratzeburgiana</i>	84
prasinana	39	regiana	86
pratana	95, 270	regiella	240
pratellus	34, 37	repandata	261
proboscidaüs	2	<i>resplendella</i>	177
prodromana	42	resplendellum	177
profugella	201	retinella	180
propinquella	199	revayana	41
protea	259	ramni	255
proximana	91	rheediella	77
proximella	155	rhombella	154
prunalis	17	rhomboidaria	261
pruniana	47	rhynchosporella	209

	Page		Page
ribeana	51	scopoliana	61
roborana (Lozotania)	54, 267	scotias	265
„ (Spilonota)	56	scoticella	188
roborella	31, 254	scutulana	63
roboris	212, 254	scelcellus	37
rosæcolana	56	selene	256
rosana	54	semifasciana	45
roseticolana	91, 269, 270	semifulvella	121
ruberaria	264	semifusca	179
rubiella	123	semifusca	59
rubiginosana	83	semipurpurella	129
rufana	79	semitestacella	178
rufescens	147	senecionis	29
ruficapitella	229	senectella	152
ruficiliana	271	seppella	127
rufillana	85	septembrella	233
rufimitrella	126	sequax	161
rufocinerea	211	sequella	136
ruralis	13	sericialis	3
rustica	134	sericiella	176
rusticana	49	sericiellum	176
rusticella	115	siccifolia	190
		similana	62
salaciella	227	similella	171
salicella (Penthina)	48	similis	152
„ (Dasystema)	108, 271	sinuana	94
salicicolella	217	sircomella	163
salicis	235	sociella	26
salicorniæ	159	solandriana	60
salopiella	129	solidaginis	251
sambucalis	15	solutella	156
sangiella	164	sommulentella	198
sangii	129	sorbi (Lithocolletis)	217
saucia	257	„ (Nepticula)	242
scabrella	137	sorbiana	52
schalleriana	78	sorbiella	181
schränkella	201	sordidana	59
schwarzella	125	sororeulana	46
scintillulana	20	sparganella	138
scitella	226	sparmannella	130
scopariella (Depressaria)	141	sparmanniana	140
„ (Lithocolletis)	221	spartiella	250

	Page		Page
spartifoliella	226	tanaceti	67, 268
spinicolella	218	taeniatella	208
spiniella (Swammerdamia) ...	131	taeniolella	163
„ (Argyresthia)	178	tapetiella	116
spinolella	217	tapetzella	116
spissicella	31	tedella	68
splendana	91	tenebrella	162
splendidella	31, 266	tenebrosella	162
splendidissimella	242	tenerana	84
splendidulana	89	terella	149
sponsana	80	terminella	202
stabilana	59	tesserana	255
stagnata	11	tetradactylus	249
stanneella	176	tetragonana	64
stanneellum	176	tetragonella	108, 153
steinkellneriana	110	tetralunaria	252
stettinensis	223	tetraquetrana	58
stieticalis	16	therinella	195
stigmatella	184	thrasonella	175
stipella	165, 171	thunbergella	128
stramineella	184	tityrella	238
subapicella	234	torquatella	173
subaquilea	171	torquillella	187
subbaumanniana	255	trapeziella	203
subbinaculella	234	triangulum	258
subfasciana	45	triatomea	210
subjectana	93	tricolorella	157
subobscurella	207	trifasciella	224
subocella (Gelechia)	166	trigeminana	62, 268
„ (Elachista)	211	trigonodactylus	246
subocellana	57	trimaculana (Spilonota) ...	57
subornatella	32	„ (Hedya)	71, 267
subpropinquella	142	trimaculella	235
subpurpurella	130	tringipennella	185
suffusa	257	tripartita	260
sulphurella	170	tripunctana	56
sulphurellum	186	triquetrella	111, 112
swammerdammella	125	tristana	79
swederella	184	tristellus	37
sylvella	212	tristregella	224
syringella	185	troglydytella	196
		truncicolella	23

	Page		Page
tumidella	30	verticalis	13
turbidana	65, 208	vetusta	259
turricella	239	viburnana	49
typica	258	viburniana	49
		viminetella	189
uldmanniana	56	viminiella	221
ulmanniana	56	virgaureana	93
ulicana	90	viridana	50
ulicetana	92	viridella	126
uliginosellus	35, 266	viscariella	158
ulmana	84	viscerella	231
ulmella	21	vittella	136
ulmifoliella	216	vorticella	162, 163
ulmivora	233	vulgella	155
umbellana	140		
umbrana	81	wailesella	226
umbrosella	153	walkerana	43
undulana	41	warringtonellus	38
unguicella	74	weaverella	250
unifasciata	53	weirella	145, 271
unifasciata	263	wilkinsoni	191
unimaculella	129	wockii	111
upsilon	259	wœberana	85
urticata	14	wœberiana	85
vacciniana	86	xanthographa	258
vacciniella	219	xylostearia	54
vacculella	114	xylostella	138
variegana	46, 81		
vectisana	40		
velosella	148		
verhuellella	123	zelleri	30
v-flava	199	zonariella	208
v-flavum	199	zophodactyla	247

