

THE
LEPIDOPTEROUS FAUNA
OF
LANCASHIRE AND CHESHIRE.

BY

JOHN W. ELLIS, M.B. (VIC.), F.E.S.,

LATE HONORARY SECRETARY TO THE LANCASHIRE AND CHESHIRE ENTOMOLOGICAL
SOCIETY, AND TO THE LIVERPOOL NATURALISTS' FIELD CLUB.

RE-PRINTED FROM 'THE NATURALIST.'

Leeds:

PRINTED BY MCCORQUODALE & CO. LIMITED.

1890.

P R E F A C E.

IN the following pages the author has endeavoured to present, as completely as possible, the facts known with reference to the occurrence in Lancashire and Cheshire of the British species of Lepidoptera. The list does not pretend to be conclusive; indeed, during the period which has elapsed since the earlier portions of the work appeared in 'The Naturalist,' the author has received information of the occurrence of several species not hitherto included; and as these, together with any subsequent information of new species or additional localities for local ones, and corrections of some few errors in the nomenclature and synonymy of species included in the present volume, will probably form the subject of an appendix, such information will be gratefully received and duly acknowledged.

HOWARD PLACE, STOKE-ON-TRENT,

April, 1890.

THE LEPIDOPTEROUS FAUNA OF LANCASHIRE AND CHESHIRE.

By JOHN W. ELLIS, L.R.C.P., L.R.C.S.E.,

Liverpool; Hon. Sec. Lancashire and Cheshire Entomological Society.

ONE of the main factors which determine the geographical distribution of phytophagous insects being the presence or absence of the plants upon which they subsist during a portion, if not the whole, of their existence, and as the flora of a district depends very largely upon the geological formation and meteorological conditions of that district, an apology is scarcely needed for referring very briefly to these conditions as they exist in the counties of Lancashire and Cheshire, before commencing a list with localities of the lepidopterous fauna of these counties.

Exposed as they are to the prevailing warm and moisture-laden south-westerly winds, and washed as a portion of each county is by the waters of the Irish Sea, the average yearly temperature is always several degrees higher, and the annual rainfall from 10 to 20 inches greater, than that of the corresponding east coast of England. Throughout Lancashire, with the exception of the extreme north, where the rainfall is somewhat higher, the amount of rain varies between 30 and 40 inches yearly, while over the whole of Cheshire the average is between 20 and 30 inches.

The two principal geological formations met with belong to the Triassic and Carboniferous periods; the former, including the series of New Red Sandstones, occupying the whole of Cheshire west of Stockport, and the western half of Lancashire, including the Preston and Fylde districts, but not including the extreme north, to be afterwards alluded to.

The Carboniferous system, chiefly the upper and lower coal

measures and the millstone grit, extends over the eastern half of Lancashire, forming the great coalfield of this county, and the extreme east of Cheshire is also occupied by a continuation of the same beds. Only in the north of Lancashire, in the neighbourhood of Grange, and in the extreme north-east, does the mountain limestone appear; and, as will be afterwards seen, the district of Grange assimilates more closely in its entomological fauna to the south of England than does any intervening district.

Through a large portion of both counties the Western Trias is separated from the Eastern Carboniferous series by a narrow strip of Permian Limestone, nowhere more than a mile in breadth, and stretching due north and south through Stockport and a few miles east of Manchester. In most places the new red sandstone is covered to a variable depth by a bed of clay containing boulders grooved by glacial action, and the remains of marine shells similar to, if not identical with, those which at present inhabit the seas of the neighbourhood.

The remaining features of the district which affect its flora, and therefore its lepidopterous fauna, are speedily dismissed. With the exception of Delamere Forest, lying between Chester and Northwich, there are no large tracts of woodland, and what woods there are are comparatively of recent growth, and usually so devoted to the preservation of game that an entomologist speedily receives peremptory orders to quit. The large tracts of moss-land known locally as 'mosses' contribute a fair share to the fauna of Lancashire, but perhaps no physiographical feature of the two counties has such an influence in swelling the list of their lepidoptera as the tract of sandhills, with a fauna and flora *sui generis*, which stretch from the Ribble to the Mersey, and from the Mersey to the Dee.

In compiling the Lepidopterous Fauna of Lancashire and Cheshire, I have to acknowledge the kind assistance of the following

Naturalist,

gentlemen, whose names are abbreviated in the body of the work as follows:—

- N.C.—Mr. Nicholas Cooke, Liscard.
 H.H.C.— „ H. H. Corbett, Levenshulme.
 J.C.— „ Joseph Chappell, Manchester.
 S.J.C.— „ S. J. Capper, Huyton.
 W.G.— „ Willoughby Gardner, Liverpool.
 H.H.H.—Rev. H. H. Higgins, Rainhill.
 J.B.H.—Mr. J. B. Hodgkinson, Preston.
 W.J.— „ William Johnson, Liverpool.
 J.C.M.— „ J. C. Melvill, Prestwich.
 S.L.M.— „ S. L. Mosley, Huddersfield.
 F.N.P.— „ F. N. Pierce, Liverpool.
 G.T.P.— „ G. T. Porritt, Huddersfield.
 E.S.— „ Edmund Shuttleworth, Preston.
 A.O.W.— „ Alfred O. Walker, Chester.

I have also derived considerable information from the following books, pamphlets, and periodicals:—

- British Butterflies and Moths, by the Rev. F. O. Morris.
 British Butterflies and Moths, by Edward Newman.
 Lepidoptera of Wirral, by J. F. Brockholes * (Trans. Lit. and Phil. Soc. of Liverpool, 1864). Vol 18 pp 53 Appendix
 Lepidopterous Insects of the district round Liverpool, by Charles S. Gregson * (Trans. Hist. Soc. of Lanc. and Ches., 1855 to 1885).
 The Entomologist.
 The Entomologists' Monthly Magazine.
 The Entomologists' Weekly Intelligencer.
 The Zoologist.
 The Young Naturalist.
 Illustrations of Varieties of Lepidoptera, by S. L. Mosley.

* Abbreviated J.F.B., and C.S.G., in the body of the work.

RHOPALOCERA.Fam. *PIERIDÆ*.**LEUCOPHASIA, Steph.****Leucophasia sinapis, L. Wood White.**

Very local in both counties, but tolerably common where it does occur.

Lanc.—Grange, abundant (E.S.; J.B.H. in litt. and Ent. Mo. Mag., viii. 62); Manchester, one from Clifton Wood (F.N.P.).

Ches.—Dunham Park (J.B.H., Intell. 1859, vol. ii., 101). Mr. Gregson also records this species from a plantation between Hooton Station and Mollington.

EUCHLOE, Hübn.**Euchloe cardamines, L. Orange-tip.**

This species, usually so common in the south, is somewhat local in its distribution, although more abundant in Cheshire than in Lancashire. Localities noted are as follows:—

Lanc.—Grange, abundant (E.S.); Silverdale, abundant (J.C.M.); fairly common in low-lying meadows between the coast and Ormskirk, and between Allerton and Hale (C.S.G.); Bolton, fairly common (W.J.); Preston, scarce (J.B.H.); Rainhill, very scarce (H.H.H.).

Ches.—Chester district, common (A.O.W.); throughout Wirral, as at Raby, Stourton, and Barnston (W.G.), and Bromborough (J.W.E.); the Bollin and Glazebrook valleys (J.C.); Delamere (S.J.C.); while it is local about Cheadle Hulme and Alderley (H.H.C.).

In Mosley's Illust. Var. Lepidoptera are figured two aberrations of this species captured in Lancashire, the one, a very dwarf specimen (Part III., Anthocharis, pl. i., fig. 5) taken by S.L.M. at Arnside in 1877, the other (Part XIV., Anthocharis, pl. ii., fig. 6) in coll. C.S.G., and taken by him at Southport, in which the ground colour of the wings is pale yellow.

Naturalist,

PIERIS, Schrank.

Pieris napi, L. Green-veined White.

Pieris rapæ, L. Small Cabbage White.

Pieris brassicæ, L. Large Cabbage White.

All these species are abundant throughout both counties, but much more so in Cheshire and South Lancashire than in North Lancashire.

COLIAS, Fabr.**Colias hyale, L. Pale Clouded Yellow.**

Mr. Chappell informs me that this species was captured at Bury by Mr. Robert Kay; in Stainton's Manual it is recorded as having occurred in the Manchester district.

Colias edusa, Fab. Clouded Yellow.

Of very irregular appearance in the two counties, as indeed is the case over the greater part of England. During the so-called 'Edusa years,' the latest of which was 1877, the butterfly seems to be generally distributed throughout both Lancashire and Cheshire.

Lanc.—Bolton (W.J., Intell., 1858, i., 195); Bury (R. Kay, Ent., x., 190); Crosby, abundant in 1877 (J.W.E.); Grange, freely at times (J.B.H.); Huyton, one specimen (S.J.C.); Lancaster, in 1869 (J.B.H., Ent. Mo. Mag., vi., 114); Liverpool, in Pigue Lane, in 1847 (C.S.G., Zool., vi., 2032); Manchester, in June 1877 (F. Kenderdine, Ent. Mo. Mag., xiv., 64); Middleton, abundant in 1877 (J. Thorpe, Ent., x., 190); Southport, one in 1869 (R. Kay, Ent., iv., 351), and in 1877 (G. Eastham, Ent., x., 190); Ulverstone, one in 1858 (J. Kirby, Intell., 1858, i., 171).

Ches.—Alderley, one in 1868, taken by W. W. Keyworth (H.H.C.); Bollin Valley, several in 1869 (J.R. Hardy, Ent. Mo. Mag., vi., 114); Chester district, rather common in 1859 and 1877 (A.O.W.); Delamere, one in 1878 (J.C.M.); Handforth, common in 1877 (H.H.C., Ent., ix., 256); Liscard, taken freely by Mr. Leather in 1877 (J.W.E.); New Brighton, taken by Mr. Cauty in 1847 (C.S.G., Zool., vi., 2032); Stourton, common in 1877 (W.G.); Wallasey Sandhills, in 1877 (J.W.E.).

The pale variety of the female (*Helice*, Hübn.) has been taken several times, of which I find the following records:—

Crosby, a single specimen captured in 1877 by Thomas West, and recorded in Trans. Lanc. and Ches. Ent. Soc., 1877; Birkenhead district, a specimen taken by Mr. William Lello in August 1868 (Ent. Mo. Mag., v., 129, and Ent., iv., 145); Stourton, one in 1877 by W. Gardner (in litt.).

Feb. 1885.

GONEPTERYX, Leach.

Gonepteryx rhamni, L. Brimstone.

Occurs sparingly throughout both counties, but nowhere plentiful.

Lanc.—Bolton, occasionally (W.J.); Grange, not rare (J.B.H.); Hale, taken by Mr. Nixon (C.S.G.); Rainhill, two females many years ago (H.H.H.); Silverdale (J.C.M.).

Ches.—Alderley, one in 1867 (H.H.C.); Beeston Castle and Chester, taken by Mr. Geo. Day (A.O.W.); Bidston, one in 1875 (W.G.); Bowden, Bollin Valley, and Lindow Common, rare (J.C.); Cheadle Hulme, one in 1868 (H.H.C.); Delamere Forest, taken by Mr. F. Leather (A.O.W.), also recorded from thence by C.S.G. (Ent., vi., 452) and J.C.M. (in litt.); Upton, where it was seen by Mr. Almond (J.F.B.).

Fam. *NYMPHALIDÆ*.

VANESSA, Fab.

Vanessa atalanta, L. Red Admiral.

Tolerably common throughout both counties, though much more frequent in some seasons than others.

A beautiful aberration of this species, having the central band of the forewing almost obliterated, and which was captured near Oldham by Mr. Joseph Chappell, is figured in Mosley's Varieties, Part XIII., Vanessa, pl. vii., fig. 1. The specimen is now in the collection of Mr. Joseph Sidebotham.

Vanessa antiopa L. Camberwell Beauty.

This scarce but extremely beautiful butterfly has been a pretty frequent visitor to both counties. So far as I am aware, the following list comprises all the specimens recorded in our periodical literature:—

Lanc.—Bolton, a specimen was captured in 1857 and recorded (Intell., 1857, vol. i., 190) by Mr. W. Johnson, who informs me that another specimen was captured and several others seen during that year in the same neighbourhood; Bury, in 1872 (R. Kay, Ent., vi., 410); Grange (J.B.H.); Heywood (near), in 1880 (J. W. Bentley, Ent., xiii., 277); Kersall Moor, one specimen (J.C.M.); Knotty Ash, near Liverpool, a specimen in 1873 (E. P. Thompson, Ent., vi., 410); Liverpool (in the town of), in 1873 (H. Durnford, Ent., vi., 410); Longridge (J.B.H.); Lytham (J.B.H., Intell., 1859, vol. ii., 101); Ribchester, a specimen in 1872 (A. G. Lathom, Ent., vi., 216); Rivington Pikes, about 1855, the specimen in coll. R. S. Edleston (Intell.,

Naturalist,

1859, ii., 47); Staley-brushes (J.C.); Ulverston (J.B.H.).

Ches.—Altrincham, a specimen taken by Mr. Keyworth (H.H.C.); Birkenhead, one near Prenton Mount (J.F.B.); Delamere, in 1872, taken by Mr. F. Leather (A.O.W.); Macclesfield Forest, one captured by Hugh Harrison, September 1858 (Intell., 1859, ii., 47); Neston, in 1872 (J.F.B., in Ent., vi., 410).

Vanessa io, L. Peacock.

While in Cheshire this insect seems tolerably common, though nowhere so abundant as in the south of England, there is a unanimous opinion among my correspondents that while formerly abundant, it has become much scarcer throughout Lancashire during recent years.

Vanessa urticae, L. Small Tortoise-shell.

Common all over both counties, though, like all of the genus, not so abundant as formerly.

Mr. Gregson records (Ent., iii., 209) a specimen captured at Hawkshead, in which the two spots on the disc of the forewing are absent, thus resembling the Corsican species (variety?) *Ichnusa*, Bon. This variety seems very scarce in Britain.

Vanessa polychloros, L. Large Tortoise-shell.

Brunswick Road, Liverpool, one specimen (N.C.); Red Scar, near Preston (Newman's British Butterflies); of more frequent occurrence in Cheshire, of which I possess the following records:—

Acton Bridge, taken by James Hirst (J.C.); Alderley, two, one in 1869, one in 1870 (H.H.C.); Chester, in 1859 (J.B.H., in Intell., 1859, vol. ii., 101); Delamere, near the Lodge-gates at Petty-pool (R. Brown); Eastham (E. Birchall in Newman's Butterflies); Prenton Wood (J.F.B.).

Vanessa c-album, L. Comma.

Very local, and not common where it does occur.

Lanc.—Bolton, rare (W.J.); Chat Moss, occasionally (J.C.); Hale and Wootton, occasionally (C.S.G.).

Ches.—Bebington, in 1873 (W.G.); Chester (A.O.W.); Delamere (A.O.W. and J.C.M.); Hooton (C.S.G.); Tranmere, Ness, and Puddington (J.F.B.).

Vanessa cardui, L. Painted Lady.

Occurs occasionally, and at uncertain intervals, over both counties; a few are to be found nearly every year on the coast sandhills. During last summer (1884) the larvæ have occurred in profusion on the sandhills beyond Crosby.

A 'wonderful variety' of this species—now, I believe, in the cabinet of Mr. C. S. Gregson—was captured at Wallasey by Mr. E. L. Ragonot, and recorded by him (Ent. Mo. Mag., v., 129).

MELITÆA, Fabr.

Melitæa aurinia, Rott. = **artemis**, S.V. **Greasy Fritillary**.

Local, and not usually common where it does occur.

Lanc.—Bolton, occasionally (W.J.); between Maghull and Lydiate, plentiful (C.S.G.); one at Rainhill (H.H.H.); Warrington (N.C.).

Ches.—Ashley Meadows, formerly (J.C.M.); Eastham, one specimen taken by S. Archer (J.F.B.); Knutsford, common (J.C.); Malpas, abundant, but local (A.O.W.); Stockport, abundant in 1845 (R. S. Edleston, Zool., 1845, 1220).

In Mosley's Varieties (Part XII., Melitæa, pl. i, fig. 3) is a large and peculiar variety taken at Knutsford, in the collection of Mr. Sidebotham.

Melitæa athalia, Esp. **Pearl-bordered Likeness Fritillary**.

Recorded from Marple by J.B.H. (Intell., 1859, vol. ii., 101).

ARGYNNIS, Fab.

Argynnis selene, W.V. **Small Pearl-bordered Fritillary**.

Scarce. Grange (J.B.H.); Silverdale (J.C.M.); Delamere Forest (J.C. and J.C.M.).

Mr. F. Bond has a specimen taken at Macclesfield, which has the spots almost entirely obliterated (Mosley's Varieties, Part V., Argynnis, pl. iv., fig. 5).

Argynnis euprosyne, L. **Pearl-bordered Fritillary**.

Local, but abundant where it does occur.

Lanc.—Abundant at Grange (J.B.H. and E.S.) and at Silverdale (F.N.P. and J.C.M.).

Ches.—Delamere Forest (J.C. and J.C.M.); Bromborough Woods (C.S.G.).

Argynnis niobe, L.

This species, which by many entomologists is denied a place in the list of British Butterflies, was captured by Mr. C. S. Gregson at the 'Devil's Gallop' on the Lancashire side of Windermere, in August 1871 (recorded Ent., viii., 84, and Y.N., i., 407).

Argynnis adippe, L. **High Brown Fritillary**.

Common on the Lancashire side of Windermere (J.B.H.); Silverdale (J.C.M.) and Grange (S.J.C.).

Argynnis aglaia, L. **Dark Green Fritillary**.

Fairly common, but almost confined to the coast sandhills of both counties.

Lanc.—Crosby (J.W.E.); Formby (F.N.P.); Southport (J.C.M.); and Blackpool (J.C.); Windermere, common (J.B.H.).

Naturalist,

Ches.—Formerly common on the New Brighton and Wallasey sandhills (J.F.B. and C.S.G.).

Mr. Edleston records a specimen of the variety **Charlotta**, Haw., which 'has the silvery spots near the base of the wing much larger, two pairs of them coalescing,' captured at Blackpool in 1843 (Zool., ii., 399); Mr. Gregson (Ent., iii., 209) also records three specimens of this variety from Bootle.

Argynnis paphia, L. **Silver-washed Fritillary**.

Delamere, common (J.C.M.); said to have occurred near Bolton (J.C.).

Fam. SATYRIDÆ.

HIPPARCHIA, Fab.

Hipparchia semele, L. **Grayling**.

Abundant on all the coast sandhills from the Dee to Southport. Bidston Hill, abundant (J.F.B. and J.W.E.); formerly abundant in the Cheadle-Hulme district, but very local at Bramall, and not seen there since 1868 (H.H.C.); Grange (J.B.H.).

EREBIA, Dalm.

Erebia æthiops, Esp. = **medea**, Hübn. = **blandina**, Fab. **Scotch Argus**.

Abundant at Silverdale (S.J.C.); Grange (J.B.H.); recorded from Colne, near Burnley (J.B.H., Intell., 1859, ii., 101).

MELANARGIA, Meig.

Melanargia galathea, L. **Marbled White**.

Recorded from Preston, in his 'British Butterflies' by the Rev. F. O. Morris, but I know not on what authority.

SATYRUS, Latr.

Satyrus megæra, L. **Wall**.

Common, and generally distributed—except in the Manchester district, where (J.C.) it is not nearly so common as formerly, and about Cheadle-Hulme, where it is very scarce (H.H.C.).

Satyrus ægeria, L. **Speckled Wood**.

Generally distributed, but apparently nowhere common.

Lanc.—Bolton (W.J.); Grange (J.B.H. and E.S.); and Silverdale (J.C.M.).

Ches.—Delamere (J.C.M.); occasionally in the wooded parts of Wirral (J.F.B. and C.S.G.).

March 1885.

EPINEPHILE, Hübn.

Epinephile hyperanthus, L. Ringlet.

Local, and not common where it does occur.

Formerly common at Turton, near Bolton (W.J.); Botany Bay Wood and Worsley (J.C.); Grange (J.B.H.); Silverdale and Delamere (J.C.M.).

Epinephile janira, L. Meadow Brown.

Abundant throughout both counties.

Epinephile tithonus, L. Large Heath.

With the exception of the Cheadle-Hulme district, where it seems absent (H.H.C.), and the Chester district, where it appears not common (A.O.W.), this species is tolerably plentiful in both counties, being especially abundant near the coast, as at Lytham (J.B.H.), Fleetwood (S.L.M.), West Kirby and Bidston (J.W.E.).

CÆNONYMPHA, Hübn.

Cænonympha pamphilus, L. Small Heath.

Common and generally distributed, except in the district of Cheadle Hulme, where it seems to be absent (H.H.C.).

Cænonympha typhon, Rott. = davus, Fab. Marsh Ringlet.

Common on all the mosses of Lancashire and Cheshire, as, *e.g.*, Chat, Risley, and Rixton mosses (J.C.); Simmonswood Moss (C.S.G. and F.N.P.); Lindow Moss (H.H.C.); Oak-mere, and other meres in the neighbourhood of Delamere Forest (W.G. and A.O.W.); and Carrington Moss (J.C.M.).

The insect which occurs in all these localities is, I believe, exclusively the darker coloured race, with large distinct eyes, known as the var. *philoxenus*, Esp. = *davus* of Kirby's European Butterflies, and *rothliebii* of Newman's British Butterflies.

Fam. *ERYCINIDÆ*.

NEMEOBIUS, Steph.

Nemeobius lucina, L. Duke of Burgundy Fritillary.

Very local. Abundant at Grange (J.B.H. and E.S.); Silverdale (J.C.M.); once taken between Eastham and Hooton (C.S.G.).

Fam. *LYCÆNIDÆ*.

POLYOMMATUS, Latr.

Polyommatus minima, Fuessly = alsus, W.V. Little Blue.

Very local.

Lanc.—Grange, common (W.G. and E.S.); Silverdale (J.C.M.); between Rainhill and Ditton, several specimens (C.S.G.).

Ches.—Neston (C.S.G.).

Naturalist,

Polyommatus argiolus, L. Azure Blue.

Local, but usually common where it does occur.

Lanc.—Grange, common (W.G. and E.S.); Silverdale (J.C.M.); Hale, taken by Mr. Nixon (C.S.G.).

Ches.—Delamere (N.C.); Eastham and Hooton, taken by Mr. T. Harris (C.S.G.).

Polyommatus corydon, Poda. Chalk-hill Blue.

Recorded from Silverdale (J.B.H.), and from Grange by the Rev. F. O. Morris in his 'British Butterflies.'

Polyommatus icarus, Rott. = alexis, W.V. Common Blue.

Very abundant on the coast sandhills, as at Crosby, Wallasey, &c. Common about Grange and Silverdale (J.B.H. and J.C.M.). Common throughout Wirral, and in Delamere Forest, but scarce near Cheadle-Hulme, from whence Mr. Corbett reports having seen only about five specimens in seventeen years.

I have taken the variety *icarinus*, Scrib., on the sandhills, where it is probably not rare. It differs from the type in having the space between the central spot on the under side of the fore-wing, and the base quite devoid of spots.

Mr. Mosley figures (Varieties, *Lycæna*, pl. iii, f. 5) a fine variety taken by himself at Fleetwood, and Mr. Thorpe records (Ent., iv., 132) a gynandromorphous specimen from Middleton.

Polyommatus astrarche, Bergstr. = medon, Esp. = agestis, Hübn. Brown Argus.

Common at Silverdale (S.L.M. and J.C.M.); Grange (J.B.H.); Chat Moss, local (R. S. Edleston, Zool., i., 112).

Polyommatus ægon, W.V. Silver-studded Blue.

Very local, but usually common where it occurs. Chat Moss (J.B.H. and J.C.); Barton Moss (J.C.); Alderley, very rare (W. W. Keyworth); Bidston Hill, abundant, but local (J.W.E.); Delamere, common (J.C.M. and A.O.W.).

LYCÆNA, Fab.

Lycæna phlæas, L. Small Copper.

Abundant throughout both counties. The white variety—*Schmidtii*, Gerh.—occurs very rarely.

ZEPHYRUS, Dalm. (Thecla).

Zephyrus betulæ, L. Brown Hair-streak.

Grange (J.B.H. and A. Mason, Intell., 1860, i., 187); Silverdale, a specimen in 1868 (J.C.M.).

March 1885.

Zephyrus quercus, L. Purple Hair-streak.

Lanc.—Grange (J.B.H.); near Stoneyhurst (J.B.H., Ent., xii., 204).

Ches.—Delamere Forest, common (J.C., J.C.M., and A.O.W.); Edge Hall, taken by the Rev. C. W. Dod (A.O.W.). Bred from a larva found in Eastham Wood (J.F.B.); taken beyond Eastham (C.S.G.).

THECLA, Fab.

Thecla rubi, L. Green Hair-streak.

Local, but usually common where it occurs. Grange (J.B.H.); Silverdale (J.C.M.); Hale and Lydiate, Sutton and Hargreave Hall (C.S.G.); Lindow Common and Trafford Park, rare (J.C.); Delamere (S.J.C.).

Fam. *HESPERIDÆ*.

HESPERIA, Fab. (*Syrichthus*, Boisd.)

Hesperia malvæ, L. = alveolus, Hübn. Grizzled Skipper.

Only recorded from one locality, viz.:—Silverdale (J.C.M.).

NISONIADES, Hübn. (*Thanaos*, Boisd.)

Nisoniades tages, L. Dingy Skipper.

Abundant about Grange (J.B.H. and E.S.); Silverdale (J.C.M.); Chat Moss (J.C.); common on railway banks in Wirral, as between Spital and Bromborough (J.W.E.).

PAMPHILA, Fabr.

Pamphila sylvanus, Esp. Large Skipper.

Grange (J.B.H.); Silverdale (J.C.M.); Chat Moss (J.C.); Simmonswood Moss (C.S.G. and J.W.E.); Crosby Sandhills (C.S.G.); Knutsford (J.C.); throughout Wirral (J.F.B.).

Pamphila linea, W.V. Small Skipper.

Only recorded from one locality in Lancashire, viz., Silverdale (J.C.M.). Generally distributed over Cheshire, e.g., Alderley, once in 1873 (W. W. Keyworth); Delamere Forest, near Oakmere, common (J.C.); near Eastham, by S. and F. Archer (J.F.B.); local at Sutton, and one specimen at Raby-mere in 1874 (W.G.).

SPHINGES.

SINCE the list of Rhopalocera was published (*Naturalist*, February and March 1885), Mr. Alfred O. Walker has contributed to the Chester Society of Natural Science a list, with localities, of the macro-lepidoptera of his district. From this paper, a copy of which he has kindly sent me, I have extracted the localities to which his initials are appended.

Fam. *SPHINGIDÆ*.

ACHERONTIA, Hübn.

Acherontia atropos, L. Of frequent occurrence in both counties.

I have records of its occurrence in the following localities:—

Lanc.—Blackpool, common in 1868 (J. Thorpe, Ent., v, 143); Bootle (C.S.G.); Bolton, occasionally (W.J.); Formby, where the late Thomas West of Liverpool procured the larvæ in plenty from the labourers in potato fields; Hale (S.J.C., C.S.G.); Leigh, common (Intell., 1859, ii, 27); Elliott Street, Liverpool, in October 1884 (B. Cooke, jun., Y.N., November 1884); Lytham, common in 1865 (W. Gregson, Ent., ii, 313); North Lancashire, generally distributed (J.B.H.); Seaforth, formerly common (W. H. Weightman).

Ches.—Bidston (C.S.G.); Hoylake, common (W.G.); Liscard (N.C.); Delamere, Saughall, Tattenhall, and Upton (A.O.W.); Tranmere (E. D. Fish).

In the collection of Mr. C. S. Gregson is an interesting aberration of this species, in which the dark central band of the hind wing is entirely wanting. The specimen was captured at Blackpool.

SPHINX, L.

Sphinx convolvuli, L. Occurs occasionally over both counties.

Lanc.—Broad Green, near Liverpool (S.J.C.); Bury (R. Kay, Ent., ix, 48, and September 1862, by T. Pollitt, Zool., xx, 8204); Copley, near Staleybridge in October 1871 (M. Kershaw, Ent., v, 443); Droylsden in August 1871 (J. S. White, Ent., v, 411); Fleetwood (S.L.M.); Hale (C.S.G.); Manchester (F. Kenderdine, Intell., 1859, ii, 3); Middleton in 1881 (J. Thorpe, Ent., xiv,

254); Staleybridge, Stretford, and Barton Moss (J.C.); Southport in 1857 (R. Tyrer, Intell., 1857, ii, 19).

Ches.—Between Birkenhead and Hoylake (J. Povall, Ent., viii, 277); Eastham Wood (W.J.); Eaton Park in 1873 (A.O.W.); Liscard (N.C., C.S.G.); New Brighton (C.S.G.); Oxtan (J.F.B., C.S.G.); Claremount Schools, Wallasey (J.W.E.).

Sphinx ligustri. L. One specimen recorded from Whittle, near Chorley, by Mr. J. B. Hodgkinson.

DEILEPHILA, Ochs.

Deilephila euphorbiæ. L. The only records I can find of the occurrence of this species, always scarce in Britain, are as follows:—

A specimen, now in the cabinet of Mr. C. S. Gregson, captured in an outhouse at Bidston, near Birkenhead, by W. Morgan; two larvæ found on *Euphorbia paralias* between Little Brighton and Hightown by C. S. G.; a specimen captured near Bolton in 1865 (J.B.H., J.C.).

Deilephila galii, Rott. Another species of very occasional appearance in our district, although the year 1870 seems to have been marked by the appearance of this species in some places, Wallasey, for instance, in abundance.

Lanc.—Bolton, Middleton, and Staleybridge, very rare (J.C.); Bootle (C.S.G.); Lytham, in 1859 (W. Gregson, Intell., 1860, i, 123); Rivington in August 1879 (T. Calderbank, Ent., v, 181); Staleybridge, several specimens in August 1870 (D. Joliffe, Ent., v, 168); Warrington, a specimen captured by Miss Greening, August 1870 (N. Greening, Ent., v, 168); Whitefield, near Bury, in 1842 (R. S. Edleston, Zool., i, 31).

Ches.—Only recorded from Wallasey and the immediate proximity to the Cheshire coast sandhills, where the larvæ were found abundantly in the autumn of 1870 (S.J.C., N.C., J.C.M., W. Greasley, Ent., v, 183). The larvæ is also recorded from Wallasey in August 1859 (T. Calliers, Intell., 1859, ii, 27).

Deilephila livornica, Esp. (*Deilephila lineata*, Fab.). A few specimens are recorded, principally from Lancashire.

Lanc.—Bury, June 1877 (R. Kay, Ent., x, 191); Chorlton and Withington in June 1844 (R. S. Edleston, Zool., i, 736); Hale in 1847 (C. S. Gregson, Zool., vi, 2032); Middleton in August 1868 (J. Thorpe, Ent., v, 132); Preston, a specimen captured by James Cooper in 1846, in coll. J.B.H. (Zool., v, 1653).

Ches.—Knutsford (J.C.).

Naturalist,

CHÆROCAMPA, Dup.

Chærocampa celerio, L. This species has frequently been recorded from localities in Lancashire, but only once from Cheshire.

Lanc.—Bolton, three specimens (W.J.); ditto, October 1873 (J.B.H., Ent., vi, 564); Lytham in October 1870 (W. Gregson, Ent., v, 204); near Manchester, at Preston, and at Grange (J.B.H.); two larvæ near Newton Heath about 1846 (R. S. Edleston, Zool., iv, 1346); Oldham, September 1880 (J. Taylor, Ent., xiii, 279); Southport in July 1871 (E. Bell, Ent., v, 411) and in September 1873 (H. Burton, Ent., vi, 564); Staleybridge (J.C.); Crosby, September 1885 (G. A. Harker).

Ches.—Alderley Edge in May 1878 (W. W. Keyworth, Ent., xi, 160).

Chærocampa elpenor, L. Generally distributed throughout Cheshire and South-West Lancashire, but seems to become less frequent as we go north.

Lanc.—Recorded from Manchester, where it occurred in 1850 at rhododendron flowers (E. C. Buxton, Zool., viii, 2882); Chorley in 1853 (Ib. Zool., xi, 4037); 'Kenyon, Rixton, Knutsford, Lymm, High Leigh, and Withington' (J.C.); Wirral (J.F.B.); Delamere and East Cheshire (A.O.W.); larvæ on Bidston Marsh (W.G.); Bromborough and West Kirby (F. N. Pierce); Wallasey (N.C.).

Chærocampa porcellus, L. More frequent in its occurrence than the preceding, especially along the coast line of both counties.

Lanc.—Crosby Sandhills (G. Harker, F.N.P.); Lytham, where it used to be common (J.B.H.); near Manchester, at rhododendron flowers, in 1850 (E. C. Buxton, Zool., viii, 2882); Patricroft and Dunham Park (J.C.).

Ches.—Delamere Forest and East Cheshire (A.O.W.); Wallasey Sandhills, where it is usually collected by the attraction of a bunch of the flowers of the yellow iris (N.C., W.G., J.C.M.); West Kirby (F.N.P.).

SMERINTHUS, Latr.

Smerinthus populi, L. Common throughout the whole of both counties.

Smerinthus ocellatus, L. Common throughout the whole of both counties.

MACROGLOSSA, Ochs.

Macroglossa stellatarum, L. This species, so frequently mistaken for the humming-bird by those who have seen the latter *in statu*

Feb. 1886.

natura, is fairly common throughout Cheshire and South Lancashire, becoming scarcer towards the north.

Lanc.—Blackpool (S.L.M.); Bolton (W.J.); Crosby Sandhills (Geo. Harker and F.N.P.); Humphrey Head near Grange (E.S.); Lytham (J.B.H.); Prestwich, abundant in 1884 (J.C.M.).

Ches.—Common throughout the Chester Society's district (A.O.W.); Tranmere, formerly not uncommon (W.G.); Wallasey Sandhills, occasionally abundant but flies only on the tops of the highest hills (N.C., F.N.P., J.W.E.); West Kirby, where Mr. R. Brown saw the species in abundance in 1884.

HEMARIS, Dalm.

Hemaris fuciformis, L. Recorded as scarce at Bidston by J. F. Brockholes. Probably the following species is intended.

Hemaris bombylififormis, Ochs. Two specimens recorded as captured at Bidston by C. S. Gregson. 'The larvæ used to occur on Ribbleton Moor, near Preston, now cultivated' (J.B.H.).

Fam. SESIIDÆ.

TROCHILIUM, Scop.

Trochilium crabroniformis, Lew. (*bembeciformis*, Hüb.). Generally distributed wherever poplars grow through both counties.

In the collection of C. S. Gregson is a remarkable variety, captured near his residence, which has the yellow markings replaced by fulvous orange.

SESIA, Fab.

Sesia spheciformis, W.V. Chat Moss (R. S. Edleston, Zool., 1845, p. 1220, and J.C.) and Botany Bay Wood in the same neighbourhood (C.S.G.) are the only recorded localities for this species in Lancashire or Cheshire.

Sesia tipuliformis, Clerck. Generally distributed in South-West Lancashire and Cheshire, but absent or scarce in North Lancashire.

Lanc.—Bolton (W.J.); Crosby (G. A. Harker); Hale and West Derby (C.S.G.); Huyton (S.J.C.); Southport and Warrington (N.C.).

Ches.—Hough Green near Chester, and the larvæ common at the Lead Works, Chester (A.O.W.); Bowdon and Withington (J.C.).

Sesia myopæformis, Bork. Taken near Grange Station in 1880 by Mr. Murray of Carnforth (J.B.H. in Ent. Mo. Mag., xvii, 70).

Naturalist,

Sesia culiciformis, L. Chat Moss, rare (J.C.); a single specimen captured at Hartford (S.J.C.).

Fam. ZYGÆNIDÆ.

INO, Leach.

Ino statices, L. Appears very local in both counties.

Lanc.—Crosby and Hale Marsh (C.S.G.); Chat Moss (J.C., W.J.); Railway Bank near Chorley (J.B.H.); near Warrington (N.C.).

Ches.—Delamere Forest (A.O.W.); Knutsford (T. Harrison, Intell., 1857, i, 123).

Ino geryon, Hub. The only localities for this species of which I have any record are: Grange, not rare (J.B.H.), and Silverdale (J.C.M.).

ZYGÆNA, Fab.

Zygæna loniceræ, Esp. Recorded from Knutsford by Thomas Harrison (Intell., 1857, i, 123).

Zygæna trifolii, Esp. Very local.

Lanc.—Hale Marsh (C.S.G.).

Ches.—Bidston Marsh (N.C.); Malpas (A.O.W.); Oak-mere and Knutsford (J.C.).

Zygæna meliloti, Esp. 'Formerly common near Manchester, and on the railway bank near Scorton' (J.B.H.).

Zygæna filipendulæ, L. Local, but very abundant where it does occur.

Lanc.—All along the Lancashire coast from Blackpool to Crosby; in hayfields all over North Lancashire (J.B.H.); near Bolton (W.J.); Chat Moss (J.C.).

Ches.—Throughout the Chester Society's district, but local (A.O.W.); Oak-mere and Knutsford (J.C.); Delamere (N.C.).

The aberration with the spots and hind-wings yellow instead of crimson occurs occasionally.

BOMBYCES.

Fam. *LITHOSIIDÆ*.

NUDARIA, Steph.

Nudaria mundana, L. Local, but abundant where it does occur.**Lanc.**—Preston district (J.B.H.), and Silverdale (J.C.M.).**Chesh.**—Chester Society's district (A.O.W.); Eastham Wood (W.J.); Prenton, near Birkenhead (C.S.G.); Wirral (J.F.B.).

SETINA, Schrank.

Setina mesomella, L. Apparently confined to the moss-lands of both counties. Mr. Hodgkinson informs me that the male flies about 7 p.m. in search of the female.

Chat Moss and all the other Lancashire mosses (J.B.H.); Chat Moss and Risley Moss, not common (J.C.); Simmonswood Moss (C.S.G.).

East Cheshire (A.O.W.).

LITHOSIA, Fab.

Lithosia griseola, Hüb. Wallasey and Bidston, scarce (J.F.B.).The variety *flava*, Haw. = *stramineola*, Doub., is recorded from Dunham-on-the-Hill by Mr. A. O. Walker.*Lithosia lurideola*, Zinck. = *complanula*, Boisd. Generally distributed throughout Cheshire and South Lancashire, but apparently scarce in the north. Localities recorded are:—**Lanc.**—Grange (J.B.H.); Prestwich district, common (J.C.M.); West Derby (C.S.G.).**Chesh.**—Bromborough (W.G.); Bidston Hill (W.J.); Chester (A.O.W.); Delamere Forest (A.O.W., J.C.); West Kirby (F.N.P.); throughout Wirral, scarce (J.F.B.).*Lithosia sericea*, Grgs. = *molybdeola*, Guén. Found only on the moss-lands, as Chat Moss (J.B.H., J.C., W.J.); Rixton Moss (N.C.); Simmonswood Moss (C.S.G.).

GNOPHRIA, Steph.

Gnophria rubricollis, L. Recorded only from Delamere Forest (N.C., J.C.) and East Cheshire (A.O.W.).

Naturalist,

Fam. *ARCTIIDÆ*.

DEIOPEIA, Curt.

Deiopeia pulchella, L. Only two specimens of this very scarce species have been recorded from the district. One of these, a female, was taken in the railway coal-yard at Middleton Station, September 8th, 1871 (J. Thorpe, Ent. Mo. Mag., viii, 111, and Ent., v, 412), and Mr. Hodgkinson records a specimen in his collection taken at Marple.

EUCHELIA, Boisd.

Euchelia jacobææ, L. Occurs in profusion all along the Lancashire coast sandhills, where the plants of ragwort are often eaten to the root by the swarms of larvæ. It occurs occasionally on the Cheshire sandhills, as at Wallasey (W.G., J.C.M.), and more rarely still, inland, as Delamere (J.C.) and Chester (A.O.W.).

In the collection of the late Alfred Owen, of Maghull, is a specimen of the very rare aberration in which the crimson colour is replaced by yellow. The specimen is probably a Lancashire one.

NEMEOPHILA, Steph.

Nemeophila russula, L. Almost confined to moss and moor-lands.

Chat Moss (J.B.H., W.J.); Rixton Moss (N.C.); Carrington Moss (J.C., J.C.M.); Barton Moss (J.C.); Delamere and East Cheshire (A.O.W.); Hale (C.S.G.); Silverdale (J.C.M.).

Nemeophila plantaginis L. Occurs on the Lancashire heaths and mosses. I have no record of its occurrence in Cheshire.

Blackstone Edge, Staleybridge, Rudd Heath (J.C.); Chat Moss (W.J.); Longridge, near Preston (J.B.H.); Silverdale, common (J.C.M., J.B.H.).

ARCTIA, Schrank.

Arctia caja, L. Abundant everywhere.

Many interesting aberrations have been obtained in the district, and are in local collections. Among these may be mentioned a specimen in the cabinet of Mr. S. J. Capper, which was bred by Mr. Lello, in which the fore-wings are nearly unicolorous cream; and a specimen in the collection of Mr. W. Johnson, in which the fore-wings are suffused with brown, and the scarlet of the hind-wings becomes replaced by tawny yellow. Both these are figured in Mosley's Varieties, Arctia, pl. ii.

Mr. Gregson's collection is singularly rich in varieties of this species.

April 1886.

Arctia villica, L. Recorded only from Cheshire, viz., Bowdon (J.C.M.) and Delamere (A.O.W.).

SPILOSOMA, Steph.

Spilosoma lubricipeda, Fab. Abundant over the whole of both counties.

Spilosoma menthastri, W.V. Abundant throughout both counties. In collection C.S.G. is a beautiful aberration, taken in the neighbourhood of Liverpool, in which the spots have become so elongated as to form distinct rays.

Spilosoma mendica, L. Local.

Preston, Chorley, and Bolton (J.B.H.); Chorley (W.J.); Warrington (N.C.); Blackpool, Bucklow Hill, and Withington (J.C.); Tranmere (J.F.B.); about old gardens in Wirral (C.S.G.); East Cheshire (A.O.W.); Warrington (N.C.).

In Mr. Gregson's collection is a peculiar variety of the male, captured at Bolton, with the ground colour of all the wings smoky, but with dark costæ and cilia.

PHRAGMATOBIA, Steph.

Phragmatobia fuliginosa, L. Common throughout both counties on heaths and mosses, and especially abundant on the coast sandhills.

Fam. LIPARIDÆ.

ORGYIA, Ochs.

Orgyia antiqua, L. Abundant everywhere; often seen flying in the streets of the larger towns.

DASYCHIRA, Steph.

Dasychira fascelina, L. Common all along the Lancashire coast, from Lytham and Blackpool to Crosby. On the Cheshire sandhills it also occurs, but not so frequently.

In Mr. Johnson's collection is a male specimen which has a large black patch on the costa of each fore-wing.

Dasychira pudibunda, L. Generally distributed, but nowhere common.

Lanc.—Chat Moss, rare (J.C.); Lytham (W.J.); Preston, rare (J.B.H.).

Chesh.—Chester district, but not common (A.O.W.); Delamere (N.C.); Eastham Wood (R. Wilding); Rock Ferry (W.G.).

Naturalist,

LEUCOMA, Steph.

Leucoma salicis, L. Very abundant all along the Lancashire coast; less frequently on the Cheshire coast, at Wallasey and Hoylake.

OCNERIA, Herr.-Schæf.

Ocnieria dispar, L. A specimen of this species (a male, in the collection of Mr. Hodgkinson), was taken near Warrington forty years ago. Recorded from Staley Brushes by J.C.M.

PORTHESIA, Steph.

Porthesia auriflua, W.V. Common all over both counties; occasionally abundant.

In Mr. Gregson's collection is a remarkable aberration of this usually constant species, a male, taken near Manchester, which has the black spot at the apex of the fore-wing joined to the one at the anal angle by a curved black line.

LÆLIA, Steph.

Lælia cænosa, Hüb. 'My friend, T. Townley, first discovered this species at Altcar, and afterwards on Bidston Marsh' (C.S.G.).

Fam. COSSIDÆ.

COSSUS, Fab.

Cossus ligniperda, Fab. Generally distributed throughout the wooded portions of the counties.

ZEUZERA, Latr.

Zeuzera æsculi, L. The only notice of its occurrence is in a letter from the Rev. H. H. Higgins, who mentions having seen one many years ago at Rainhill.

Fam. HEPIALIDÆ.

HEPIALUS, Fab.

Hepialus humuli, L. Abundant throughout the district.

Mr. C. S. Gregson informs me that on the moss-lands of North Lancashire, where the species is extremely abundant, and where, at the time of its emergence it forms a favourite food of the Black-headed Gull, a variety of the female is of very frequent occurrence in which the usual red markings are entirely absent, all the wings being of a unicolorous pale buff colour.

Hepialus velleda, Esp. Generally distributed.

Lanc.—Bolton (W.J.); Chat Moss (J.C.); moors in North Lancashire, common (J.B.H.); Simmonswood Moss (C.S.G.).

Chesh.—Delamere Forest (N.C., F.N.P.); Eastham Wood (J.F.B.).

The variety *gallicus*, Led. (usually known as *carneus*, Esp., but which is exclusively a scarce alpine species) occurs in Delamere Forest (S.J.C.).

Hepialus sylvinus, L. Generally distributed through both counties.

Hepialus lupulinus, L. Common throughout the whole of the district, but not so abundant now as formerly, according to Mr. Hodgkinson.

Hepialus hectus, L. More local than either of the two preceding species, though common where it does occur. Localities recorded are as follows:—

Lanc.—Aigburth, near Liverpool (J.W.E.); Bolton (W.J.); Croxteth and Hale (C.S.G.); Huyton (S.J.C.); abundant near Preston (J.B.H., E.S.); Prestwich (J.C.M.).

Chesh.—Alderley and Bowdon (J.C.); Chester district, common (A.O.W.); Bromborough (C.S.G.); Delamere Forest (F.N.P.); Wirral (J.F.B.).

Fam. *PSYCHIDÆ*.

FUMEA, Haw.

Fumea nitidella, Hüb. Recorded from the Preston neighbourhood by Mr. Hodgkinson; and by J. F. Brockholes as having been taken in Patrick Wood, near Lower Bebington, by Mr. F. Archer.

Fumea roboreolella, Bruand. The only records I have of its occurrence in the district are the following Lancashire localities:—Pilling Moss (J.B.H., Ent. Mo. Mag., ii, 186); Stayley Brushes and Chat Moss (J.C.).

Fam. *DREPANULIDÆ*.

CILIX, Leach.

Cilix spinula, W.V. (*glaucata* Scop.). Common throughout both counties, occasionally abundant.

PLATYPTERYX, Lasp.

Platypteryx lacertinaria, L. Common among birch on all the mosses of Lancashire, and in similar localities—Delamere, for instance, in Cheshire.

Platypteryx falcataria, L. Commoner than the preceding species, and in the same localities.

Naturalist,

Fam. *SATURNIDÆ*.

SATURNIA, Schrank.

Saturnia carpini, W.V. Common on mosses and heaths both in Lancashire and Cheshire. I have known as many as 70 males taken in one day with a single female by the process of 'calling.'

In Mr. Gregson's collection is a splendid aberration of this species, taken at Bolton; it is a male, in which the whole of the markings are so suffused with the dark ground colour that the insect appears nearly black.

Fam. *LASIOCAMPIDÆ*.

LASIOCAMPA, Schrank.

Lasiocampa potatoria, L. Abundant throughout the two counties.

In Mr. Gregson's rich collection is a peculiar variety of the female, which has the wings coloured like the male, and the thorax with a dense black tuft, which gives the individual a strange appearance. It was captured in the vicinity of Liverpool.

Lasiocampa trifolii, W.V. Occurs on all the coast sandhills from Blackpool and Lytham to Wallasey, but is not nearly so plentiful as formerly. Within the last few years the species has been nearly exterminated at Crosby owing to the cupidity of collectors for exchange.

Lasiocampa quercus, L. Abundant on the mosses, heaths, and coast sandhills of both counties. I believe all our specimens belong to the race *callunæ*, but Mr. Joseph Chappell, after referring to *callunæ* as common on all the mosses, records *quercus* as not uncommon at Bowdon (Cheshire) and Moss-side, near Manchester.

Lasiocampa rubi, L. Abundant on heaths, mosses, sandhills, and waste lands.

CLISIOCAMPA, Steph.

Clisiocampa cratægi, L. Scarce. The only records of its occurrence that I possess are:—

Silverdale, rare (J.C.M.); 'Reared from larvæ found at Saughton by Miss H. Smith, Hampton Lodge, Chester' (A.O.W.). Stainton refers (Manual, p. 155) to its occurrence in the Preston district.

Clisiocampa populi, L. Generally distributed, but nowhere common.

Lanc.—Bolton (W.J.); sparingly around Liverpool (F.N.P.); throughout the Manchester district, but not common (J.C.); Preston (J.B.H.); Warrington (N.C.); West Derby (C.S.G.).

Chesh.—Bidston and Birkenhead (J.F.B.); Bidston Light-house (C.S.G.); East Cheshire (A.O.W.).

April 1886.

Clisiocampa neustria, L. Local, but tolerably common where it does occur.

Lanc.—Blackpool and Lytham (J.C.).

Chesh.—Hoylake (W.J.); West Kirby (C.S.G.); Upton Valley (J.F.B., C.S.G.).

ERIOGASTER, Germ.

Eriogaster lanestris, L. Of more frequent occurrence than the preceding.

Lanc.—Arnsdale near Silverdale (E.S.); between Grange and Carnforth (S.L.M.); Blackpool and Morecambe (J.C.); common all over the Fylde district from Preston to Fleetwood (J.B.H.).

Chesh.—Chester and West Kirby (A.O.W.); Tranmere, Prenton, and Parkgate (W.G.); Upton Valley (J.F.B.).

Fam. NOTODONTIDÆ.

PYGÆRA, Ochs.

Pygæra pigra, Hufn. (*reclusa*, W.V.). The only record I have of the occurrence of this species in either county is found in the *addenda* to Mr. Gregson's list of Liverpool lepidoptera: 'A single specimen in an old wood at Kirkby' (Lancashire).

PHALERA, Hüb.

Phalera bucephala, L. Common throughout the whole of both counties.

CERURA, Schrank.

Cerura vinula, L. Common, and generally distributed throughout the district, being rather more abundant near the coast.

Cerura bifida, Hüb. The commonest of the 'Kittens' in our district. I have records of its occurrence in the following localities:—

Lanc.—Generally distributed (J.C.); Crosby, scarce (G. A. Harker and F.N.P.); Preston district (J.B.H.).

Chesh.—Wirral, Chester, and East Cheshire (A.O.W.); Prenton and Wallasey (C.S.G.).

Cerura furcula, L. All round the Preston district (J.B.H.); Chat Moss and Delamere Forest, rare (J.C.); East Cheshire (A.O.W.); Wirral, scarce (J.F.B.).

Cerura bicuspis, Borkh. This scarce species was first taken in England by James Cooper, on an alder near Preston, in 1847 (Zool., v, 1863). Since that time its occurrence all round Preston has been occasional, in some years as many as eight or nine specimens being taken in a week by Mr. Hodgkinson. Also recorded from near Stoneyhurst (J.B.H., Ent., xiii, 204).

Naturalist

PTEROSTOMA, Germ.

Pterostoma palpina, L. A single specimen at Puddington in 1864 (J.F.B.).

LOPHOPTERYX, Steph.

Lophopteryx camelina, L. Fairly common throughout both counties, especially on the 'mosses,' where the larva feeds upon the stunted birch trees.

LEIOCAMPA, Steph.

Leiocampa dictæa, L. Generally distributed, but nowhere common. Localities noted are:—

Preston district (J.B.H.); near Ribchester (J.B.H., Ent., xiii, 105); Liverpool district (C.S.G.); Crosby, Wallasey, and West Kirby (F.N.P.); Wirral and East Cheshire (A.O.W.); Chat Moss, Bowdon, Pendleton, Withington, Barton, Stretford, Knutsford, &c. (J.C.).

Leiocampa dictæoides, Esp. Of frequent occurrence on the moss-lands, but only occasional elsewhere.

Lanc.—Chat Moss, Carrington Moss, Risley Moss (J.C.); Crosby (F.N.P.); Simmonswood Moss (J.W.E.); near Longridge (J.B.H.).

Chesh.—Bidston Lighthouse (C.S.G., Zool., 1850, 2898); Bidston, scarce (J.F.B.); Delamere Forest (C.S.G., Zool., 1850, 2898); East Cheshire (A.O.W.); Wallasey and West Kirby (F.N.P.).

DRYMONIA, Hüb.

Drymonia chaonia, W.V. So far as I know, this species has only occurred in Cheshire, viz.:—

Dunham Park, rare, and Timperley, a single specimen (J.C.); a specimen captured by the late Benjamin Cooke in Eastham Wood (J.F.B., C.S.G.); two at Hooton, by T. Harris (C.S.G.).

Drymonia dodonæa, W.V. Recorded from East Cheshire by Mr. Alfred O. Walker, on the authority of the late Noah Greening.

PERIDEA, Steph.

Peridea trepida, Fab. Recorded only from Delamere Forest (S.J.C., J.C.M., E. C. Buxton in Zool., ix, 3181).

NOTODONTA, Ochs.

Notodonta dromedarius, L. Common on all the mosses, especially in the larval condition. Preston district, not rare (J.B.H.); Bidston and Rock Ferry, not common (J.F.B.); Bidston (J.W.E.). 'On the mosses this species is deep rich brown, the variety

April 1886.

subfascata of authors, not deep red as in the typical form' (C.S.G., Ent, iv, 491).

Notodonta ziczac, L. Generally distributed.

Lanc.—Crosby, common (G. A. Harker and F.N.P.); Chat Moss, Barton Moss, and Kenyon, rare (J.C.); Preston district, not rare (J.B.H.); Simmonswood Moss (F.N.P., J.W.E.).

Chesh.—Wirral and Delamere (A.O.W.); Wallasey sandhills (J.W.E.).

Fam. *CYMATOPHORIDÆ*.

GONOPHORA, Bruand.

Gonophora derasa, L. Generally distributed.

Lanc.—Huyton and Hale (S.J.C.); Hale and the Dingle, near Liverpool (C.S.G.); Preston, common (J.B.H., E.S.).

Chesh.—Bowdon, Delamere, &c. (J.C.); Bidston, common (C.S.G.); Chester Society's district, not uncommon (A.O.W.); Lymm (J.C.M.); West Kirby (F.N.P.); Wirral (J.F.B.).

THYATIRA, Ochs.

Thyatira batis, L. Generally distributed and fairly common throughout the whole of both counties.

CYMATOPHORA, Tr.

Cymatophora or, W.V. Occurs occasionally about Preston (J.B.H.); near Ribchester (J.B.H., Ent, xiii, 105).

Cymatophora duplaris, L. Between Roby and Huyton Quarry (C.S.G.); not rare among birch in the Preston district (J.B.H.); Chat Moss and Worsley, not common (J.C.); Prenton Wood, scarce (J.F.B.).

ASPHALIA, Hüb.

Asphalia diluta, W.V. Very local. Oak Woods at Hale, abundant (C.S.G.); Mere Clough, Bury, uncommon (J.C.); Eastham, occasionally (C.S.G.).

Asphalia flavicornis, L. Common on all the mosses, and occasionally found elsewhere.

Lanc.—Chat, Risley, and Carrington Mosses (J.C.); all round the Liverpool district (C.S.G.); Longridge (J.B.H.); Simmonswood Moss, common (F.N.P., J.W.E.).

Chesh.—Bidston (J.F.B.); East Cheshire (A.O.W.); Hartford (F.N.P., G. A. Harker); Bowdon (J.C., J.C.M.); Wallasey and Eastham Wood (J.C.M.).

Asphalia ridens, Fab. 'One specimen taken in the Boor's Wood, Hale, by Frederick Hitchmough' (C.S.G.); on the Lancashire side of Windermere (J.B.H.); rare at Staley Brushes (J.C.).

Naturalist,

NOCTUÆ.

Fam. *BOMBYCOIDÆ*.

DILOBA, Boisd.

Diloba cæruleocephala, L. Common, and generally distributed throughout both counties.

DEMAS, Steph.

Demas coryli, L. Not common, the localities recorded being Dolphinholme, near Lancaster (J.B.H.); Grange, local (E.S.); Croxteth Park, near Liverpool (C.S.G.).

Fam. *ACRONYCTIDÆ*.

CRANIOPHORA, Snell.

Craniophora ligustri, L. Very scarce.

Lanc.—Speke, Hale, and Rainhill, at sugar (C.S.G.).

Ches.—Taken at Old Marsh Lane, Ince, by Mr. Newstead (A.O.W.).

ACRONYCTA, Ochs.

Acronycta leporina, L. Generally distributed.

Lanc.—Bolton (W.J.); Chat Moss (J.C., W.J.); Hale and Huyton (S.J.C.); Ormskirk (W.G.); Preston (J.B.H.); Rixton and Risley Mosses (J.C.); Simmonswood Moss (F.N.P., W.J., J.W.E.); Birchwood, near Woolton (C.S.G.).

Ches.—Bidston (J.F.B., C.S.G.); Carrington Moss (J.C.); Delamere Forest (F.N.P.); Dunham Park (J.C.).

Acronycta alni, L. Of occasional occurrence, principally in the larval state, recorded localities being:—

Lanc.—Grange (J.B.H.); two larvæ near his own house at Huyton, in August 1871 (S.J.C., Ent, v, 417); near Manchester in 1868 (J. Leigh, Ent. Mo. Mag., ii, 105); an imago at sugar, in June 1850, at Speke Hall (C.S.G.).

Ches.—Delamere Forest, taken by Mr. Leather in 1877 (A.O.W.); larvæ at Deysbrook, in August 1860 (C.S.G.); Dunham Park, in 1842 (J.B.H.), and in July 1872 by J. Chappell

(Ent. Mo. Mag., ix, 195), and again in 1879 (Ib. xvi, 185); Hale Moss, near Altrincham, in August 1863 (E. M. Geldart, Zool., p. 8,733); Marple (J.C.).

Acronycta tridens (W.V.). Recorded from Wallasey and Ness, by J. F. Brockholes, and from Chester and East Cheshire (*i.e.*, the neighbourhood of Warrington), by Alfred O. Walker.

Acronycta psi, L. Common, and generally distributed.

Acronycta menyanthidis, View. Common in the moss and moorland districts.

Lanc.—All the high moors in N.E. Lancashire (J.B.H.); Bolton (W.J.); Chat Moss (W.J., J.C.); Risley Moss (J.C.); Longridge, Withnell, and Staleybridge (J.C.M.); Pilling Moss (J.B.H.).

Ches.—Carrington Moss and Lindow Common (J.C.); Delamere Forest (F.N.P.).

The specific name of this species is so commonly regarded as a misnomer, that it is worth recording that on a single occasion Mr. Hodgkinson found the larva feeding on the bog-bean, (*Menyanthes trifoliata*) on Pilling Moss.

Acronycta rumicis, L. Common and generally distributed, though apparently not now so plentiful as in former years.

Acronycta megacephala, W.V. Common and generally distributed throughout Cheshire and South Lancashire, but becoming scarcer in the northern parts of the latter county.

Acronycta aceris, L. Recorded from Ashton-on-Mersey, where it is not common, by Mr. Chappell, and from Delamere Forest by Mr. A. O. Walker.

BRYOPHILA, Tr.

Bryophila perla, W.V. Common on lichen-covered walls throughout both counties.

Bryophila algæ, Fab. In the collection of the late Joseph Sidebottom are two specimens of this species captured at Disley, Cheshire, and obtained by him from Mr. R. S. Edleston's collection.

Fam. ORTHOSIDÆ.

NONAGRIA, Hübn.

Nonagria arundinis, Fab. (= *typhæ*, Esp.). Tolerably common wherever the reed-mace (*Typha latifolia*) grows.

CÆNOBIA, Steph.

Cænobia rufa, Haw. (= *despecta*, Tr.). Ledsham and Little Neston, recorded by Mr. A. O. Walker on the authority of Mr. Brockholes.

Naturalist,

TAPINOSTOLA, Led.

Tapinostola fulva, Hübn. Common in swampy places throughout both counties.

CALAMIA, Led.

Calamia lutosa, Hübn. Somewhat local, though abundant where it does occur.

Lanc.—Crosby (G. A. Harker); Lytham (J.B.H.); Manchester district, common (J.C.).

Ches.—Bidston Marsh, plentiful (C.S.G.); Wallasey (S.J.C., F.N.P.); throughout Wirral (J.F.B.).

LEUCANIA, Ochs.

Leucania pallens, L. Abundant and generally distributed.

Leucania impura, Hübn. Abundant and generally distributed.

Leucania straminea, Fr. Taken by Mr. C. S. Gregson, and by Mr. T. Townley, from flowers growing in ditches between Leasowe lighthouse and Meols.

Leucania obsoleta, Hübn. Taken by Mr. Gregson and Mr. Townley—abundantly at one period, on Bidston Marsh.

Leucania comma, L. Common towards the coast-line of both counties, becoming scarcer inland.

Leucania conigera, W.V. Local, and apparently not common where it does occur. I have once met with it on ragwort flowers at Crosby; Mr. Johnson records it from Crosby; Preston, occasionally (J.B.H.). These are all the recorded localities in Lancashire.

Ches.—New Brighton and Dacre Park, near Birkenhead (C.S.G.) and Rock Ferry (J.F.B.).

Leucania littoralis, Curt. Confined to the coast sandhills from Lytham to Wallasey, where the larvæ are sometimes abundant, though the perfect insect is not often met with.

Leucania lithargyrea, Esp. Common, and generally distributed.

Leucania turca, L. Rare at sugar in Dunham Park (J.C.). (Confirmed by J.B.H.)

STILBIA, Steph.

Stilbia anomala, Haw. Local, the only places of its occurrence of which I have record being:—

Dutton, near Ribchester (J.B.H., Ent., xiii, 105); Silverdale and Longridge (J.B.H. *in litt.*); Staleybrushes, one specimen taken by Thomas Hague (J.C.).

Sept. 1886.

CARADRINA, Tr.

Caradrina exigua, Hübn. Mr. George A. Harker captured a specimen of this rare species at light at Crosby, on September 16th, 1884. Mr. Hodgkinson mentions having once seen a specimen at Preston.

Caradrina morpheus, Hufn. Tolerably common, and generally distributed.

Lanc.—Crosby (G. A. Harker); Preston (J.B.H.); Prestwich (J.C.M.); Withington and Pendleton, at flowers of *Epilobium*, not uncommon (J.C.).

Ches.—Denhall and Chester (A.O.W.); Wallasey (J.C.M., J.W.E.).

Caradrina cubicularis, W.V. Abundant everywhere.

Caradrina alsines, Brahm. Not common. Preston district, not common (J.B.H.). Wallasey and Bromborough, scarce (A.O.W.). Mr. Gregson refers to its occurrence in this district, together with *C. blanda*, with which it had been confused.

Caradrina blanda, Tr. (= *taraxaci*, Hübn.). Not common. Preston (J.B.H.); Pendleton and Withington, at sugar, uncommon (J.C.); Wallasey (C.S.G., J.C.M., W.J.); Wirral (J.F.B.).

LAMPETIA, Boie.

Lampetia (Miana) arcuosa, Haw. Common, and generally distributed.

Lanc.—Altcar and Halewood, near Liverpool (C.S.G.); Bolton (W.J.); Pendleton, common, but local (J.C.); Preston district, abundant at light (J.B.H.).

Ches.—Bowdon (J.C.); Bidston Marsh (C.S.G., F.N.P., J.F.B.); Puddington (J.F.B.).

GRAMMESIA, Steph.

Grammesia trilinea, W.V. Somewhat local.

Lanc.—Crosby (G. A. Harker); Huyton (S.J.C.); Preston, not rare (J.B.H.); Prestwich and Silverdale (J.C.M.).

Ches.—Chester district (A.O.W.); Wallasey, common at sugar (F.N.P., W.J., J.W.E.).

The variety *bilinea*, Tr., occurs occasionally along with the type form.

CLEOCERIS, Boisd.

Cleoceris (Epunda) viminalis, Fabr. Recorded only from Toppings Turton, near Bolton, where it was captured at heath flowers (J. W. Baldwin, Young Naturalist, I, 387), and by Mr. C. S. Gregson, from Hale and Knowsley.

Naturalist,

ANCHOCELIS, Guén.

Anchocelis lunosa, Haw. Recorded from Bidston lighthouse by C. S. Gregson; from Wallasey by Mr. Johnson; and from the district of Wirral by Mr. Brockholes.

RUSINA, Boisd.

Rusina tenebrosa, Hübn. Generally distributed, but apparently not common.

Lanc.—Carnforth and Longridge, not common (J.B.H.); Crosby (G. A. Harker); Manchester district (J.C.); Birch-wood, Woolton (C.S.G.).

Ches.—Tranmere (W.G.); Wallasey (F.N.P., J.W.E.); Wirral (J.F.B.).

ASTEROSCOPUS, Boisd.

Asteroscopus sphinx, Hufn. (= *Petasia cassinea*, W.V.). Bred from a larva found near Preston (J.B.H.); recorded by N. Greening from East Cheshire (A.O.W.).

DASYPOLIA, Guén.

Dasypolia templi, Thunb. Local.

Lanc.—Aigburth (C.S.G.); Crosby, a specimen taken on the sandhills in the autumn of 1885 (R.W.); Preston district (J.B.H.); West Derby, at light (C.S.G.).

Ches.—Bidston lighthouse (J.F.B.).

PANOLIS, Hübn.

Panolis (Trachea) piniperda, Panz. Common wherever there are fir plantations, especially in the neighbourhood of the 'mosses.'

CHARÆAS, Steph.

Charæas graminis, L. Generally distributed and found sometimes on the Lancashire moorlands in great abundance, as during 1881.

TÆNIOCAMPA, Led.

Tæniocampa gothica, L. Common and generally distributed through both counties.

Tæniocampa populeti, Fabr. Generally distributed, but not common.

Lanc.—Bolton (W.J.); Hale and Lydiate (C.S.G.); Chat Moss and Withington (J.C.); Longridge and Preston (J.B.H.); Prestwich (J.C.M.).

Ches.—Generally distributed through Wirral, but scarce (J.F.B.); Eastham (C.S.G.); Marple (J.C.).

Oct. 1886.

Tæniocampa miniosa, W.V. Recorded as rare in Delamere Forest by Mr. Chappell.

Tæniocampa cruda, Tr. (= *pulverulenta*, Bork.). Generally distributed through both counties.

Tæniocampa munda, W.V. Not common.

Lanc.—Hale and Croxteth, occasionally (C.S.G.); Preston (J.B.H.).

Ches.—Bromborough and Puddington (J.F.B.); Dunham Park and Marple (J.C.); Eastham Wood (J.F.B., F.N.P., W.J.); Hooton (C.S.G.).

Tæniocampa stabilis, W.V. Common throughout both counties—the most frequent of the genus.

Tæniocampa gracilis, W.V. Local, and not common where it does occur.

Lanc.—Crosby (G. A. Harker, F.N.P., R.W.); Chat Moss, Barton Moss, and Withington (J.C.); Huyton (S.J.C.); Southport (G. T. Porritt); Preston district and Longridge (J.B.H.).

Ches.—Lindow Common (J.C.); Wallasey (G. T. Porritt and J.W.E.).

Tæniocampa incerta, Hufn. (= *instabilis*, Tr.). Generally distributed.

Tæniocampa opima, Hübn. The only recorded localities for this species are the Wallasey sandhills, where it is abundant; Lytham, where it occurs commonly; and Longridge.

PACHNOBIA, Led.

Pachnobia leucographa, W.V. Formerly common at Preston, but now scarce (J.B.H.).

Pachnobia rubricosa, W.V. Generally distributed, but apparently not common.

Lanc.—Agercroft, Chat Moss, and Withington, not common (J.C.); Preston district, formerly common (J.B.H.).

Ches.—Bowdon, Staley-brushes, and Marple (J.C.); Eastham Wood (J.C.M.); Delamere Forest (F.N.P., G. A. Harker); Wallasey sandhills (W.G., G. T. Porritt, J.C.M., J.W.E.); throughout Wirral (J.F.B.).

ORTHOSIA, Tr.

Orthosia pistacina, Fab. Generally distributed and fairly common.

Orthosia rufina, L. Not generally common.

Lanc.—Crosby (F.N.P., W.J.); Hale (C.S.G.).

Ches.—Alderley district, common (H. H. Corbett); Eastham (F.N.P., W.J.); Stourton and Bidston (C.S.G.); Staley-brushes, common (J.C.); Wirral, scarce (J.F.B.).

Naturalist,

Orthosia circellaris, Hufn. (= *Xanthia ferruginea*, Tr.). Common and generally distributed.

Orthosia lota, L. Common and generally distributed.

Orthosia macilenta, Hübn. Local.

Lanc.—Agercroft (J.C.); Grange (S.J.C.); Birch-wood, Woolton (C.S.G.).

Ches.—Bowdon, not common (J.C.); Eastham Wood (W.J.); Rock Ferry, Eastham, and Puddington (J.F.B.).

Orthosia litura, L. Common and generally distributed.

DYSCHORISTA, Led.

Dyschorista suspecta, Hübn. Scarce.

Lanc.—Barton Moss (J.C.); Middleton (Ib., and J. Thorpe, Ent., iv, 135).

Ches.—Staley-brushes (J.C., J.B.H., J.C.M.); between Stourton and Hargreave Hall (C.S.G.).

Dyschorista ypsilon, W.V. Not very common.

Lanc.—Preston (J.B.H.); Prestwich (J.C.M.); Withington (J.C.).

Ches.—Marple (J.C.); Alderley, rare (H. H. Corbett); Wallasey, frequent (J.F.B., J.C.M., C.S.G., J.W.E.); West Kirby (F.N.P.).

PLASTENIS, Boisd.

Plastenis retusa, L. Not common.

Lanc.—Liverpool district, occasionally (W.J.); Formby, taken by Mr. Gregson (J.B.H.).

Ches.—Knutsford, rare (J.C.); Wallasey, Bidston, Tranmere, Puddington, not common (J.F.B.).

Plastenis subtusa, W.V. Common in the Preston district (J.B.H.); not common on Chat Moss, and at Pendleton, Sale, and Bowdon (J.C.); on sugar at Wallasey (C.S.G.).

CIRRHOEDIA, Guén.

Cirrhoedia xerampelina, Hübn. Scarce. The only localities of which I have any record are—

Lanc.—Clitheroe, taken by B. B. Labrey (J.B.H.); larva taken near Manchester (G. Campbell, Ent. Mo. Mag., vii, 140); Withington, by J. H. Aspinwall (Ent., viii, 229).

Ches.—One specimen recorded from Denhall by Mr. A. O. Walker, probably on Mr. Brockholes' authority.

Oct. 1886.

COSMIA, Ochs.

- Cosmia trapezina*, L. Abundant throughout both counties.
Cosmia affinis, L. Recorded as 'very rare' from Alderley by Mr. Corbett; while Mr. Gregson mentions having taken it at sugar in a young elm plantation between Hightown and Sephton.
 (*Cosmia paleacea*, Esp. (= *Euperia fulvago*, Hübn.). Recorded from Lancashire in Newman's British Moths, p. 380, but on what authority I know not.)

PYRRHIA, Hübn.

- Pyrrhia umbra*, Hufn. (= *Heliothis marginata*, Fab.). Local, but plentiful where it does occur. Crosby is the only Lancashire locality recorded, but it occurs on the Cheshire coast at Wallasey and New Ferry.

HYDRÆCIA, Guén.

- Hydræcia nictitans*, L. Common and generally distributed, being especially abundant on the mosses.
Hydræcia micacea, Esp. Common throughout both counties.
Hydræcia petasitis, Doubl. Occurs in the moorland regions of both counties, but much scarcer of late years than formerly.
 Lanc.—Bolton (W.J., J.B.H.); Preston and Ribchester (J.B.H.); Staleybridge, common in 1870 (J.C.M.).
 Ches.—East Cheshire, recorded by N. Greening (A.O.W.).

GORTYNA, Led.

- Gortyna flavago*, W.V. Common and generally distributed.

XANTHIA, Tr.

- Xanthia gilvago*, Esp. Recorded from Eastham, where it was captured by Mr. Wm. Lello, in September 1868 (Ent. Mo. Mag., v, 129); also by Mr. Brockholes from Ness and Puddington.
Xanthia cerago, Tr. (= *fulvago*, L.). Common, and generally distributed wherever tallows grow.
Xanthia flavago, Fab. (= *silago*, Hübn.). Common, but rather more local than the preceding species.
Xanthia aurago, W.V. 'Two taken at Lydiate, end of September' (C.S.G.).
Xanthia citrigo, L. Local, and not very common where it does occur.
 Lanc.—Aigburth (W.J., C.S.G.); Myerscough Hall, near Preston (J.B.H.); Withington (J.C.).
 Ches.—Bowdon and Wilmslow (J.C.); Bromborough (C.S.G.); Dunham Park (J.C.M.); Chester (A.O.W.); Rock Ferry and Puddington (J.F.B.).

Naturalist,

SCOPELOSOMA, Curt.

- Scopelosoma satellitia*, L. Common throughout both counties.

ORRHODIA, Hübn.

- Orrhodia vaccinii*, L. Common throughout both counties.
Orrhodia ligula, Esp. (= *spadicea*, W.V.). Somewhat local.
 Lanc.—Agercroft (J.C.); Aigburth (W.J.); Preston (J.B.H.).
 Ches.—Chester (A.O.W.); Dunham Park (J.C.); Wallasey (C.S.G.); Wirral, but not abundant (J.F.B.).

SCOLIOPTERYX, Germ.

- Scoliopteryx libatrix*, L. Not very common, but generally distributed throughout both counties.

AMPHIPYRA, Ochs.

- Amphipyra tragopogonis*, L. Abundant everywhere.
Amphipyra pyramidea, L. Recorded as rare in Dunham Park (J.C.); from Eastham Wood (W.J.); and one from Puddington in 1870 (J.F.B.).

Fam. AGROTIDÆ.

TRIPHÆNA, Hübn.

- Triphæna fimbria*, L. Generally distributed, but not common.
 Lanc.—Chat Moss and Withington (J.C.); Crosby (G. A. Harker); Preston and Lytham (J.B.H.).
 Ches.—Bowdon (J.C.); Chester (A.O.W.); Delamere (F.N.P.); Dunham Park (J.C.M.); Claughton, Denhall, Eastham Wood, Puddington, and Wallasey (J.F.B.); larvæ plentiful between Wallasey and Leasowe in March and April (C.S.G.).
Triphæna ianthina, W.V. Not generally common.
 Lanc.—Preston, not common (J.B.H.); Garston (C.S.G.).
 Ches.—Bowdon, not common (J.C.); Chester (A.O.W.); Delamere and West Kirby (F.N.P.); Tranmere and Rock Ferry (W.G.); Wallasey (J.W.E.); Wirral (J.F.B.).
Triphæna interjecta, Hübn. Local.
 Lanc.—Wyre district, near Fleetwood (J.B.H.).
 Ches.—Chester district (A.O.W.); New Brighton at flowers of ragwort (C.S.G.); Parkgate (W.G.); Wallasey (W.J., J.F.B., and W. Lello, Ent., iv, 155).
 Mr. Gregson notices that this species does not come to ragwort flowers before 11 p.m.

Oct. 1886.

Triphaena orbona, Fab. (= *comes*, Hübn.). Abundant everywhere. In his illustrations of varieties of Lepidoptera, Part II, Mr. Mosley figures several fine aberrations of this species from specimens in the collections of Messrs. Johnson and Roxburgh, of Liverpool.

Triphaena pronuba, L. Abundant everywhere.

AGROTIS, Hübn.

* GRAPHIPHORA, Ochs.

Agrotis augur, Fab. Common and generally distributed.

Agrotis neglecta, Hübn. Scarce, the localities recorded being all in Lancashire, viz.:—Dutton, near Ribchester (J.B.H., Ent., xiii, 105); two specimens recorded from near Hale (C.S.G.); Pendleton and Chat Moss, not common (J.C.).

Agrotis xanthographa, W.V. Abundant everywhere.

Agrotis umbrosa, Hübn. Somewhat local.

Lanc.—Chat Moss (J.C.M.); Crosby (F.N.P., G. A. Harker, R.W.); Preston (J.B.H.).

Ches.—Bowdon, not common (J.C.); Wallasey (F.N.P., J.W.E.).

Agrotis rubi, View. (= *bella*, Tr.). Common and generally distributed, though not so plentiful as formerly.

Agrotis festiva, W.V. Common and generally distributed.

Agrotis conflua, Tr. Recorded from Preston by Mr. Hodgkinson.

Agrotis dahlii, Hübn. Very local.

Lanc.—Windermere, at sugar (J.B.H.); Birch-wood, Woolton, near Liverpool (C.S.G.).

Ches.—Alderley, rare (H. H. Corbett); Hargreave Hall and Hooton (C.S.G.); Staley-brushes, not common (J.C.).

Agrotis brunnea, W.V. Common and generally distributed.

Agrotis baja, W.V. Generally distributed, though scarcely common.

Agrotis rhomboidea, Esp. Mr. Gregson records the capture of a specimen of this species, taken on the wing, between Linacre and Bootle.

Agrotis triangulum, Hübn. Not common.

Lanc.—Longridge, and near Lytham (J.B.H.); Middleton and Pendleton (J.C.); Prestwich (J.C.M.); Old Swan, near Liverpool (C.S.G.).

Ches.—Chester (A.O.W.); Staley-brushes (J.C.); Wallasey (E. L. Ragonot, Ent. Mo. Mag., v, 76); Wirral, scarce (J.F.B.).

Agrotis C-nigrum, L. Generally distributed and fairly common.

Naturalist,

Agrotis depuncta, L. Recorded only from one (Cheshire) locality, viz.:—Staley-brushes, where it is rare (J.C.).

Agrotis glareosa, Esp. Local, and not common where it does occur.

Lanc.—On heath flowers at Toppings Turton, near Bolton (J. W. Baldwin, Y.N., i, 137); Crosby, one specimen (G. A. Harker); Longridge, rare (J.B.H.); Woolton (C.S.G.).

Ches.—Alderley, rare (H. H. Corbett); Dunham Park (J.C., J.C.M.); Ness, scarce (A.O.W.); Staley-brushes (J.C.); Stourton (C.S.G.).

Agrotis saucia, Hübn. Generally distributed, but nowhere common.

Lanc.—Aigburth, common some years (W.J.); Hale and Huyton (S.J.C.); Lytham, sparingly (J.B.H.); Pendleton and Chorlton, not common (J.C.).

Ches.—Alderley, rare and uncertain in its appearance (H. H. Corbett); Bidston, Eastham, Ness, and in the Upton Valley (J.F.B.); Staley-brushes (J.C.M.); Wallasey (C.S.G.).

Agrotis plecta, L. Common and generally distributed.

Agrotis (Axylia) putris, L. Generally distributed and fairly common.

Agrotis porphyrea, W.V. Tolerably common wherever there are large tracts of heather.

Lanc.—Longridge (J.B.H.); Chat Moss (J.C.).

Ches.—Bidston Hill, very common in the larval condition (J.W.E.); Carrington Moss and Staley-brushes, not common (J.C.); Delamere Forest (J.C.M.); Stourton (W.G.); a specimen taken at sugar at Wallasey (J.C.M.).

Agrotis agathina, Dup. Scarce.

Lanc.—Chat and Rixton Mosses, rare (J.C.); Farrington Moss (J.B.H.); Simmonswood Moss (C.S.G.).

Ches.—Bidston Hill, occasionally (W.J., J.C.M.); Wallasey, one specimen taken by Mr. Almond, in August 1854 (C.S.G., J.F.B.).

* * SPÆLIOTIS, Boisd.

Agrotis lucerneæ, L. Only recorded from two localities, both in Lancashire, viz., on heath flowers at Toppings Turton, near Bolton (J. W. Baldwin, Y.N., i, 387); near Grange (J.B.H.).

Agrotis simulans, Hufn. (= *pyrophila*, W.V.). Scarce.

Lanc.—Lytham, rare (J.B.H.); in Mr. Gregson's garden, Fletcher Grove, Old Swan, near Liverpool, in 1847 (Zool., 1848).

Ches.—Bidston (C.S.G.); Wallasey sandhills, once (W.J.).

Agrotis ravidæ, W.V. Recorded from only one (Lancashire) locality, viz.:—Rusholme, near Manchester, where it was once taken by Mr. G. W. Adams (H. H. Corbett).

Oct. 1886.

Agrotis præcox, L. Common on all the coast sandhills from Southport to Wallasey; found inland rarely.

* * * AGROTIS, Hübn.

Agrotis cinerea, W.V. Is recorded from the neighbourhood of Grange, but the locality of its capture is just beyond the boundary of Lancashire (J.B.H.).

Agrotis ripæ, Hübn. Recorded from Runcorn (Cheshire), by Messrs. Gregson and Melvill.

Agrotis cursoria, Bork. Common on the Lancashire and Cheshire coast sandhills. Recorded also from Denhall, by Alfred O. Walker.

Agrotis nigricans, L. Sandhills and mosses, tolerably common.

Lanc.—Chat Moss (J.C.); Farrington Moss (J.B.H.); Crosby sandhills (G. A. Harker); Southport (G. T. Porritt).

Ches.—Bowdon, not common (J.C.); Denhall (A.O.W.); Wallasey sandhills (W.J., F.N.P.).

Mr. Gregson notes (Ent., iv, 53) that the specimens which occur on or about the mosses are much darker in colour than the type form, this latter occurring on the sandhills.

Agrotis tritici, L. Common on all the coast sandhills and occasionally inland.

Agrotis aquilina, W.V. On the sandhills and mosses, but not so common as the preceding species.

Agrotis obeliscæ, W.V. Of very rare occurrence. Mr. Gregson records the species from Crosby and Stourton, and Mr. Brockholes mentions the fact of its having been taken by Mr. N. Cooke on the Wallasey sandhills. Mr. Wilding took a specimen of this species at Heswall in August 1884.

Agrotis puta, Hübn. One specimen captured near Wallasey is recorded by Mr. Brockholes.

Agrotis segetum, W.V. Common and generally distributed, occasionally abundant.

Agrotis clavis, Hufn. (= *corticea*, Hübn.). Local, and apparently not common where it does occur.

Lanc.—Crosby (C.S.G.); Preston, not common (J.B.H.).

Ches.—Wallasey (C.S.G., W.J., J.C.M., and E. L. Ragonot, Ent. Mo. Mag., v, 76).

Agrotis exclamationis, L. Abundant everywhere.

Agrotis suffusa, Hübn. Generally distributed and fairly common.

Agrotis vestigialis, Hufn. (= *valligera*, W.V.). Abundant at sugar and on ragwort flowers on the coast sandhills from Lytham to Wallasey.

Naturalist.

Fam. *HADENIDÆ*.

APLECTA, Boisd.

Aplecta occulta, L. Generally distributed, but not common.

Lanc.—Chorlton-cum-Hardy, near Manchester, rare (J.C.); Crosby, several (G. A. Harker); Stretford, near Manchester (J.B.H.).

Ches.—Claughton, near Birkenhead (J.F.B.); Delamere (A.O.W.).

Aplecta herbida, W.V. Local, and nowhere common.

Lanc.—Chat Moss (R. S. Edleston, Zool., 1845, p. 1220); Botany Bay Wood, Cotteril Clough near Ringway, not common (J.C.); Hale and Woolton (C.S.G.); Preston district (J.B.H.).

Ches.—Only recorded from one locality, viz., Ledsham, by Mr. Brockholes.

APAMEA, Tr.

Apamea (Luperina) testacea, W.V. Common and generally distributed.

NEURONIA, Hübn.

Neuronina (Heliophobus) popularis, Fab. Common and generally distributed.

Neuronina (Luperina) cespitis, W.V. Local.

Lanc.—Carnforth and Preston (J.B.H.); Crosby (C.S.G., W.J., F.N.P., G. A. Harker); Withington (J.C.).

Ches.—Dunham Park (J.C.); Wallasey (C.S.G., W.J., J.F.B., F.N.P.).

APOROPHYLA, Led.

Aporophyla (Epunda) nigra, Haw. Recorded by Mr. Chappell as rare at Botany Bay Wood and Worsley; and by Mr. Gregson from Crosby, Speke, and Lydiate.

Aporophyla (Epunda) lutulenta, W.V. Not common.

Lanc.—Var. *lunebergensis*, Frey, recorded from Dutton, near Ribchester, by Mr. J. B. Hodgkinson (Ent., xiv, 68).

Ches.—Chester, scarce (A.O.W.); Eastham Wood (J.W.E.); Wallasey (F.N.P.).

CERIGO, Boisd.

Cerigo matura, Hufn. (= *cytherea*, Fab.). Common and generally distributed.

MISELIA, Steph.

Miselia oxyacanthæ, L. Common and generally distributed.

Oct. 1886.

DICHONIA, Hübn.

Dichonia (Agriopis) aprilina, L. Generally distributed, but not very common.

Lanc.—Preston (J.B.H.); Manchester district, common (J.C.).

Ches.—Eastham Wood (W.J., G. A. Harker, F.N.P.); Bidston, Rock Ferry, Eastham, Ness, and Puddington (J.F.B.).

DRYOBOTA, Led.

Dryobota (Hadena) protea, W.V. Tolerably common and generally distributed.

EPUNDA, Dup.

Epunda lichenea, Hübn. Local, found only near the coast.

Lanc.—Lytham (J.B.H.); Formby, abundant in the larval state (J.W.E.); Crosby (G. A. Harker and F.N.P.).

Ches.—Wallasey sandhills (J.C.M., F.N.P., G. T. Porritt) Bidston lighthouse, taken there by Mr. Almond (J.F.B.).

POLIA, Tr.

Polia flavicincta, W.V. Mr. Gregson records a specimen captured at Allerton Hall, on sugar, and two between Ditton and Hale.

Polia chi, L. Common and generally distributed, especially in the moorland districts.

DIANTHÆCIA, Boisd.

Dianthæcia conspersa, W.V. Scarce.

Lanc.—Bedford Leigh (J.C.); Bickerstaffe (C.S.G.); Chorley, in 1853, by E. C. Buxton (Zool., xi, 4037); Preston, not common (J.B.H.).

Ches.—Tranmere, one specimen found by Mr. Warrington (J.F.B.); Marple (J.C.); West Kirby (C.S.G.).

Dianthæcia capsicola, W.V. Common and generally distributed.

Dianthæcia cucubali, W.V. Generally distributed, but not so common as the preceding species.

Dianthæcia carpophaga, Bork. Local, nearly confined to the coast.

Lanc.—Crosby, common (W.J. and G. A. Harker); Morecambe and Grange, common (J.B.H.); Hale and Formby (C.S.G.).

Ches.—Denhall, scarce (A.O.W.); West Kirby (C.S.G.).

MAMESTRA, Ochs.

Mamestra (Neuria) saponariæ, Bork. Recorded as scarce from Denhall, and from Delamere Forest, by Mr. A. O. Walker.

Naturalist,

Mamestra (Hecatera) serena, W.V. Local.

Lanc.—Crosby sandhills (F.N.P., J.W.E.).

Ches.—Ness, Burton, Capenhurst (J.F.B.); Wallasey sandhills (W.J.).

Mamestra (Hadena) chenopodii, W.V. A specimen captured at Denhall in 1870, and recorded by Mr. Brockholes, is the only record I have of its occurrence in either county.

Mamestra dentina, W.V. Fairly common, and generally distributed.

Mamestra glauca, Hübn. Rather local.

Lanc.—Bolton (W.J.); Chat Moss (J.C.); Cheetham Hill (R. S. Edleston, Zool., 1845, p. 1220); Longridge, moors above Chorley, Withnell, and White Moss, near Middleton (J.B.H.); Simmonswood Moss (C.S.G.).

Ches.—Delamere (A.O.W.); Lindow Common (J.C.); Staley-brushes (J.C., J.C.M.); Stourton (C.S.G.).

Mamestra contigua, W.V. Recorded from Barlow Moor, as rare, by Mr. Chappell, and from Rock Ferry, where a single specimen was captured in 1860, by Mr. Bockholes.

Mamestra genistæ. The only record I have of the occurrence of this species is as follows :—Larvæ found prior to 1868 on broom at Moore Station, Cheshire, by E. C. Buxton (communicated by J.C.M.).

Mamestra thalassina, Hüfn. Common, and generally distributed.

Mamestra suasa, W.V. Local.

Lanc.—Chorlton-cum-Hardy and Stretford, not common (J.C.); Liverpool district (C.S.G.).

Ches.—Bidston and Wallasey (J.F.B.); Denhall (A.O.W.); Altrincham (R. S. Edleston, Zool., ii, 683).

Mamestra oleracea, L. Abundant everywhere.

Mamestra pisi, L. Common and generally distributed.

Mamestra persicariæ, L. Common and generally distributed.

Mamestra brassicæ, L. Abundant everywhere.

Mamestra albicolon, Hübn. Common on the sandhills along the coast-line of both counties.

Mamestra (Aplecta) nebulosa, Hüfn. Fairly common and generally distributed.

Mamestra tinctoria, Bork. Recorded from Grange-over-Sands, by Mr. Hodgkinson.

Mamestra advena, W.V. Mr. Gregson records the capture of a specimen at valerian flowers at Hale, and one from the same plant at Lydiate.

Oct. 1886.

HADENA, Tr.

- Hadena leucostigma**, Hübn. (= *Apamea fibrosa*, Hübn.). Local.
Lanc.—Huyton (S.J.C.); Morecambe, abundant (J.B.H.).
Ches.—Dunham Park (S.J.C.); Wallasey sandhills, occasionally (W.J.).
- Hadena adusta**, Esp. Tolerably common and distributed over both counties.
- Hadena abjecta**, Hübn. Scarce. Preston, scarce (J.B.H.); two near Cloughton some years ago, taken by Messrs. Almond and Warrington (J.F.B.); and also recorded from Ness and Puddington by Mr. Brockholes.
- Hadena (Xylophasia) polyodon**, L. (= *monoglypha*, Hufn.). Abundant everywhere; the black variety occasionally taken on the moss-lands.
- Hadena lithoxylea**, W.V. Common and generally distributed.
- Hadena sublustris**, Esp. Recorded from Carnforth by Mr. Hodgkinson, and from Hale by Mr. Gregson.
- Hadena sordida**, Bork. (= *Mamestra anceps*, Hübn.). Local.
Lanc.—Preston district, not common (J.B.H.).
Ches.—Wallasey sandhills (C.S.G., J.C.M.); Wirral (J.F.B.).
- Hadena gemina**, Hübn. Common and generally distributed.
- Hadena unanimitis** (Hübn.). Not generally common.
Lanc.—Chat Moss and Withington (J.C.); Hale and Croxteth (C.S.G.).
Ches.—Chester, rather common in 1858 (A.O.W.); Prenton (C.S.G.); Wallasey, Rock Ferry, and Puddington (J.F.B.); occasionally about Alderley (H. H. Corbett).
- Hadena basilinea**, W.V. Common and generally distributed.
- Hadena hepatica**, Hübn. Local.
Lanc.—Preston, not rare (J.B.H.); Hale and Croxteth (C.S.G.).
Ches.—Cotteril Clough, near Ringway (J.C.); near Puddington (J.F.B.).
- Hadena rurea**, Fab., and the variety *combusta*, Dup. Abundant everywhere.
- Hadena scolopacina**, Esp. Recorded from Agercroft, near Manchester, on flowers of wild angelica, rare, by Mr. Chappell; and from Brockholes Wood, near Preston, by Mr. Hodgkinson.
- Hadena pabulatricula**, Brahm. (= *Apamea connexa*, Bork.) A single specimen taken at light at Wallasey, is recorded by Mr. Gregson.
- Hadena (Celæna) haworthii**, Curt. Common on the moors and mosses.

Lanc.—Bolton (W.J.); Chat Moss (J.C., W.J.); moors above Chorley, abundant (J.B.H.); Simmonswood Moss (C.S.G., W.J., F.N.P., J.W.E.).

Ches.—Carrington Moss and Lindow Common (J.C.); Delamere Forest (S.J.C., F.N.P.); Staley-brushes (J.C.).

- Hadena didyma**, Esp. (= *oculea*, Guén.). Abundant everywhere.
- Hadena (Miana) strigilis**, L. Common and generally distributed.
- Hadena fasciuncula**, Haw. Common and generally distributed.
- Hadena furuncula**, W.V. Fairly common, but not nearly so generally distributed as the two preceding species.
- Hadena literosa**, Haw. Common, and generally distributed.

HYPPA, Dup.

- Hyppa (Hadena) rectilinea**, Esp. Mr. Chappell records a specimen from Trafford, near Manchester; and Mr. Hodgkinson refers to the capture of the larva on balsam, near Windermere.

DIPTERYGIA, Steph.

- Dipterygia pinastri**, L. Of occasional occurrence. Mr. Hodgkinson reports having seen several which had been taken near Manchester. In Cheshire it has been taken several times at Knutsford (J.C.); while Mr. Corbett informs me it was common at Alderley in 1879, but that he had not seen it before or since (see also Ent., xiii, 14).

EUPLEXIA, Steph.

- Euplexia lucipara**, L. Abundant everywhere.

HABRYNTIS, Led.

- Habryntis meticulosa**, L. Common everywhere.

MORMO, Steph.

- Mormo maura**, L. Common and generally distributed.

NÆNIA, Steph.

- Nænia typica**, L. Common and generally distributed.

Fam. XYLINIDÆ.

XYLINA, Tr.

- Xylina socia**, Hufn. (= *petrificata*, W.V.). A specimen captured at the Dingle, near Liverpool, by Mr. W. Johnson, is the only record of the appearance of this insect in our counties.

Xylina ornithopus, Hufn. (= *rhizolitha*, Fab.). Scarce. Recorded from Chat Moss by Mr. E. C. Buxton (Zool., 1850, 2882); Manchester district, occasional (J.B.H.); Denhall, scarce (A.O.W.); and Mr. Brockholes records a specimen captured in the Upton Valley, near Birkenhead, in 1859.

CALOCAMPA, Steph.

Calocampa vetusta, Hübn. Local.

Lanc.—Aigburth (W.J.); Chat Moss, rare (J.C.); Crosby, occasionally (C.S.G.).

Ches.—Delamere (A.O.W.); Eastham (G. A. Harker and W.G.); Wallasey (J.C.M., J.F.B.); Bidston and Upton (J.F.B.).

Calocampa exoleta, L. Generally distributed, but not common.

Lanc.—Agercroft, Barton Moss, Chat Moss, Bury, and Middleton (J.C.); Preston district, not common (J.B.H.); Hale and Huyton (S.J.C.).

Ches.—Chester and Ince (A.O.W.); Eastham (W.G., W.J.); Liscard, common (C.S.G.); Wallasey (J.C.M.); Wirral (J.F.B.).

EGIRA, Dup.

Egira (Cloantha) solidaginis, Hübn. Local.

Lanc.—Bolton Moors, common (W.J., J.C.); Bamford Wood, abundant (J.C.M.); Anglesark, near Chorley, and Longridge, on stone walls (J.B.H.); a specimen taken at Walton Gaol, near Liverpool, on a lamp, by W. Harrison in 1861 (C.S.G.).

Ches.—Staley-brushes, common (J.C., J.C.M., G. T. Porritt).

Fam. CLEOPHANIDÆ.

XYLOCAMPA, Guén.

Xylocampa lithorhiza, Bork. (= *areola*, Esp.). Tolerably common and generally distributed.

Fam. CUCULLIDÆ.

CUCULLIA, Schrank.

Cucullia asteris, W.V. Mr. Hodgkinson records the capture of the larva of this species on golden-rod (*Solidago virgaurea*) at Grange.

Cucullia umbratica, L. Local.

Lanc.—Bury, Middleton, Pendleton, and Staleybridge, not common (J.C.); Chorley (E. C. Buxton, Zool., xi, 4037); Crosby (R.W., G. A. Harker); Preston, but not so common as formerly (J.B.H.).

Ches.—Bowdon (J.C.); Bidston (J.F.B.); Ness and Chester (A.O.W.); Wallasey (J.C.M., J.F.B., E. L. Ragonot, Ent. Mo. Mag., v, 76).

Naturalist,

Cucullia chamomillæ, W.V. Local.

Lanc.—Aigburth, the larva common a few years ago (J.W.E.); Fylde district, not rare (J.B.H.); Irlam and Moss-side, near Manchester (J.C.); Lytham (J.B.H., Intell., 1856, p. 53).

Ches.—Bidston (J.F.B., J.W.E.); Bowdon, rare (J.C.); Denhall (A.O.W.); Tranmere (W.G.); Wallasey (G. T. Porritt).

Fam. HELIOTHIDÆ.

HELIOTHIS, Ochs.

Heliothis armigera, Hübn. Very scarce. This species was first captured in Britain, at Salford, by Mr. Jno. Thomas, in September 1840. (Recorded R. S. Edleston, Zool., 1843, p. 260). A specimen was captured on a salt-marsh at the mouth of Bromborough Pool, in November 1857, by Mr. Almond (Zool., xvi, 5947). It has also been recorded from Huyton (S.J.C.) and Staleybridge (J.B.H.), and from Linacre, near Bootle, on ragwort (C.S.G.).

Heliothis peltigera, W.V. Very scarce. Recorded from Blackpool, June 1876, by J. W. Aspinwall (Ent., ix, 183); from Lytham and Farrington Moss, by Mr. Hodgkinson. Mr. Gardner records the capture of a specimen on ragwort flowers at Wallasey in 1879; and Mr. Wilding had the good fortune to find a specimen and the wings of a second on the Wallasey sandhills, on July 17th, 1884.

Fam. ANARTIDÆ.

HELIACA, Herr.-Schäff.

Heliaca tenebrata, Scop. (= *Heliodes arbuti*, Fab.). Local.

Lanc.—Abundant on a railway bank at Chorley (J.B.H.); Longridge (ib.); Orrell and Ford, near Liverpool (C.S.G.).

Ches.—Beeston Castle and Chester (A.O.W.); Prenton Lane and Puddington (J.F.B.); between Spital and Parkgate (C.S.G.); Wilmslow, Knutsford, Ashley, and Mabblerley (J.C.).

ANARTA, Tr.

Anarta myrtili, L. Abundant on heaths and mosses.

Fam. PLUSIDÆ.

ABROSTOLA, Hübn.

Abrostola triplasia, L. Generally distributed, but scarcely common.

Lanc.—Bolton (W.J., J.C.); Bury (J.C.); Chorley (E. C. Buxton (Zool., xi, 1853, 4037); Crosby (G. A. Harker); Preston, rare (J.B.H.); West Derby (R.W.).

Ches.—Chester and Ince (A.O.W.); Knutsford (J.C.); Wallasey (J.W.E.); Wirral (J.F.B.); Alderley (H. H. Corbett).

Oct. 1886.

- Abrostola tripartita**, Hufn. (= *urticæ*, Hübn.). Somewhat local.
Lanc.—Bolton (W.J.); Preston, rare (J.B.H.).
Ches.—Ince (A.O.W.); Wallasey (J.C.M.); Alderley (H. H. Corbett).

PLUSIA, Ochs.

- Plusia chrysitis**, L. Generally distributed, but not usually common.
Lanc.—Huyton (S.J.C.); Preston, not common (J.B.H.).
Ches.—Bowdon, Marple, and Wilmslow, not common (J.C.); Alderley (H. H. Corbett); Chester district, common (A.O.W.); Tranmere and Oxtun (W.G.); West Kirby (F.N.P.).
- Plusia chryson**, Esp. (= *orichalcea*, Hübn.). The only specimen captured in either Lancashire or Cheshire, of which I have any record, was beaten out of honeysuckle near Preston by Mr. Hodgkinson, twenty years ago.
- Plusia bractea**, W.V. Has occurred in several localities, viz.:—
Lanc.—Longridge, and formerly at Preston (J.B.H.); near Hyde, Manchester (R. S. Edleston, Zool., ii, 1007); Staley-bridge, captured by —. Radcliff (J.C.M.).
Ches.—Bowdon (R. S. Edleston, Intell., 1857, vol. i, p. 123); and again at Bowdon by J. Sidebotham (J.C.M.); Marple, Disley, and Macclesfield, rare (J.C.).
- Plusia festucae**, L. Local.
Lanc.—Bolton (W.J.); Hall Road, near Crosby (G. A. Harker); round Manchester, but not common (J.C.); Chorley (E. C. Buxton, Zool., 1853, 4037).
Ches.—Birkenhead and Puddington (J.F.B.); Chester (A.O.W.); Bowdon (R. S. Edleston, Intell., 1857, vol. i, p. 123); Alderley and Cheadle Hulme, rare, Heatley, common (H. H. Corbett).
- Plusia iota**, L. Local.
Lanc.—Crosby (G. A. Harker); Chorley, common (J.B.H.); Manchester district, but not common (J.C.); Preston, not common (J.B.H.).
Ches.—Alderley, common (H. H. Corbett); Bowdon (R. S. Edleston, Intell., 1857, i, 123); Bromborough (R.W.); Chester and Ince (A.O.W.); New Brighton (J.C.M.); Puddington (J.F.B.).
- Plusia pulchrina**, Haw. (= *V-aureum*, Guén.). Not common.
Lanc.—Manchester district (J.C.); Preston, not common (J.B.H.); Prestwich, one in 1876 (J.C.M.).
Ches.—Bowdon (R. S. Edleston, Intell., 1857, i, 123); Chester (A.O.W.); Puddington, scarce (J.F.B.); West Kirby and Frankby, at briar flowers (C.S.G.).

- Plusia gamma**, L. Common and generally distributed, sometimes abundant.
- Plusia interrogationis**, L. Local.
Lanc.—Chat Moss (J.C.M.); Preston (T. R. Pugh, Intell., 1857, i, 115); Longridge Moors, common (J.B.H.).
Ches.—Staley-brushes, four taken by Thomas Hague (J.C.). Recorded also from the latter locality by Mr. Edleston (Zool., ii, 734).

Fam. OPHIUSIDÆ.

CATOCALA, Schrank.

- Catocala fraxini**, L. I have records of the capture of about ten specimens of this scarce and handsome species in our counties.
Lanc.—A specimen at Bolton in September 1859 (Intell., 1859, ii, 27); one at Agercroft Bridge, near Kersall Moor, August 1846 (R. S. Edleston, Zool., 1515); one at Prestwich Clough about 1846, by C. Doyle (J.B.H.) (N.B.—Do these two latter records refer to the same specimen?); near Chorley (J.B.H.); one near Newton Heath (R. S. Edleston, Zool., 1515); one near Manchester in 1868 (E. Hopley, Ent. Mo. Mag., v, 173).
Ches.—A specimen in Mrs. Peacock's garden, Saughall Massie (C.S.G.); a specimen captured in a smithy at Upton (Ib.); one at sugar in Eastham Wood, September 12th, 1868, by W. Lello and E. L. Ragonot (Ent. Mo. Mag., v, 129); Bowdon (recorded by J.C.); one near Carrington Moss (R. S. Edleston, Zool., 1515).

EUCLIDIA, Ochs.

- Euclidia mi**, L. Local, but common where it does occur.
Lanc.—Kirby, Hale, and Lydiate, plentiful (C.S.G.); Silverdale (J.C.M.).
Ches.—Ashley, formerly common (J.C.); railway bank between Wallasey and Spital, common (R.W., J.W.E., G. A. Harker); Wallasey Sandhills, scarce (J.B.H.).
- Euclidia glyphica**, L. Recorded from only one locality in Lancashire, viz., Speke, by Mr. Gregson. Local in various places in Cheshire, viz., Ashley, formerly common (J.C.); Beeston and Chester (A.O.W.); Eastham (Ib.); Shotwick, taken by Mr. Almond (J.F.B.); Knutsford (T. Harrison, Intell., 1857, i, 123); sparingly with *E. mi* on the railway bank between Spital and Bromborough (R.W., W.G., J.W.E.).

Fam. *NOCTUOPHALÆNIDÆ*.

PROTHEDES, Led.

(*Prothedes* (*Miana*) *expolita*, Staint. Mr. Hodgkinson remarks that this species probably occurs on Hamp's Fell, Grange; it certainly occurs on the borders of Lancashire.)

PROTHYMIA, Hübn.

Prothymia viridaria, Clerck. (= *ænea*, W.V.) Common on the moss-lands and some of the sandhills.

Lanc.—Lytham (J.B.H.); Southport (G. T. Porritt, J.B.H., W.J.); Simmonswood Moss (F.N.P., C.S.G.).

Ches.—Bidston Hill (J.F.B.); Prenton (C.S.G.); Delamere Forest (J.C.); Lindow Common, common (Ib.).

Fam. *DELTOIDÆ*.

ZANCLOGNATHA, Led.

Zanclognatha (*Herminia*) *nemoralis*, Fab. = *grisealis*, Hubn. Generally distributed.

Lanc.—Common at Kirkby and Hale (C.S.G.); Preston district, generally distributed, but not common (J.B.H.); Simmonswood Moss (G. A. Harker).

Ches.—Alderley district, abundant (H.H.C.); Bidston, not uncommon (C.S.G.); Bromborough Wood, occasionally (W.J.); Eastham and other woods in Wirral; Chester (A.O.W.); Eastham Wood (J.W.E.).

Zanclognatha (*Herminia*) *tarsipennalis*, Tr. Not nearly so frequent as the preceding species.

Lanc.—Aigburth (W.J.); Greenbank, near Liverpool (C.S.G., J.W.E.); Windermere (J.B.H.).

Ches.—Alderley district, common (H.H.C.); Wallasey (J.C.M.); scarce throughout Wirral (A.O.W.).

HYPENA, Tr.

Hypena proboscoidalis, L. Common and generally distributed throughout Cheshire and South Lancashire, but becoming scarcer in the north.

HYPENODES, Guen.

Hypenodes albistrigatus, Haw. Recorded from Wallasey, a single specimen only, by J. Cosmo Melvill, F.L.S.

Hypenodes costæstrigalis, Steph. Recorded from the Lancashire side of Windermere (J.B.H.); and as being plentiful at Bidston and Prenton, near Birkenhead (J.F.B., C.S.G.).

Naturalist,

THOLOMIGES, Led.

Tholomiges turfosalis, Wocke. Very local.

Lanc.—Pilling Moss, sometimes abundant, flying about 7 p.m. (J.B.H.).

Ches.—Wybunbury, near Crewe (J.C.M.); Crewe and Delamere Forest (Stainton's Manual, ii, 129).

RIVULA, Guen.

Rivula sericealis, Scop. Scarce and local.

Lanc.—Grange (S.J.C.); Hale (J.B.H.); Manchester (Stainton's Manual, ii, 130).

Ches.—Ledsham (A.O.W.); Wallasey (J.C.M.).

Fam. *NYCTEOLIDÆ*.

NOLA, Leach.

Nola cucullatella, L. Fairly common all over the district.

Nola confusalis, Herr.-Schäff. = *crystalis*, Dup. Recorded from one locality only in each county, viz.—Grange (J.B.H., Ent. Mo. Mag., x, 40) and Puddington, Cheshire (J.F.B.).

SARROTHRIPA, Curt.

Sarrothripa revayana, W.V. Recorded from Grange (J.B.H.); and as occurring in plantations near the coast (Cheshire?) by C. S. Gregson.

Fam. *CHLÆPHORIDÆ*.

HALIAS, Tr.

Halias prasinana, L. Local and scarce.

Lanc.—Bolton (W.J.); Hale (C.S.G.); Silverdale (J.C.M.).

Ches.—Delamere (N.C.); Wirral, scarce (J.F.B.).

Fam. *BREPHIDÆ*.

BREPHOS, Ochs.

Brephos parthenias, L. Recorded only from the birch-wood, Woolton, near Liverpool, May 1849 (C.S.G.); and Delamere Forest (F.N.P.).

March 1887.

GEOMETRIDÆ.

Fam. DENDROMETRIDÆ.

ELLOPIA, Tr.

Ellopia prosapiaria, L. = **fasciaria**, W.V. Frequent in fir-woods, and generally distributed.

Lanc.—Chat Moss (J.C.); Longridge, not common (J.B.H.); near Ribchester (J.B.H., Ent., xiii, 105); Silverdale (J.C.M.).

Ches.—Alderley (H.H.C.); Bidston Hill (C.S.G., W.J., J.W.E.); Delamere Forest (S.J.C., G. Harker, F.N.P., A.O.W.); Delamere Forest and Rudd Heath (J.C.); Prenton (C.S.G.); Prenton, Ness, and Burton (A.O.W.).

METROCAMPA, Latr.

Metrocampa margaritaria, L. Common and generally distributed.

ODONTOPERA, Steph.

Odontopera bidentata, Clerck. Common and generally distributed.

EUGONIA, Hübn.

Eugonia quercinaria, Hufn. = **angularia**, W.V. Recorded as rare at light in the Manchester district (J.C.).

Eugonia erosaria, Borkh. Scarce.

Lanc.—Chat Moss (J.C.); Hale (C.S.G.).

Ches.—Bidston and Upton (C.S.G.); Dunham Park (J.C.); taken by Mr. Almond at Tranmere and Rock Ferry (A.O.W.).

Eugonia fuscantaria, Haw. Scarce.

Lanc.—Manchester district, rare at light (J.C.); Walton, near Liverpool (C.S.G.).

Ches.—Bidston (C.S.G.); North Birkenhead and the Upton Valley, scarce (A.O.W.).

Eugonia alniaria, L. = **tiliaria**, Borkh. Generally distributed but nowhere common.

Lanc.—Aigburth, near Liverpool (J.W.E., W.J.); Chat Moss and Risley Moss (J.C.); Chat Moss and Simmonswood Moss (W.J.); Crosby and Simmonswood Moss (G. A. Harker, F.N.P.); Huyton (S.J.C., J.W.E.); around Manchester, but not common (J.C.); Old Swan, near Liverpool (C.S.G.); Preston, formerly common, but now scarce (J.B.H.).

Ches.—Chester (A.O.W.); Birkenhead (J.F.B.).

Naturalist.

SELENIA, Hübn.

Selenia lunaria, W.V. Generally distributed, but nowhere common.

Lanc.—Chat Moss and Simmonswood Moss (W.J.); Pendlebury, rare (J.C.); Preston, not common (J.B.H.); Dutton, near Ribchester (Id., Ent., xiii, 105).

Ches.—Bramall and Cheadle Hulme (H.H.C.); Delamere Forest (F.N.P.); Puddington and Rock Ferry, scarce (A.O.W.).

Selenia bilunaria, Esp. = **illunaria**, Hübn. Common and generally distributed throughout both counties.

PERICALLIA, Steph.

Pericallia syringaria, L. Rare and local.

Lanc.—Hale and Warbreck Moor, near Liverpool (C.S.G.); Longridge (J.B.H.) and Dutton, near Ribchester (Id., Ent., xiii, 105); Manchester district, very rare (J.C.).

Ches.—Alderley, rare (H.H.C.); Chester, Denhall, Ince, and Newton (A.O.W.).

HIMERA, Dup.

Himera pennaria, L. Generally distributed, but not usually common.

Lanc.—Aigburth (J.W.E., W.J.); Aigburth and West Derby (C.S.G.); Manchester district, not common (J.C.); Preston, rare (J.B.H.); Prestwich, rare (J.C.M.); Sefton Park, Liverpool (F.N.P.).

Ches.—Alderley district (H.H.C.); Birkenhead, Chester, Eastham Wood, Ness, and Puddington (A.O.W.).

CROCALLIS, Tr.

Crocallis elinguaris, L. Generally distributed and moderately common.

EURYMENE, Dup.

Eurymene dolabraria, L. Rare and local.

Lanc.—Grange, rare (J.B.H.).

Ches.—Alderley, rare (H.H.C.); Delamere Forest, Dunham Park, and Knutsford, rare (J.C.); Eastham Wood, taken by Mr. Almond (J.F.B.); Rock Ferry (C.S.G., A.O.W.); Wallasey, at light (J.C.M.).

March 1887.

EPIONE, Dup.

Epione apiciaria, W.V. Generally distributed throughout both counties, but not common.

Lanc.—Bootle and Seaforth (W.J.); Chat Moss, on the railway bank, not common (J.C.); Crosby, scarce (G. A. Harker); Dutton, near Ribchester (J.B.H., Ent., xiii, 105) and Preston, rare (Id. in litt.).

Ches.—Alderley, rare (H.H.C.); Bowdon (J.C.M.); Chester, Denhall, Puddington, Rock Ferry, and Wallasey (A.O.W.); Wallasey (W.J.); Tranmere, a single specimen captured (C.S.G.).

VENILIA, Dup.

Venilia macularia, L. Very local, being recorded only from Grange (J.B.H., Ent. Mo. Mag., vii, 62), though now much rarer than formerly (in litt.); Silverdale and Delamere (J.C.M.).

MACARIA, Curt.

Macaria alternata, W.V. Recorded only from one locality, Newby Bridge, near Windermere (J.B.H.).

Macaria notata, L. Recorded as rare in the neighbourhood of Alderley, Cheshire (H.H.C.).

Macaria liturata, L. Generally distributed, but not common.

Lanc.—Chat Moss (J.C., W.J.); Dutton, near Ribchester (J.B.H., Ent., xiii, 105); Hale and Lydiate (C.S.G.); Longridge (J.B.H.); Silverdale (J.C.M.).

Ches.—Alderley, Rudd Heath, and Delamere (J.C.); Bidston Hill (W.J.); Delamere Forest (C.S.G., J.C.M., F.N.P.); Prenton, scarce, and Haddon Wood (A.O.W.); Parkgate in 1873 (W.G.).

URAPTERYX, Leach.

Urapteryx sambucaria, L. Generally common throughout Cheshire and South Lancashire, becoming scarcer northwards.

RUMIA, Dup.

Rumia luteolata, L. = *cratægata*, L. Abundant everywhere.

ASPILATES, Fr.

(**Aspilates ochrearia**, Rossi = *citraria*, Hübn. Though recorded as having been captured in Delamere Forest by Mr. Leather (A.O.W.), this locality requires further confirmation.)

Naturalist,

Aspilates strigillaria, Hübn. Common on the mosses.

Lanc.—Chat Moss (J.C., J.C.M., W.J., and R. S. Edleston, Zool. 1845, 1220); moss near Grange (J.C.M.); Pilling Moss (J.B.H.); Risley Moss (J.C.).

Ches.—Carrington Moss, Rudd Heath, and Staley-brushes (J.C.); Delamere (J.C., F.N.P.).

SCODIONA, Boisd.

Scodiona belgaria, Hübn. Heaths and mosses.

Lanc.—Chat Moss (J.C., W.J., J.C.M.); Pilling Moss and Longridge Fells (J.B.H.); Simmonswood Moss (C.S.G.).

Ches.—Bidston Hill, scarce (W.J., A.O.W.); Carrington Moss (J.C., J.C.M.); Delamere Forest, scarce (Geo. A. Harker, F.N.P.); Lindow Common, local (J.C., H.H.C.); Storeton, near Birkenhead (C.S.G.).

PHASIANE, Dup.

Phasiane petraria, Hübn. Somewhat local, though common where it does occur.

Lanc.—Recorded only from Silverdale (J.C.M.) and Chat Moss (J.C.).

Ches.—Barnston Heath (W.G.); Bidston Hill (W.G., W.J., A.O.W.); Delamere, abundant (G. A. Harker, F.N.P.); Dunham Park, Lindow Common, and Rudd Heath (J.C.); Eastham Wood (C.S.G., F.N.P., A.O.W., J.W.E.).

NUMERIA, Dup.

Numeria pulveraria, L. Local.

Lanc.—Brockholes Wood, near Preston (J.B.H.); Hoghton Tower, near Blackburn (J.C.); Silverdale (J.C.M.).

Ches.—Bowdon, rare (J.C.); Delamere (S.J.C.); Claughton, Tranmere, Rock Ferry, Eastham Wood, Ness, and Newton Lane, Chester (A.O.W.); Prenton, Oxtan, and Storeton (C.S.G.).

CABERA, Tr.

Cabera pusaria, L. Common and generally distributed.

Var. *rotundaria*, Haw., recorded from Dutton, near Ribchester (J.B.H. in litt. and Ent. xiii, 242).

Cabera exanthemata, Scop. Common and generally distributed.

April 1887.

BAPTA, Steph.

Bapta temerata, W.V. Local.**Lanc.**—Botany-bay Wood, near Worsley (J.C.); Hale (C.S.G.); Grange, Preston, etc. (J.B.H.).**Ches.**—Chester, captured by Miss Smith (A.O.W.); Delamere Forest, common near the Blue-cap Inn (J.C.M.); Eastham Wood (C.S.G., A.O.W.).**Bapta bimaculata**, Fab. = **taminata**, W.V. The only locality from which it has been recorded is Grange (J.B.H. *in litt.* and E.M.M., xvii, 70).

ZERENE, Tr.

Zerene adustata, W.V. The only localities I have for this species are both in Lancashire, viz., Grange (J.B.H.) and Silverdale (J.C.M.).

ABRAXAS, Leach.

Abraxas sylvata, Scop. = **ulmata**, Fab. Rather local, but usually abundant where it does occur.**Lanc.**—Bolton (W.J.); Little Crosby, formerly abundant (G. A. Harker); Croxteth (C.S.G.); Ince-Blundell Woods, very abundant (J.W.E., F.N.P.); Manchester district, but local (J.C.); Preston, Hoghton, and Windermere—a leaden-coloured variety occurs near Withnell (J.B.H.); Silverdale (J.C.M.).**Ches.**—Generally distributed through Cheshire (A.O.W.); Sutton, common in Elm woods, and Storeton, occasionally (W.G.).**Abraxas grossulariata**, L. Abundant everywhere. For interesting varieties, ranging from almost white to nearly black, of this protean species, no collection surpasses that of Mr. C. S. Gregson, whose specimens are chiefly the selection of many years' continual breeding of large numbers of this insect. Some of these specimens are figured in 'Mosley's Illustrations of Varieties of Lepidoptera,' while the figures of aberrations of this species in 'Newman's British Moths' are from the same source.**Abraxas (Lomaspilis) marginata**, L. Common and generally distributed through both counties.

HIBERNIA, Latr.

Hibernia defoliaria, L. Local, but usually abundant where it occurs.**Lanc.**—Crosby, scarce (G. A. Harker); Prestwich (J.C.); Preston (J.B.H.).

Naturalist,

Ches.—Alderley district (H.H.C.); Bidston, Eastham, Upton, Birkenhead, Ledsham (A.O.W.); Delamere, Dunham Park, and Tatton Park (J.C.); Eastham Wood, abundant (J.W.E., F.N.P.); Wallasey and Bowdon (J.C.M.).**Hibernia aurantiaria**, Esp. Rather local.**Lanc.**—Aigburth and West Derby (C.S.G.); Preston (J.B.H.); Prestwich (J.C.).**Ches.**—Delamere and Tatton Park (J.C.); Denhall and Puddington, scarce (A.O.W.); Dunham Park (J.C., J.C.M.); Bowdon (J.C.M.).**Hibernia progemma**, Hübn. Abundant everywhere. In Mr. Joseph Chappell's collection is a very singular monstrosity of this species. The specimen is gynandromorphous, having wings on the right side and being apterous on the left, but the singularity of the specimen is that the left antenna is pectinated (indicating the male sex), while the right is filiform. The specimen was captured at Staley-brushes.**Hibernia leucophaea**, W.V. Generally distributed wherever oak abounds.**Lanc.**—Preston (J.B.H.); Prestwich (J.C.).**Ches.**—Alderley and Bramall (H.H.C.); Eastham Wood, very common (C.S.G., W.G., J.W.E., F.N.P.); Dunham Park and Tatton Park, common (J.C.); Prenton, Patrick Wood near Bromborough, Ness, Puddington, and Delamere (O.A.W.).**Hibernia rupicapra**, W.V. Local.**Lanc.**—Crosby, scarce (F.N.P.); Preston (J.B.H.); Stretford, near Manchester (J.C.).**Ches.**—Bowdon (J.C.); Bromborough (G. A. Harker, J.W.E.); Chester and Delamere (A.O.W.); Eastham (F.N.P., W.G., J.W.E.).

SELIDOSEMA, Hübn.

Selidosema plumaria, W.V. Recorded only from a very few localities, and those only in Lancashire, viz., Pilling Moss, not rare (J.B.H.); near Preston (J.B.H. in Zool. 1845, 1885); Rainford Moss, and upon a small moss near Eccleston (C.S.G.).

THAMNONOMA, Led.

Thamnonoma Wavaria, L. Abundant wherever currants are grown.

FIDONIA, Tr.

Fidonia piniaria, L. Common in fir-woods throughout both counties.

April 1887.

Fidonia atomaria, L. Abundant on all the heaths and mosses.

Fidonia clathrata, L. Very local.

Lanc.—On the sides of railway-banks near Carnforth, not uncommon (J.B.H.).

Ches.—Delamere and Puddington (A.O.W.).

GNOPHOS, Tr.

Gnophos obscurata, W.V. Local on heaths.

Lanc.—Banks of the Wyre, near Fleetwood (J.B.H.).

Ches.—Bidston (W.G., W.J., J.C.M., A.O.W., J.W.E.); Burton, Wallasey, and Tranmere (A.O.W.); Heswall and Storeton (W.G.); near Prenton (C.S.G.); Wallasey (W.J., F.N.P.).

HEMEROPHILA, Steph.

Hemerophila abruptaria, Thunb. Not common.

Lanc.—Hale, and occasionally in other parts of the Liverpool district (C.S.G.).

Ches.—Alderley district, very rare (H.H.C.); Chester, Upton, Tranmere, Rock Ferry, Ness (A.O.W.).

BOARMIA, Tr.

Boarmia lichenaria, Hübn. Very local, occurring usually in the neighbourhood of old orchards.

Lanc.—Preston, rare (J.B.H.).

Ches.—Prenton, Hooton, Frankby, Spital (C.S.G.); Frankby and Prenton (A.O.W.).

Boarmia repandata, L. Common and generally distributed. In the Entomologist, v, 73, Mr. Gregson writes: 'Around Lytham the specimens have always a yellowish suffused appearance, markings not defined. In South Lancashire and Cheshire they appear as a family of sweeps—rich, dark, smoky, suffused specimens, having the zigzag posterior marginal line distinctly defined.'

Boarmia rhomboidaria, W.V. Common and generally distributed.

Boarmia roboraria, W.V. Very scarce, being recorded only from Dunham Park (J.C., J.B.H.).

Boarmia biundularia, Borkh. = *laricaria*, Doubl. Local.

Lanc.—Preston, Longridge, etc. (J.B.H.); Prestwich and Worsley (J.C.).

Ches.—Petty Pool Wood, Delamere Forest (S.J.C., F.N.P.).

Naturalist,

Boarmia crepuscularia, W.V. Local.

Lanc.—Botany-bay Wood, Worsley (J.C.); Hale (C.S.G.); Longridge (J.B.H.).

Ches.—Alderley, occasionally (H.H.C.); Hooton (C.S.G.); Rudd Heath (J.C.).

Boarmia consonaria, Hübn. One locality recorded in each county, viz., Newby Bridge, near Windermere (J.B.H.), and Upton, near Birkenhead, a single specimen only (C.S.G.).

Boarmia extersaria, Hübn. Mr. Hodgkinson records the capture of a single specimen at Newby Bridge, at the foot of Windermere.

Boarmia punctularia, Hübn. Local, and nowhere common.

Lanc.—Chat Moss, Hoghton Tower (J.C.); Croxteth and Knowsley (C.S.G.); Preston (J.B.H.); Silverdale (J.C.M.).

Ches.—Bramall (H.H.C.); Delamere (S.J.C.); East Cheshire, on the authority of N. Greening (A.O.W.).

BISTON, Leach.

Biston strataria, Hufn. = *prodromaria* (W.V.). Generally distributed through both counties, but nowhere common.

Lanc.—Preston, rare (J.B.H.).

Ches.—Alderley, rare (H.H.C.); Bidston (C.S.G.); Bowdon and Dunham Park (J.C.M.); Dunham Park and Tatton Park (J.C.); Delamere (J.C., C.S.G., Ent, vi, 452); Eastham Wood, occasionally (W.G., W.J., A.O.W., T. Galliers, Ent. Weekly Intell., 1860, i, 19).

Biston pilosaria, W.V. Common and generally distributed.

Biston hispidaria, W.V. Recorded only from Dunham Park, Cheshire (J.C., J.B.H., R. S. Edleston, Zool., i, 176).

Biston zonaria, W.V. Coast sand-hills of Cheshire and Lancashire, probably introduced into the latter county. This species was discovered by the late Mr. Nicholas Cooke in 1833 (although his brother, Mr. Benjamin Cooke, had found a pupa in 1832) on the New Brighton sand-hills.

AMPHIIDASIS, Tr.

Amphidasis betularia, L. Generally distributed and fairly common in Cheshire and South Lancashire, especially on the moss lands, but becoming scarcer northwards. The black variety (*Doubledayaria*, Mill.), is the prevailing form.

April 1887.

PSEUDOTERPNA, Hübn.

Pseudoterpna pruinata, Hufn. = *cytisaria*, W.V. Local, the localities recorded being, with two exceptions, in Cheshire.

Lanc.—Morecambe and Silverdale, not common (J.B.H.).

Ches.—Bidston (F.N.P., W.J., C.S.G., A.O.W., J.W.E.); Claughton Fir-wood, Haddon Wood, Ness (A.O.W.); Tatton Park and Delamere Forest (J.C.).

GEOMETRA, L.

Geometra papilionaria, L. Generally distributed, but apparently nowhere very common.

Lanc.—Chat Moss (J.C., W.J.); Didsbury (J.C.M.); Dutton, Preston, etc., not common (J.B.H.); Woolton (C.S.G.).

Ches.—Alderley and Cheadle Hulme (H.H.C.); Bidston Hill (C.S.G., A.O.W.); Delamere Forest (S.J.C., J.C.); Dunham Park and Knutsford, rare (J.C.); Eastham Wood, occasionally (W.J.); Hartford (F.N.P.); Rock Ferry, Ledsham, Ince (A.O.W.).

NEMORIA, Hübn.

Nemoria strigata, Müll. = *thymiaria* Guen. Very local, and not common where it does occur.

Lanc.—Aigburth (W.J.); Fleetwood and near Lytham (J.B.H.).

Ches.—Bidston (F.N.P.); Chester, and in Wirral occasionally (A.O.W.); Parkgate (W.G.); Wallasey (J.C.M.).

Nemoria lactearia, L. Common, and generally distributed.

ACIDALIA, Tr.

Acidalia subsericeata, Haw. Rather local.

Lanc.—Barlow Moor and Withington, not common (J.C.); lanes round Manchester formerly (J.B.H.); Humphrey Head, near Grange (J.B.H.).

Ches.—Bidston (C.S.G., A.O.W.); pasture lands near Leasowe sand-hills (C.S.G.); Wallasey (W.G., J.C.M.).

Acidalia holosericeata, Dup. The only recorded locality for this species is 'below Bidston Plantation, looking towards Moreton, in plantations where the ground is swampy' (C.S.G.).

Acidalia circellata, Guen. Very scarce.

Lanc.—Chat Moss, rare (J.C., J.B.H.), probably extinct, the wood where it occurred having been destroyed by fire.

Ches.—Bowdon; specimens collected here by Mr. R. S. Edleston are in the collection of Mr. J. Cosmo Melvill.

Naturalist,

Acidalia humiliata, Hufn. = *osseata*, W.V. Local.

Lanc.—Barlow Moor, common (J.C.); banks of the Wyre, not rare (J.B.H.).

Ches.—Hedges near Leasowe sandhills (C.S.G.); Wallasey (W.J., J.C.M.).

Acidalia dimidiata, Hufn. = *scutulata*, (W.V.). Common, and generally distributed.

Acidalia trigeminata, Haw. Recorded only from Barlow Moor and Irlam, but not occurring there commonly (J.C.).

Acidalia bisetata, Hufn. Common and generally distributed.

Acidalia inornata, Haw. Scarce.

Lanc.—Bolton (W.J.); Chat Moss (R. S. Edleston, Zool., 1845, 1220); Preston (J.B.H.).

Ches.—Staley-brushes, rare (J.C., J.B.H.).

Acidalia aversata, L. Abundant everywhere.

Acidalia muricata, Hufn. = (*Hyria*) *auroraria*, Borkh. Very local, and only on the mosses.

Lanc.—Chat Moss (W.J., J.C., J.C.M.); Heysham Moss and Pilling Moss (J.B.H.); Risley and Rixton Mosses (J.C.).

Ches.—Carrington Moss and Lindow Common (J.C.M.).

Acidalia emarginata, L. Very local, being recorded only from Barlow Moor and Irlam (J.C.) and Bidston (W.J.).

Acidalia rubiginata, Hufn. = *rubricata* W.V. Taken by the late Mr. Joseph Sidebotham at Ashton-on-Mersey (J.C.).

Acidalia marginepunctata, Goeze = *promutata*, Guen. Recorded only from Silverdale (J.B.H.).

Acidalia incanata, L. Local.

Lanc.—Grange (S.J.C.); Lytham and Preston (J.B.H.); Liverpool district, occasionally (C.S.G.); Prestwich (J.C.M.).

Ches.—Bidston Hill (A.O.W.); Meols (J.W.E.); Tranmere (W.G.); Wallasey (J.C.M.).

Acidalia fumata, Steph. Plentiful on all the moss-lands.

Acidalia remutata, Hübn. Generally distributed and fairly common.

Acidalia imitatoria, Hübn. Generally distributed and fairly common.

Acidalia ornata, Scop. Recorded as rare on Chat Moss (J.C.).

TIMANDRA, Dup.

Timandra amataria, L. Uncommon, and recorded only from localities in Cheshire, viz.:—Backford (W.G.); Ness, Puddington, Chester, Ince (A.O.W.); lane leading from Liscard to Wallasey Church (J.W.E.).

April 1887.

ZONOSOMA, Led.

Zonosoma (Ephyra) porata, Fab. Delamere Forest, rare (J.C.) is the only locality of which I have information.

Zonosoma punctaria, L. Very local.

Lanc.—Hale (C.S.G.).

Ches.—Bidston and Eastham (C.S.G.); Eastham Wood (A.O.W.); Dunham Park and Delamere, common (J.C.).

Zonosoma trilinearia, Borkh. Scarce, the localities recorded being the Silverdale and Middlebarrow woods (J.C.M.) in Lancashire, and Dunham and Tatton Parks (J.C.) in Cheshire.

Fam. PHYTOMETRIDÆ.

ANISOPTERYX, Steph.

Anisopteryx æscularia, W.V. Rather local.

Lanc.—Aigburth (W.J., J.W.E.); Manchester district, common (J.C.); Preston (J.B.H.).

Ches.—Dunham Park and Bowdon (J.C.M.); Chester (A.O.W.); Delamere Forest (F.N.P., A.O.W.); Eastham Wood (W.G., F.N.P., J.W.E.).

ODEZIA, Boisd.

Odezia atrata, L. = *chærophyllata*, L. Local, but common where it does occur.

Lanc.—Bolton (W.J.); Pendleton (J.C.); Prestwich hills (J.C.M.); Withnell (J.B.H.).

Ches.—Bramall and Knutsford (J.C.).

STERRHA, Herr.-Schäff.

Sterrha sacraria, L. Of very occasional occurrence, localities recorded being:—

Lanc.—A specimen captured by Mr. S. J. Capper near his residence, Huyton Park, near Liverpool, in August 1867 (Ent., iii, 347).

Four specimens taken in the Liverpool district by a local collector (C.S.G., Ent., iii, 347). Some of these are probably the Cheshire specimens taken by Mr. E. L. Ragonot (see next page).

One captured in the Freemasons' Hall, Manchester, September 5th, 1872 (J. T. Carrington, E. M. M., ix, 139).

Naturalist,

Ches.—Ness (A.O.W.).

One on August 16th, at Wallasey, and one on August 21st, 1867, at Poulton, captured on ragwort flowers,—another specimen at the latter locality being lost (E. L. Ragonot, E. M. M., iv, 131).

One at Wallasey (C.S.G., E. M. M., v, 129).

ANAITIS, Boisd.

Anaitis plagiata, L. Local, and not common.

Lanc. Bolton (W.J.); Bury (J.C.); Chat Moss (J.C.M.); Childwall (C.S.G.); Longridge (J.B.H.).

Ches.—Bowdon, Knutsford, Delamere, Marple, not common (J.C.).

Anaitis paludata, Thumb. = *Carsia imbutata*, Hübn. Common on the moors and mosses.

CHESIAS, Tr.

Chesias spartiata, Fuessl. Local, and not common.

Lanc.—Bury and Staleybridge (J.C.); Crosby, one specimen at light (F.N.P.); Preston (J.B.H.).

Ches.—Alderley district (H.H.C.); Delamere (A.O.W.); Bromborough and Hooton (C.S.G.).

(*Chesias oblata*, Fab. = *obliquaria*, W.V. The record of its occurrence in Delamere Forest by Mr. A. O. Walker requires to be verified.)

LOBOPHORA, Curt.

Lobophora polycommata, W. V. Recorded only from Grange (J.B.H.).

Lobophora viretata, Hübn. Very scarce, being recorded only from Grange (J.B.H.) and from Sandal Heath and Goss Moss, near Alderley (H.H.C.).

Lobophora carpinata, Borkh. = *lobulata*, Hübn. Local.

Lanc.—Botany-bay Wood near Worsley, and Atherton, rare (J.C.); 'not uncommon in the woods round Kirkby and Simonswood' (C.S.G.).

Ches.—Delamere Forest (S.J.C., J.B.H., F.N.P., and C.S.G., Ent., vi, 452).

Lobophora halterata, Hufn. = *hexapterata*, W.V. Recorded by Mr. Alfred O. Walker, probably on the authority of Mr. Brockholes, from Puddington and Ness.

Lobophora sexalisata, Hübn. The only instance I have of the occurrence of this species in either county is the record of the capture of a specimen in Croxteth Woods by Mr. Gregson.

April 1887.

ORTHOLITHA, Hübn.

Ortholitha (Eubolia) palumbaria, W.V. Abundant on heaths and mosses throughout both counties.

Ortholitha limitata, Scop. = *mensuraria*, W.V. Common and generally distributed.

Ortholitha cervinata, W.V. Scarce.

Lanc.—Preston, rare (J.B.H.).

Ches.—Bidston (C.S.G.); formerly not uncommon in Clifton Park, Birkenhead (A.O.W.); Hoylake (W.J.).

Ortholitha bipunctaria, W.V. Mr. Gregson records the occurrence of this species at Hoylake, at the mouth of the Dee, in July 1845.

Ortholitha badiata, W.V. Generally distributed, and fairly common.

Ortholitha comitata, L. Local.

Lanc.—Crosby (G. A. Harker); Pendleton and Irlam (J.C.); Preston (J.B.H.); Southport (W.J.).

Ches.—Alderley district (H.H.C.); Bowdon (J.C.); Egremont and Rock Ferry (C.S.G.); near Wallasey Church (J.W.E.); Wallasey, Denhall, and Chester (A.O.W.).

MESOTYPE, Hübn.

Mesotype virgata, Hübn. = *Eubolia lineolata*, W.V. Common on the Lancashire and Cheshire sand-hills wherever the yellow bed-straw (*Galium verum*) is plentiful.

PHIBALAPTERYX, Steph.

Phibalapteryx fluviata, Hübn. = *gemmaria*, Hübn. Scarce.

Lanc.—One specimen captured on the Birkdale sand-hills, August 24th, 1878 (J.C.M., H. Dent, Ent., xi, 282); Hale (S.J.C.); Manchester district, rare (J.C.); Preston, a single specimen (J.B.H.).

Ches.—Birkenhead, a specimen taken by Mr. Diggles in October 1857, and recorded in the proceedings of the Northern Entomological Society (Zool. (1858), xvi, 5771). Wallasey sandhills, a single specimen (W.J.); and a specimen captured by Mr. E. R. Curzon, in the presence of the writer, on the border of the sand-hills near Wallasey village, September 30th, 1880 (Y. Nat., i., 394).

Phibalapteryx vittata, Borkh. = *lignata*, Hübn. Scarce, being recorded from Bidston Marsh and Otterspool (C.S.G.); Charlton flat near Stretford, Ashton-on-Mersey, Warburton, and Heatley, not common (J.C.); Bidston Marsh, Ness (A.O.W.); Preston (J.B.H.).

Naturalist,

SCOTOSIA, Steph.

Scotosia dubitata, L. Generally distributed, though scarcely common.

Scotosia undulata, L. Local, and nowhere common.

Lanc.—Botany-bay Wood at Worsley (J.C.); Preston and Windermere (J.B.H.).

Ches.—Delamere Forest (J.C.); Eastham Wood (C.S.G.); East Cheshire (A.O.W.).

Scotosia vetulata, W.V. Recorded only from Grange, where it is stated to be not rare (J.B.H.).

COLLIX, Guen.

Collix sparsaria, Hübn. Recorded from Cheshire only, and probably both records refer to the same locality, viz.;—Delamere Forest (S.J.C.) and East Cheshire, on the authority of N. Greening (A.O.W.).

LARENTIA, Tr.

Larentia reticulata, W.V. The only known locality for this beautiful species is Windermere, where it has been taken by Messrs. Gregson and Hodgkinson.

Larentia silaceata, W.V. Rather local.

Lanc.—Bolton, Bury, and Hoghton Tower (J.C.); Hale, Ditton, and Rainhill (C.S.G.); Preston (J.B.H.).

Ches.—Delamere Forest (F.N.P.); East Cheshire (A.O.W.); Marple (J.C.).

Larentia suffumata, W.V. Local.

Lanc.—Bolton (W.J.); Chat Moss, Worsley, and High Leigh (J.C.); Dutton, near Ribchester (J.B.H., Ent., xiii, 105); Huyton (S.J.C.); Preston (J.B.H.).

Ches.—Alderley Edge (H.H.C.); Chester and Wirral (A.O.W.); Delamere Forest (C.S.G., Ent., vi, 452); Eastham Wood (C.S.G., W.J.).

Larentia prunata, L. Local.

Lanc.—Bury and Staleybridge (J.C.); Hale and Crosby (C.S.G.); Prestwich (J.C.M.); Windermere (J.B.H.).

Ches.—Burton and East Cheshire (A.O.W.); Marple and Stockport (J.C.).

Larentia testata, L. Common on the moors, mosses, and coast sand-hills.

Larentia populata, W.V. Local, but usually common where it does occur.

Lanc.—Longridge (J.B.H.); Staleybridge and Irlam (J.C.); Toppings Turton, near Bolton, on heath flowers (J. W. Baldwin, Y. Nat., i., 387).

April 1887.

- Ches.**—Alderley (J.C.); Delamere (F.N.P.); Staley-brushes (J.C.M., R. S. Edleston, Zool., 1845, 1220); Storeton Quarry (C.S.G.).
- Larentia associata**, Borkh. = *dotata*, Guen. Local.
- Lanc.**—Crosby (F.N.P.); Preston, rare (J.B.H.); Withington and Pendlebury (J.C.).
- Ches.**—Alderley (H.H.C.); Bowdon (J.C.); Puddington and Denhall (A.O.W.); Wallasey (W.G.).
- Larentia pyraliata**, W.V. = *dotata*, L. Somewhat local.
- Lanc.**—Irlam, Pendleton (J.C.); Preston (J.B.H.); Sefton Park, Liverpool (J.W.E.).
- Ches.**—Alderley, common (H.H.C.); Barnston (W.G.); Bowdon and Knutsford (J.C.); Chester district, common (A.O.W.); Delamere (F.N.P.).
- Larentia fulvata**, Forst. Common and generally distributed.
- Larentia firmata**, Hübn. Fir-woods, tolerably common all over both counties.
- Larentia variata**, W.V. Common in all fir-woods.
- Larentia simulata**, Hübn. Recorded from Hamp's Fell, near Grange (J.B.H.).
- Larentia corylata**, Thunb. Local.
- Lanc.**—Chat Moss and Prestwich (J.C.); Grange (J.B.H.).
- Ches.**—Alderley district, common (H.H.C., J.C.); Delamere Forest (F.N.P.); Eastham Wood (W.J.); Marple (J.C.); Puddington, scarce (A.O.W.).
- Larentia truncata**, Hufn. = *russata*, W.V. Common and generally distributed.
- Larentia immanata**, Haw. Common and generally distributed.
- Larentia viridaria**, Fab. = *pectinitaria*, Fuessl. = *miata*, W.V. Common and generally distributed.
- Larentia galiata**, W.V. Local, but common where it does occur.
- Lanc.**—Humphrey Head and the Lancashire coast (J.B.H.).
- Ches.**—Alderley and Cheadle Hulme (H.H.C.); Staley-brushes (J.C., R. S. Edleston, Zool., 1845, 1220); Wallasey, abundant (J.W.E.); Burton and Ness (A.O.W.).
- Larentia unangulata**, Haw. Local, and not usually common.
- Lanc.**—Bolton (W.J.); Lytham and Wyre district, not rare (J.B.H.).
- Ches.**—Bowdon, not common (J.C.); Flaybrick Hill and Noctorum (C.S.G.); Flaybrick Hill, Ledsham, Puddington, and Tranmere (A.O.W.).
- Larentia montanata**, W.V. Abundant everywhere.

Naturalist,

- Larentia ferrugata**, Clerck. Generally distributed, but scarcely common.
- Larentia unidentaria**, Haw. Common everywhere.
- Larentia ocellata**, L. Common and generally distributed.
- Larentia olivata**, W.V. Not common.
- Lanc.**—Bolton Moors (W.J.); Silverdale (J.C.M.); Withnell (J.B.H.); woods on the Lancashire side of Windermere (C.S.G., Ent., iv, 316).
- Ches.**—Bidston, taken by Mr. Almond (A.O.W.); Staley-brushes, rare (J.C.).
- Larentia tæniata**, Steph. Very local, being found only in North Lancashire, viz., woods on the Lancashire side of Windermere (C.S.G., J.B.H.); Silverdale (J.B.H., and J. Sidebotham, Ent., x, 8).
- Larentia designata**, Hufn. = *propugnata*, W.V. Local.
- Lanc.**—Barton Moss, Chat Moss, and Stretford (J.C.); Preston (J.B.H.); Wavertree (C.S.G.).
- Ches.**—Carrington Moss and Dunham Park (J.C.); Chester and Wirral (A.O.W.); Cloughton and Saughall (C.S.G.); Delamere Forest (S.J.C.).
- Larentia fluctuata**, L. Abundant everywhere.
- Larentia bicolorata**, Hufn. = *rubiginata*, W.V. Common and generally distributed, the variety *plumbata*, Curt., occurring in several widely-distant localities, as Ormskirk (W. R. Kifford, Ent., v, 227); Preston (J.B.H.); Fleetwood (J.B.H. in E. M. M., ix, 162); Ledsham (A.O.W.).
- Larentia siterata**, Hufn. = *psittacata*, W.V. Very local.
- Lanc.**—Grange (J.B.H.); Knowsley and Speke (C.S.G.).
- Ches.**—Eastham Wood (C.S.G.).
- Larentia miata**, L. Very local.
- Lanc.**—Crosby (F.N.P.); Grange and Lancaster (J.B.H.).
- Ches.**—North Birkenhead and East Cheshire (A.O.W.).
- Larentia bilineata**, L. Very abundant.
- Larentia tristata**, L. Scarce, the only localities recorded being Chat Moss (J.C.M.); near Stoneyhurst (J.B.H., Ent., xii, 204; Castle Mill, scarce (J.C.).
- Larentia subtristata**, Haw. Common and generally distributed.
- Larentia hastata**, L. Scarce and local.
- Lanc.**—Chat Moss (J.C.M., J.C.).
- Ches.**—Alderley (H.H.C.); Delamere (J.C.).
- Larentia albicillata** L. Rather local, and not usually common where it does occur.

April 1887.

Lanc.—Chat Moss (J.C., R. S. Edleston, Zool., 1845, 1220); Halewood and Hale (C.S.G.); Hoghton Tower (J.C.); Preston (J.B.H.); Silverdale (J.C.M.).

Ches.—Alderley, rare (H.H.C.); Delamere (S.J.C., J.C.); Marple (J.C.); Eaton Park, near Chester (A.O.W.).

Larentia derivata, W.Y. Local and not common.

Lanc.—Hoghton Tower, not common (J.C.); Preston, rare (J.B.H.).

Ches.—Alderley (J.C.); Bidston Hill, occasionally (W.J.); Cheadle Hulme (H.H.C.); Delamere (C.S.G., Ent., vi, 452); between Oxton and Prenton (C.S.G.); Tranmere, scarce, and Ledsham, common (A.O.W.).

Larentia impluviata, W.V. Common and generally distributed. At Longridge a dark form prevails, while near Preston it is much greener (J.B.H.).

Larentia literata, Don. = *ruberata*, Freys. Local, but fairly common where it does occur.

Lanc.—Liverpool district (F.N.P.); Longridge (J.B.H.).

Ches.—Wallasey sandhills (W.J., G. T. Porritt); Bidston Marsh (A.O.W.); Macclesfield, rare (J.C.).

Larentia sordidata, Fab. = *elutata*, Hübn. Common everywhere.

Larentia didymata, L. Common everywhere.

Larentia multistrigaria, Haw. Common and generally distributed.

Larentia cæsiata, W.V. Common on the Lancashire moorlands, as Bolton Moors (W.J.); Bury (R. Kay, Ent., ix, 158); Toppings Turton, near Bolton, on heath flowers (J. W. Baldwin, Y. Nat., i, 387); Longridge (J.B.H.). Also rare at Alderley (H.H.C.), and abundant at Staley-brushes (R. S. Edleston, Zool., 1845, 1220).

Larentia salicata, Hübn. Local.

Lanc.—Bolton Moors (W.J.); Silverdale (J.C.M.); Withnell, and on the coast near Fleetwood (J.B.H.).

Ches.—Bidston Hill and Storeton (C.S.G.); Staley-brushes (J.C.).

Larentia affinitata, Steph.

Lanc.—Manchester district, generally distributed but not common (J.C.); Preston, not rare (J.B.H.).

Ches.—Wallasey, occasionally (W.J.).

Larentia alchemillata, L. Local.

Lanc.—Chat Moss, uncommon (J.C.); Preston (J.B.H.).

Ches.—Alderley, common but local (H.H.C.); Chester? (A.O.W.); Patrick Wood, near Bromborough Mill (A.O.W.); Wallasey, rare (J.C.M., W.J.).

Larentia decolorata, Hübn. Common everywhere.

Larentia albulata, Steph. Common wherever the food-plant of the larva—Yellow-rattle (*Rhinanthus crista-galli*)—grows.

Larentia blandiata, W.V. Mr. Hodgkinson informs me that he once saw a specimen at Accrington, said to have been captured there by the possessor.

Larentia ericetata, Curt. 'C. S. Gregson met with this near Hawks-head' (J.B.H.).

Larentia unifasciata, Haw. Local and scarce.

Lanc.—Preston (J.B.H. in litt. and E. M. M., iv, 154); near Fleetwood (J.B.H. in E. M. M., x, 118); Lytham (J.B.H.).

Ches.—Wallasey sand-hills, scarce (N. Cooke, C.S.G.).

OPORABIA, Steph.

Oporabia dilutata, W.V. Common everywhere.

Oporabia filigrammaria, Herr.-Schäff. Common on the moorland districts of Lancashire. It was first recorded as British, under the name of *porata*, by R. S. Edleston, in the Entomologist for 1856.

CHEIMATOBIÆ, Steph.

Cheimatobia brumata, L. Abundant everywhere.

Cheimatobia boreata, Hübn. First recorded as British by Benjamin Cooke in Zoologist, 1850, p. 2749, a female having been captured at Petty Pool Wood, Delamere Forest, in October 1848. It has since occurred there in abundance, and has also been recorded from Chat Moss and Staley-brushes (J.C.) and Bidston birch-plantations (C.S.G.).

HYDRELIA, Hübn.

Hydrelia cambrica, Curt. = *Venusia cambricaria*. Very local, occurring only in Lancashire, viz., Longridge, where it was formerly abundant (J.B.H.); Hoghton Tower, not common (J.C.); and Windermere, scarce (J.B.H.).

Hydrelia Blomeri, Curt. Recorded only from Lancashire, the localities given being Brockholes Wood near Preston, and Hoghton Woods (J.B.H.).

Hydrelia sylvata, W.V. Local.

Lanc.—Chat Moss (R. S. Edleston, Zool., 1845, 1220); Preston, now rare, but formerly abundant (J.B.H.); Silverdale (J.C.M.); Worsley, rare (J.C.).

Ches.—Bromborough Woods (C.S.G.); Castle Mill and Delamere (J.C.); East Cheshire (A.O.W.).

Hydrelia candidata, W.V. Local.

Lanc.—Chat Moss (J.C.); Preston (J.B.H.); Silverdale (J.C.M.).

Ches.—Bidston and Wallasey, scarce (A.O.W.); Bollin Valley, near Castle Mill, and Marple (J.C.); Delamere Forest (J.C.M.); Eastham and Hooton (C.S.G.).

Hydrelia luteata, W.V. Fairly common, but local.

Lanc.—Chat Moss (J.C., R. S. Edleston, Zool., 1845, 1220); Preston, among alder (J.B.H.).

Ches.—Bidston (C.S.G.); Bramall, local but common (H.H.C.); Burton and Puddington, scarce (A.O.W.); Marple (J.C.); Delamere (J.C., S.J.C.).

Hydrelia oblitterata, Hufn. = **heparata**, W.V. Local.

Lanc.—Chat Moss (J.C., R. S. Edleston, Zool., 1845, 1220); Preston (J.B.H.); Prestwich (J.C.).

Ches.—Bidston (C.S.G.); Bramall (H.H.C.); Burton, Rock Ferry, and Puddington, not common (A.O.W.); Marple and Delamere (C.S.G.).

EUPITHECIA, Curt.

Eupithecia centaureata, W.V. Common everywhere.**Eupithecia venosata**, Fab. Local.

Lanc.—Crosby sand-hills (W.J.); Humphrey Head, near Grange (J.B.H. *in litt.* and Ent. Mo. Mag., vii, 67); Rusholme, near Manchester, rare (H.H.C.).

Ches.—Denhall, one specimen (A.O.W.); Hilbre Island, at the mouth of the Dee, common (F.N.P., W.G., A.O.W., J.W.E.).

Eupithecia subnotata, Hübn. Not common.

Lanc.—Preston and Longridge (J.B.H.).

Ches.—Birkenhead, Denhall, and Wallasey (A.O.W.); Prenton (C.S.G.).

Eupithecia linariata, W.V. Local, recorded only from Cheshire.

Ches.—Bidston (W.J.); Delamere (J.C.); New Brighton (J.B.H.); Bidston and Tranmere (A.O.W.); Wallasey (F.N.P., J.W.E.).

Eupithecia pulchellata, Steph. Local.

Lanc.—Chat Moss (W.J.); Dutton, near Ribchester (J.B.H., Ent., xiii, 105); Prestwich (J.C.); Longridge, and abundant in gardens at Morecambe, among snap-dragons (J.B.H.).

Ches.—Alderley, common (H.H.C., J.C.); Delamere, Dunham Park, Knutsford, and Castle Mill (J.C.); Prenton Mount Wood, Rock Ferry, Ness, and Burton (A.O.W.).

Naturalist,

Eupithecia rectangulata, L. Common and generally distributed wherever there are old orchards.

Eupithecia debiliata, Hübn. Recorded from Chat Moss by Charles Campbell (Zool., 1862, p. 8209).

Eupithecia succentaureata, L. Local.

Lanc.—Crosby (G. Harker); Lytham and Fleetwood (J.B.H. *in litt.* and E. M. M., x, 118).

Ches.—Bidston (A.O.W.); Bromborough (W.J., J.W.E.); Dunham, rare (J.C.); Wallasey (F.N.P., J.C.M., W.J., J.W.E., (A.O.W.)).

Eupithecia scabiosata, Bork. = **subumbrata**, W.V. Recorded only from Grange (J.B.H.).

Eupithecia subfulvata, Haw. Local.

Lanc.—Barlow Moor and Irlam, common (J.C.); Lytham and near Fleetwood (J.B.H. *in litt.* and E. M. M., ix, 162); Dutton, near Ribchester (J.B.H., Ent., xiii, 105).

Ches.—Bowdon (J.C.); Bromborough (W.J.); Burton (A.O.W.); Alderley district, common (H.H.C.); Wallasey (W.J., F.N.P.).

Eupithecia nanata, Hübn. Common wherever heath grows.

Eupithecia innotata, Hufn. (? **fraxinata**, Crewe). Scarce.

Lanc.—Lytham (J.B.H.).

Ches.—One at Styall (J.C.); a few on the sand-hills (C.S.G.).

Eupithecia fraxinata, Crewe. Recorded by Mr. Chappell from Prestwich, Withington, Rusholme, and Stretford, all near Manchester, and from Preston by Mr. Hodgkinson.

Eupithecia pygmaea, Hübn. Not common.

Lanc.—Preston, Grange, etc. (J.B.H.); Liverpool district (C.S.G.); near Bury (J.C.).

Ches.—Castle Mill (J.C.); Dee marsh near Puddington (A.O.W.).

Eupithecia tenuiata, Hübn. Not common.

Lanc.—Bury, rare (J.C.); Liverpool district, 'where shallows are plentiful' (C.S.G.); Preston (J.B.H.).

Ches.—East Cheshire, on the authority of N. Greening (A.O.W.).

Eupithecia plumbeolata, Haw. Local. Bury, Mereclough, Prestwich, rare (J.C.); not uncommon among *Myrica gale* on the mosses (C.S.G.); Pilling Moss, plentiful among *Myrica gale* where *Melampyrum arvense* grows (J.B.H. *in litt.* and E. M. M., ii, 186).

Eupithecia valerianata, Hübn. = **viminata**, Doubl. Recorded only from Windermere (J.B.H.); Pilling Moss (J.B.H. *in* E. M. M., ii, 186); and East Cheshire (A.O.W.).

Eupithecia isogrammata, Tr. Grange, among clematis (J.B.H.).

pril 1887.

Eupithecia satyrata, Hübn. Local.

Lanc.—Grange, Silverdale, &c. (J.B.H.); Manchester district, generally distributed (J.C.); Simmonswood Moss (C.S.G.).

Ches.—Burton, and near Birkenhead (A.O.W.); Bowdon (J.C.M.).

Eupithecia helveticaria, Boisd. Recorded as rare at Grange by Mr. Chappell.**Eupithecia castigata**, Hübn. Common but local.

Lanc.—Grange, Silverdale, &c. (J.B.H.); Liverpool district, common (C.S.G.).

Ches.—Alderley, abundant (H.H.C.); Hartford (F.N.P.); Wirral (A.O.W.).

Eupithecia lariciata, Freyer. Local.

Lanc.—Longridge, among larches (J.B.H.); near Stoneyhurst (J.B.H. in Ent., xii, 204).

Ches.—Alderley, local (H.H.C.); East Cheshire (A.O.W.).

Eupithecia trisignaria, Herr.-Schäff. Recorded only from Preston and Windermere (J.B.H.).**Eupithecia virgaureata**, Crewe. Tolerably common.

Lanc.—Grange, Lytham, &c. (J.B.H.); Crosby (W.J.).

Ches.—Bidston Hill (W.J.); Staley-brushes, not common (J.C.); Wallasey, common (W.J., G. Harker, F.N.P., J.W.E.).

Eupithecia vulgata, Haw. Abundant everywhere.**Eupithecia albipunctata**, Haw. Recorded from Barton, Castle Mill, and Knutsford (J.C.); and from near Manchester (Charles Campbell in E. M. M., v, 280).**Eupithecia absynthiata**, Clerck. Common and generally distributed.**Eupithecia assimilata**, Doubl. Local.

Lanc.—Eccles (J.C.); Preston (J.B.H.); Dutton near Ribchester (J.B.H. in Ent., xiii, 105).

Ches.—Bowdon, Baguley (J.C.); ragwort flowers on the Cheshire (and Lancashire) coast (C.S.G.); Wirral (A.O.W., W.G.); East Cheshire (A.O.W.).

Eupithecia minutata, Guen. Fairly common wherever heath grows, as on the moors and mosses.**Eupithecia expallidata**, Guen. Recorded only from Grange (J.B.H.).**Eupithecia pimpinellata**, Hübn. Local.

Lanc.—Grange (J.B.H.); Manchester district, not common (J.C.).

Ches.—East Cheshire (A.O.W.); Wallasey (J.W.).

Eupithecia constrictata, Guen. Rare.

Lanc.—Grange (J.B.H., E. M. M., vii, 67); Silverdale (J.B.H. in litt.).

Naturalist,

Eupithecia indigata, Hübn. Local, all the localities recorded being in Cheshire, viz.:—Alderley, Lindow Common, Dunham Park, Rudd Heath, Delamere and Chat Moss (J.C.); Bidston (W.J., J.W.E.); Prenton and Storeton (C.S.G.); Prenton, Ness, and Burton (A.O.W.).**Eupithecia abbreviata**, Steph. Generally distributed and fairly common in oak woods.**Eupithecia exigua**, Hübn. Common and generally distributed.**Eupithecia sobrinata**, Hübn. Recorded from Grange and Preston (J.B.H.).**Eupithecia pumilata**, Hübn. Tolerably common.

Lanc.—Preston, Grange, etc. (J.B.H.).

Ches.—Bidston Hill and New Brighton, among gorse (C.S.G.); Bidston (W.J., A.O.W.); Claughton fir-wood and Haddon Wood (A.O.W.); Alderley district, common (H.H.C.); Delamere, abundant (C.S.G., Ent., vi, 452); Wallasey (G.T.P.).

PART VII.—PYRALIDINA.

Fam. PYRALIDIDÆ.

AGLOSSA, Latr.

Aglossa pinguinalis, L. Common in the neighbourhood of stables.**Aglossa cuprealis**, Hübn. Recorded from one (Lancashire) locality only, Barton, by Mr. Chappell.

ASOPIA, Tr. (PYRALIS, L.)

Asopia glaucinalis, L. Scarce.

Lanc.—Barton (J.C.); Hale-bank, one specimen (C.S.G.).

Ches.—Carrington (J.C.); Cheadle Hulme (H.H.C.); New Brighton, on one occasion only (J.C.M.).

Asopia farinalis, L. Abundant about stables and granaries.

SCOPARIA, Haw. (EUDOREA, Curt.)

Scoparia ambigualis, Tr. Apparently generally distributed throughout both counties.**Scoparia cembræ**, Haw. Local, and not common.

Lanc.—Pendleton and Cheetham Hill, near Manchester (J.C.); Windermere, not common (J.B.H.).

Ches.—Birkenhead, one specimen, and Denhall (A.O.W.); Neston and Woodchurch (C.S.G.).

Scoparia dubitalis, Hübn. Recorded from one Lancashire locality, Silverdale, by Mr. Hodgkinson; and from Ledsham, Puddington, and East Cheshire by Mr. Walker.**Scoparia conspiciualis**, Hodg. Not rare on the Lancashire side of Windermere (J.B.H.).**Scoparia murana**, Curt. Local.

Lanc.—Longridge, abundant at light (J.B.H.); Manchester district (Stainton's Manual).

Dec. 1887.

Ches.—Prenton Hill, near Birkenhead (C.S.G.); the wall of Tatton Park (J.C.); Wirral and East Cheshire (A.O.W.).

Scoparia resinea, Haw. Recorded from Croxteth and Allerton Hall (both in Lancashire) by C. S. Gregson; and from the Birkenhead district in Stainton's Manual.

Scoparia truncicolella, Staint. Local.

Lanc.—Windermere, not rare (J.B.H.).

Ches.—Dunham Park and Knutsford (J.C.); Prenton Wood (C.S.G.); Wirral, on Scotch fir (A.O.W.).

Scoparia cratægella, Hübn. Recorded only from Silverdale and Windermere in Lancashire (J.B.H.); and Bowdon and Bucklow Hill in Cheshire (J.C.).

Scoparia frequentella, Sta. (= *mercurella*, L.). Not rare.

Lanc.—Edge Lane and Green Bank, near Liverpool (C.S.G.); Preston district, common (J.B.H.).

Ches.—Bidston Hill (C.S.G., A.O.W.); Ness, Puddington, and East Cheshire (A.O.W.).

Scoparia angustea, Steph. Common and generally distributed.

Scoparia atomalis, Doubl. Recorded from Longridge, near Preston, by Mr. Hodgkinson.

Scoparia pallida, Steph. Local, but common where it does occur.

Lanc.—Chat Moss (J.C.); Simmonswood Moss and Crosby (C.S.G.); Penwortham, near Preston, and Pilling Moss (J.B.H.).

Ches.—Bidston Marsh (C.S.G., J.F.B.); East Cheshire (A.O.W.).

EURRHYPARA, Hübn.

Eurrhypara (Botys) urticata, L. Common and generally distributed.

BOTYS, Tr.

Botys (Ennychia) octomaculata, Fab. Local, and recorded from Lancashire only, viz., Grange (J.B.H. in E.M.M., vii, 87), and Silverdale and Arnside (S.J.C., J.C.M.).

Botys (Ennychia) cingulata, L. Local.

Lanc.—Silverdale, among wild sage (J.B.H.).

Ches.—Wallasey sandhills (J.F.B., C.S.G., G. A. Harker, F.N.P., J.W.E.).

Botys aurata, Scop. = *Pyrausta punicealis*, Schiff. Recorded only from Lancashire, viz., Lydiate, scarce (C.S.G.), and Silverdale (J.C.M.).

Botys (Pyrausta) purpuralis, L. Local.

Lanc.—Ditton (C.S.G.); Silverdale (S.J.C., J.B.H., J.C.M.).

Ches.—Bollin Valley and Knutsford (J.C.); Parkgate and Srtton (C.S.G.); Ledsham and Wallasey (J.F.B.).

Naturalist,

Botys (Pyrausta) ostrinalis, Hübn. Local, but plentiful.

Lanc.—Kenyon (J.C.) and Silverdale (J.C.M.).

Ches.—Knutsford (J.C.); Wallasey sandhills (C.S.G., G. Harker, W.J., F.N.P.).

Botys (Rhodaria) sanguinalis, L. Plentiful among wild thyme on the Wallasey sandhills.

Botys (Herbula) cespitalis, Schiff. Common and generally distributed.

Botys fuscalis, Schiff. Fairly common.

Lanc.—Manchester district, generally distributed (J.C.); Preston district, common among yellow-rattle (J.B.H.).

Ches.—Bidston marsh, plentiful (C.S.G.); Wirral (J.F.B.).

Botys terrealis, Tr. Recorded only from Grange, Lancashire, by J. B. Hodgkinson; and from Puddington, Cheshire, a single specimen, by J. F. Brockholes.

Botys (Ebulea) crocealis, Hübn. Local.

Lanc.—Grange (J.B.H. in E.M.M., x, 40); Preston, among flea-bane (Id., in litt.); Kirkby and Lydiate (C.S.G.); Manchester district, common (Stainton's Manual).

Ches.—Bollin Valley (J.C.).

Botys (Ebulea) sambucalis, Schiff. Common and generally distributed.

Botys (Scopula) ferrugalis, Hübn. Local, and not common.

Lanc.—Crosby, a single specimen (G. A. Harker); Lytham, occasionally (J.B.H.).

Ches.—Bidston, Rock Ferry, Ness, Wallasey (J.F.B.); Saughall Massie (C.S.G.).

Botys (Scopula) prunalis, Schiff. Common and generally distributed.

Botys (Scopula) olivalis, Schiff. Common and generally distributed.

Botys (Scopula) lutealis, Haw. Abundant.

Botys pandalis, Hübn. Recorded only from Castle Mill, Cheshire, by Mr. Chappell, though in Stainton's Manual it is given as occurring in the Manchester district.

EURYCREON, Led. (SPILODES, Guen.)

Eurycreon sticticalis, L. Rare.

Lanc.—Ashton-under-Lyne (J.C.); Chat Moss (W.J.); Lytham (J.B.H.).

Ches.—Wallasey sandhills, seven specimens recorded by C. S. Gregson, this locality being also referred to by J. F. Brockholes and R. S. Edleston, Zool. 1845, p. 1220.

Eurycreon palealis, Schiff. Very rare, and only recorded from Lancashire, viz., Barton Moss, a single specimen (J.C.); a

Dec. 1887.

specimen 'at Manchester' (W. P. Weston, Ent., x, 92); a specimen at Seaforth near Bootle, captured August 1876, by William Whitwick, and recorded by T. I. Roxburgh (Ent., ix, 278).

Eurycreon (Botys) verticalis, L. Common, but local.

Lanc.—Liverpool district (probably Wirral is intended) (W.J.).

Ches.—Chester district (A.O.W.); Marple (J.C.); Wallasey (J.C.M.).

NOMOPHILA, Hübn.

Nomophila noctuella, Schiff. = **Stenopteryx hybridalis**, Hübn.
Common and generally distributed.

PSAMOTIS, Hübn. (LEMIODES, Guen.)

Psamotis pulveralis, Hübn. The only record of the occurrence of this species in either of the two counties is 'Stockport, scarce' (R. S. Edleston, Zool., 1845, p. 1220).

PIONEA, Guen.

Pionea forficalis, L. Frequent wherever there are kitchen-gardens.

HYDROCAMPA, Guen.

Hydrocampa stagnata, Don. Fairly common and generally distributed.

Hydrocampa nymphaea, L. Common everywhere.

PARAPONYX, Hübn.

Paraponyx stratiotata, L. Local.

Lanc.—Crosby (G. Harker); Old Trafford (J.C.); Preston Canal, near Salwick (J.B.H.); Silverdale (J.C.M.).

Ches.—Bidston Marsh (C.S.G., J.F.B., F.N.P.); Chester and Ness (A.O.W.); Delamere (J.C.); Dunham Park (J.C.); near Liscard (C.S.G.).

CATACLYSTA, Hübn.

Cataclysta lemnata, L. Abundant everywhere.

Fam. CHILONIDÆ.

SCHÆNOBIUS, Dup.

Schœnobijs forficellus, Thunb. Somewhat local.

Lanc.—Pits near Preston (J.B.H.); Pendleton and Withington.

Ches.—Bidston Marsh and Oxton, scarce; commoner at Little Neston and Burton; Chester, by the canal, common (A.O.W.); on the canal bank between Macclesfield and Marple, also Cheadle Hulme (H.H.C.); most swampy places, especially at Liscard (C.S.G.).

Schœnobijs mucronellus, Schiff. Rare. Liverpool district, probably Bidston marsh (C.S.G.); one specimen among sedges, taken by T. Cooper, on the canal, Preston (J.B.H.).

Naturalist,

CHILO, Zinck.

Chilo phragmitellus, Hübn. Recorded from Crosby Marsh (G. A. Harker) and from Bidston Marsh (id., F.N.P., J.F.B.).

Fam. CRAMBIDÆ.

CRAMBUS, Fab.

Crambus hamellus, Thunb. Local.

Lanc.—Chat Moss (J.C.).

Ches.—Carrington Moss (J.B.H.); East Cheshire (A.O.W.); rough plantations beyond Eastham (C.S.G.); Lindow Common and Wilmslow (J.C.M.).

Crambus pascuellus, L. Heaths and mosses, plentiful.

Crambus pratellus, L. Abundant.

Crambus dumetellus, Hübn. Local.

Lanc.—Chat Moss (J.C.).

Ches.—Wallasey sandhills (J.F.B., C.S.G.).

Crambus hortuellus, Hübn. Common, but local.

Lanc.—Prestwich (J.C.M.) and the mosses of the Manchester district (J.C.); near Southport (J.B.H.).

Ches.—Lindow Common and Cheadle, abundant but local (H.H.C.); New Brighton (C.S.G.).

Crambus falsellus, Schiff. Very local.

Lanc.—Wall at Hough End Hall, Withington (J.C.).

Ches.—Moss-covered walls near Hooton (C.S.G.); Ness and East Cheshire (A.O.W.).

Crambus pinellus, L. = **pinetellus**, L. Not common.

Lanc.—Barlow Moor and Withington (J.C.); Grange (J.B.H. in E.M.M., vii, p. 87); lanes round Didsbury (Id., in litt.).

Ches.—Near Birkenhead (C.S.G.); Delamere Forest (J.C.M., F.N.P.); East Cheshire (A.O.W.); Lindow Common, on one occasion only (H.H.C.).

Crambus margaritellus, Hübn. Common on the heaths and mosses of Cheshire and South-West Lancashire.

Crambus latistrius, Haw. Local.

Lanc.—Crosby sandhills (C.S.G., W.J.).

Ches.—Wallasey (J.B.H., J.C.M.); Claughton Fir-wood (J.F.B., C.S.G.).

Crambus furcatellus, Zett. A mountain species, recorded from Coniston Old Man by Mr. Hodgkinson.

Crambus culmellus, L. Abundant everywhere.

Crambus inquinatellus, Schiff. Local.

Lanc.—Recorded only from Silverdale (J.B.H.).

Ches.—The Kennel Wood, Hartford (G. Harker, F.N.P.); Hooton (C.S.G.); Wallasey (J.C.).

Crambus geniculellus, Haw. Common on the sandhills of the Lancashire and Cheshire coast.

Crambus contaminellus, Hübn. Local.

Lanc.—Salt marshes near Preston (J.B.H.); near Grange (id. in E.M.M., vii, p. 87).

Ches.—Dee Marsh near Puddington, and Denhall, scarce (A.O.W.).

Crambus tristellus, S.V. Abundant everywhere.

Crambus selasellus, Hübn. Very local.

Lanc.—Banks of the river Alt at Sefton (C.S.G.); Chorlton-cum-Hardy (J.C.); Salt marshes at Preston and Fleetwood (J.B.H. in litt. and Intell., 1858, i, 146).

Ches.—Dee marsh near Puddington (A.O.W.); Heatley (J.C.).

Crambus perlellus, Scop. Local.

Lanc.—Chat Moss (J.C.); Kirkby Moss (C.S.G., G. Harker); Salt marsh near Preston (J.B.H.).

Ches.—Bidston Marsh (F.N.P.); Bidston, Bromborough, Ince, and Puddington, in marshes (A.O.W.).

Crambus Warringtonellus, Staint. On the Lancashire and Cheshire mosses and heaths, often abundant.

EROMENE, Hübn.

Eromene ocella, Haw. Recorded only from Eastham Wood (C.S.G., J.B.H.) and Cheshire coast (C.S.G., Ent., iv, pp. 249, 263).

Fam. PHYCIDEÆ.

DIORYCTRIA, Zell.

Dioryctria abietella, Zk. Recorded from one locality only in each county, viz., Silverdale (J.B.H.) and Bidston (W.J.).

NEPHOPTERYX, Zell.

Nephopteryx spissicella, Fab. = *roborella*, Zinck. Recorded only from Dunham Park, Cheshire (J.C.).

PEMPELIA, Hübn.

Pempelia betulæ, Göze. Recorded only from Lancashire, viz., Chat Moss (J.B.H.); Botany Bay Wood and Woollen Wood, (J.C.).

Pempelia fusca, Haw. = *carbonariella*, Ffisch. On heaths and mosses, plentiful upon the burnt parts.

Pempelia palumbella, Fab. Heaths and mosses, plentiful.

Pempelia adornatella, Tr. = *dilutella*, Hübn. Recorded from two localities only—Prescot in Lancashire, and Prenton in Cheshire, by Mr. Gregson.

CRYPTOBLABES, Zell.

Cryptoblabes bistriga, Haw. Scarce.

Lanc.—Once in Brockholes Wood, near Preston (J.B.H.); Woolton Wood, near Liverpool, on a single occasion (C.S.G.).

Ches.—Bidston Park Wood (J.F.B.); Dunham Park (J.C.).

ACROBASIS, Zell.

Acrobasis consociella, Hübn. Rare.

Lanc.—Recorded only from Silverdale (J.B.H.).

Ches.—One specimen taken in Clifton Park, Birkenhead (J.F.B.); 'bred from oak-leaves collected at the rough plantation beyond Hooton' (C.S.G.).

Acrobasis tumidella, Zinck. Rare. Mr. Chappell mentions it as rare on Chat Moss, and Mr. Gregson refers to a specimen taken somewhere in Cheshire, in the Liverpool district.

MYELOIS, Zell.

Myelois advenella, Zinck. Recorded only by Mr. Hodgkinson from the banks of the Wyre.

EUZOPHERA, Zell.

(*Euzophera pinguis*, Haw. Recorded from the Birkenhead district in Stainton's Manual, but not mentioned in any of our local lists.)

HOMŒOSOMA, Curt.

Homœosoma nimbella, Zell. Local.

Lanc.—Morecambe (J.B.H.).

Ches.—Wallasey sandhills (J.F.B., C.S.G.); Flaybrick Hill (C.S.G.).

ANERASTIA, Hübn.

Anerastia lotella, Hübn. Abundant, but local, on the Wallasey sandhills. Also recorded from the Lytham sandhills by Mr. Hodgkinson.

EPHESTIA, Guen.

Ephestia elutella, Hübn. Plentiful in the neighbourhood of warehouses in Liverpool, Manchester, Preston, and Knutsford.

Ephestia ficella, Doug. Prestwich (J.C.M.).

Ephestia semirufa, Haw. Plentiful in some Liverpool warehouses (C.S.G.).

Ephestia passulella, Bar. Abundant in a mill at Preston, among oil-cake (J.B.H.).

Ephestia ficulella, Bar. Liverpool warehouses (C.S.G., Ent., v, 385).

Ephestia interpunctella, Hübn. Liverpool warehouses (C.S.G., J.B.H.).

Fam. GALLERIE.

APHOMIA, Hübn.

Aphomia sociella, L. Frequent.

Lanc.—Banks of the Wyre.

Ches.—Lanes about Wallasey (W.J.); comes to sugar in the plantations at Wallasey (C.S.G.); Burton, Ness, and Puddington (A.O.W.).

ACHRŒA, Hübn.

Achrœa grisella, Fab. = **alvearia**, Fab. Recorded only, as infrequent where bees are kept in the Liverpool district, by Mr. Gregson.

TORTRICINA.

The initials J.H.T., which here appear for the first time, are those of Mr. J. H. Threllfall, of Preston, to whom I am indebted for much valuable information about our local micro-lepidoptera.

RHACODIA, Hüb.

Rhacodia (Teras) caudana, F. Generally distributed.

Lanc.—Chat Moss (J.C.); Croxteth Woods, near Liverpool (C.S.G.); Fylde district (J.H.T.); Preston (J.B.H.).

Ches.—Prenton, in profusion (C.S.G.); Wirral (J.F.B.).

TERAS, Tr.

(Including *Peronea*, Curt., *Leptogramma*, Curt., and *Dictyopteryx*, Steph.).**Teras umbrana**, Hüb. Rarely among sloe at Grange (J.B.H.).**Teras hastiana**, L. Abundant, but local.

Lanc.—Chat Moss (J.C.); Farrington (J.H.T.); Longridge and Lytham (J.B.H.).

Ches.—Throughout Wirral (J.F.B.); abundant among dwarf sallows on the Wallasey sandhills (J.C., J.W.E.).

Teras maccana, Tr. Manchester (Stainton's Manual, ii. 233). Not recorded by any of the Manchester entomologists.**Teras mixtana**, Hb. Common on heaths and mosses.

Lanc.—Chat Moss (J.C.); Farrington and Pilling Mosses (J.H.T.); Longridge (J.B.H., J.H.T.).

Ches.—Bidston Hill (C.S.G., J.W.E.); Delamere Forest (C.S.G., Ent., vi. 452).

Teras logiana, Schiff. = **tristana**, Hb. Scarce, being recorded only from a single locality in Lancashire, viz., Windermere, among *Viburnum lantana* (J.B.H.), and from two localities in Cheshire: Eastham, only a few taken (C.S.G.), and Rock Ferry (J.F.B.).**Teras permutatana**, Dup. First recorded as British by Nicholas Cooke (Zool., 1848, 2271), on the authority of a specimen

Naturalist.

captured during August at New Brighton. The Wallasey sandhills, where it occurs commonly in some seasons among *Rosa spinosissima*, remain almost the only British locality for this handsome species.

Teras variegana, Schiff. Abundant everywhere.**Teras literana**, L. Not common.

Lanc.—Liverpool district, in old woods where there are lichen-covered thorns (C.S.G.); Windermere (J.B.H.).

Ches.—Dunham Park (J.C.); Wirral, occasionally (J.F.B.).

Teras lipsiana, Schiff. Recorded only from Grange (J.B.H.).**Teras sponsana**, F. = **favillaceana**, Hb. Tolerably common.

Lanc.—Barton Moss and Prestwich (J.C.); Liverpool district, common among beeches (C.S.G., J.W.E.); Preston (J.B.H.); Lake side, Windermere (J.H.T.).

Ches.—Alderley and Cheadle, common (H.H.C.); Dunham Park (J.C.); Wirral, common (J.F.B.).

Teras schalleriana, L. Generally distributed, but scarcely common.

Lanc.—Chat Moss (J.C.); Preston (J.B.H., J.H.T.).

Ches.—About Prenton (C.S.G.); Staleybrushes (J.C.); Wirral (J.F.B.).

Teras comparana, Hüb. Abundant, but local.

Lanc.—Liverpool district, common (C.S.G.); Preston (J.B.H.).

Ches.—Wirral (J.F.B.).

VAR. Proteana, H.S. = **potentillana**, Cooke. First described as British by Benjamin Cooke (E.M.M., vii. 42), from specimens found among strawberries near Liverpool in 1850. Recorded as common at West Derby (C.S.G.); and as occurring at Withington (J.C.), and New Brighton and Birkenhead (J.F.B.).

Teras comariana, Zell. Not common, being recorded only from the Preston district (J.B.H. and J.H.T.).**Teras perplexana**, Bar. Recorded from near Preston (J.B.H.).**Teras aspersana**, Hb. Scarce.

Lanc.—Grange (J.H.T.); Longridge (J.B.H.).

Ches.—Wallasey (J.F.B., C.S.G.); New Brighton (Stainton's Manual, ii. 235).

Teras shepherdana, Steph. Recorded only from Lytham (J.B.H., Intell., 1858, i. 146).

Teras ferrugana, Tr. Tolerably common, but local.

Lanc.—Grange (J.H.T.); Longridge (J.B.H.).

Ches.—Eastham, common (C.S.G.); Wirral (J.F.B.).

Teras caledoniana, Steph. Common on the moors and mosses.

Lanc.—Longridge (J.B.H., J.H.T.); Ribchester, abundant (J.B.H., Ent., xiii. 105); Lancashire mosses, among *Myrica gale* (C.S.G.).

Ches.—Staleybrushes (J.C.).

Teras forskaleana, L. Generally distributed.

Lanc.—Preston (J.B.H.); Prestwich (J.C.).

Ches.—Cheadle Hulme, rare (H.H.C.); Dunham Park (J.C.); Wirral (J.F.B., J.W.E.).

Teras holmiana, L. Local, but common where it occurs.

Lanc.—Irlam, Glazebrook, and Barlow Moor (J.C.); Levenshulme (H.H.C.); Preston (J.B.H., J.H.T.); near Sefton Park, Liverpool (J.W.E.).

Ches.—Cheadle Hulme, not common (H.H.C.); thorn hedges near New Brighton (C.S.G.); Tranmere (J.F.B.); near Wallasey (J.W.E.).

Teras contaminana, Hüb. Abundant everywhere.

TORTRIX, Tr.

A. CACECIA, Hb. (LOZOTÆNIA, Steph.).

Tortrix podana, Scop. = *pyrastrana*, Hüb., *fulvana*, Wilk. Common and generally distributed.

Tortrix xylosteanana, L. Common everywhere.

Tortrix rosana, L. Common everywhere.

Tortrix sorbiana, Hüb. 'Four specimens from Little Britten Wood,' near Liverpool (C.S.G.); Preston and Longridge (J.B.H., J.H.T.).

Tortrix costana, F. Fairly common, and generally distributed throughout both counties.

B. PANDEMIS, Hüb.

Tortrix corylana, F. Local.

Lanc.—Barton Moss (J.C.); Preston (J.B.H., J.H.T.).

Ches.—Bromborough Woods (J.W.E.); Cheadle Hulme (H.H.C.); Dunham Park and Bowdon (J.C.); Wirral (J.F.B.).

Tortrix ribeana, Hüb. Common and generally distributed.

Tortrix heparana, Schiff. Common and generally distributed.

Naturalist.

C. PTYCHOLOMA, Steph.

Tortrix lecheana, L. Generally distributed.

Lanc.—Preston (J.B.H., J.H.T.); Prestwich (J.C.).

Ches.—Bramall, not common (H.H.C.); Dunham Park (J.C.); Eastham Wood (J.W.E.); Puddington (J.F.B.).

D. IDIOGRAPHIS, Led. (HALONOTA, Steph.).

Tortrix inopiana, Haw. Recorded only from the Preston district (J.B.H.).

E. LOZOTÆNIA, H.S.

Tortrix musculana, Hüb. Common and generally distributed.

Tortrix unifasciana, Dup. Common and generally distributed.

G. LOPHODERUS, Steph.

Tortrix (Sericoris) politana, Haw. = *lepidana*, Curt. Common on the mosses.

Lanc.—Chat Moss (J.C.); Lancashire mosses (C.S.G.); Longridge (J.B.H.); Pilling Moss (J.H.T.).

Ches.—Staleybrushes (J.B.H.); Wirral, common (J.F.B.).

Tortrix (Eulia) ministrana, Hüb. Common and generally distributed in woods.

H. HETEROGNOMON, Led.

Tortrix conwayana, F. Generally distributed.

Tortrix bergmanniana, L. Common among roses throughout both counties.

Tortrix lœflingiana, L. Very local.

Lanc.—Barlow Moor and Irlam (J.C.); Preston (J.B.H.); Silverdale (J.H.T.).

Ches.—Wallasey, near the church (J.W.E.); Wirral (J.F.B.).

Tortrix viridana, L. Abundant everywhere where oaks grow.

Tortrix fosterana, F. Common and generally distributed.

Tortrix viburniana, F. Local, on the moors and mosses.

Lanc.—Chat Moss (J.C.); Fleetwood (J.H.T.); Lancashire Mosses (C.S.G.); Preston (J.B.H.).

Ches.—Abundant but local on the Cheshire moors (J.C.); Stockport, scarce (R. S. Edleston, Zool., 1845, 1220).

Tortrix paleana, Hüb. = *icterana*, Froel. Not very common, but widely distributed.

Lanc.—Aigburth, near Liverpool, bred from colt's-foot (J.W.E.); Fleetwood (J.H.T.); Glazebrook and Mode Wheel (J.C.); Preston (J.B.H.).

Ches.—Bramall, very local (H.H.C.); Knutsford (J.C.); Wallasey (J.W.E.); Wirral (J.F.B.).

Tortrix (Clepsia) rusticana, Tr. Scarce.

Lanc.—Chat Moss (J.C.); Longridge (J.B.H.); Simmons-wood Moss (C.S.G.).

Ches.—Bidston Hill, a single specimen (J.F.B.); Lindow Common (J.C.).

I. BATODES, Guen.

Tortrix angustiorana, Haw. Generally distributed and fairly common.

Lanc.—Chorlton and Withington (J.C.); Grange (J.H.T.); Liverpool district, local (C.S.G.); Preston, common (J.B.H.).

Ches.—Dunham Park (J.C.); Wirral (J.F.B.).

L. DICHELIA, Guen.

Tortrix grotiana, F. Local, and recorded only from localities in Lancashire, viz., Barlow Moor and Irlam (J.C.); dry parts of the Lancashire mosses (C.S.G.); and Preston (J.B.H.).

M. AMPHYSA, Curt.

Tortrix gerningana, Schiff. Common on the moors and mosses.

Lanc.—Chat Moss (J.C., R. S. Edleston, Zool. 1845, 1220); Longridge (J.B.H.); Risley Moss (C.S.G., E.M.M., ix. 176); Silverdale (J.H.T.).

Ches.—Bidston Hill, abundant (C.S.G.); Bidston and Oxtan heaths (J.F.B.); Lindow Moss (H.H.C.); Lindow Common and Staley-brushes (J.C.).

Tortrix prodromana, Hüb. Very local on the moors.

Lanc.—Longridge (J.B.H.); Withnell (J.B.H., J.H.T.).

Ches.—Staley-brushes (J.C., J.B.H., E.M.M., ii. 159); Stourton (C.S.G.).

N. CAPUA, Steph.

Tortrix favillaceana, Hüb. = **ochraceana**, Steph. Very scarce and local. The only records are from Lancashire: the Boor's Wood, Hale (C.S.G.), and Windermere, among juniper (J.B.H.).

SCIAPHILA, Tr.

A. ABLABIA, Steph.

Sciaphila osseana, Scop. = **pratana**, Hüb. Local and not common.

Lanc.—Chat Moss (J.C.); Longridge (J.B.H.); Silverdale (J.H.T.).

Ches.—Bidston Marsh and Ledsham (J.F.B.); Knutsford (J.C.).

B. SCIAPHILA, Tr.

Sciaphila longana, Haw. = **ictericana**, Haw. Tolerably common and generally distributed over both counties.

Sciaphila penziana, Hüb.

VAR. (sp. ?) **conspersana**, Doug. Recorded from Grange (J.H.T.) and from Preston and Longridge (J.B.H.). No Cheshire localities have been noted.

Sciaphila octomaculana, Doub. Scarce.

Lanc.—Recorded only from Longridge (J.B.H.).

Ches.—A few at Stourton (C.S.G.); Wirral (J.F.B.).

Sciaphila chrysanthæana, Dup. = **alternella**, Wilk. Scarce.

Lanc.—Preston and Longridge (J.B.H.).

Ches.—Preston, near Birkenhead, scarce (C.S.G.).

Sciaphila wahlbomiana, L.

VAR. **virgaureana**, Tr. Common and generally distributed.

VAR. **subjectana**, Guen. Abundant everywhere.

Sciaphila pasivana, Hüb. = **pascuana**, Hüb. Recorded only from Preston and Longridge (J.B.H.).

Sciaphila sinuana, Steph. Recorded from Windermere (J.B.H.).

Sciaphila abrasana, Dup. Preston (J.B.H.).

CHEIMATOPHILA, Steph.

Cheimatophila tortricella, Hüb. = (**Tortricodes**) **hyemana**, Hüb. Abundant in oak woods in spring.

EXAPATE, Hüb.

Exapate congelatella, Clerck = **gelatella**, L. Local.

Lanc.—Taken at Rainhill in 1852 (C.S.G.).

Ches.—Handforth, rare (H.H.C.); Staley-brushes (C.S.G.).

OLINDIA, Guen.

Olindia (Sciaphila) hybridana, Hüb. Tolerably common.

Lanc.—Manchester district, local (J.C.); Preston (J.B.H.).

Ches.—Cheadle (H.H.C.); Tranmere and Burton (J.F.B.); Wallasey and New Brighton (C.S.G.).

Olindia ulmana, Hüb. Not common.

Lanc.—Brockholes Wood near Preston and Windermere (J.B.H.).

Ches.—Upton and Parkgate (C.S.G.).

COCHYLIS, Tr.

- Cochylis* (*Xanthosetia*) *hamana*, L. Common and generally distributed.
- Cochylis* (*Xanthosetia*) *zægana*, L. Common and generally distributed.
- Cochylis* (*Eupœcilia*) *maculosana*, Haw. Not common.
Lanc.—The only locality given is Brockholes Wood, near Preston (J.B.H.).
Ches.—Eastham Wood, on flowers of *Hyacinthus non-scriptus* (C.S.G.); Knutsford (J.C.).
- Cochylis* (*Eupœcilia*) *griseana*, Haw. Recorded only from Martinmere, near Blackpool (J.B.H.), and from Bidston Marsh (J.F.B.).
- Cochylis* (*Eupœcilia*) *affinitana*, Dougl. Scarce, being recorded only from the Wyre district (J.B.H., J.H.T.), and from marshy places around Liverpool (C.S.G.).
- Cochylis* (*Eupœcilia*) *vectisana*, Westw. Found only in salt-marshes on the Wyre about Fleetwood (J.B.H., J.H.T.; see also J.B.H. in E.M.M., ix. 162).
- Cochylis* (*Eupœcilia*) *cruentana*, Froel. = *angustana*, Hüb. Tolerably common on the moors and mosses.
Lanc.—Farrington and Pilling Mosses (J.H.T.); Longridge (J.B.H.); Lancashire mosses, general (J.C.).
Ches.—Bidston Hill (J.W.E.); Claughton, near Birkenhead (J.F.B.); Lindow Moss, abundant (H.H.C.).
- Cochylis* (*Lozopera*) *straminea*, Haw. Local, but common where it occurs.
Lanc.—Ashton-on-Ribble (J.B.H.); Preston district (J.H.T.); Liverpool district, common (C.S.G.).
Ches.—Cheadle, abundant but local (H.H.C.); Knutsford and Castle Mill (J.C.); Stockport, scarce (R. S. Edleston, Zool., 1845, 1220); Wirral (J.F.B.).
- Cochylis* *hartmanniana*, Clerck. = (*Argyrolepis* *baumanniana*, Schiff. Local.
Lanc.—Longridge (J.B.H.); Preston district (J.H.T.).
Ches.—Bidston (C.S.G.); Knutsford and near Castle Mill (J.C.); Stockport (R. S. Edleston, Zool. 1845, 1220).
- Cochylis* *badiana*, Hüb. Not common.
Lanc.—Grange (J.H.T.); Longridge (J.B.H.).
Ches.—Bidston (C.S.G.).
- VAR. (sp.?) *cnicana*, Doub. Recorded from Grange (J.H.T.); Windermere (J.B.H.); and Bidston Marsh (C.S.G.).

Naturalist,

- Cochylis* *francillana*, Fab. Recorded from one locality only Lytham (J.H.T.).
- Cochylis* *dilucidana*, Steph. Rare, both localities being in Lancashire, viz., Blackpool (J.B.H.) and Lytham (J.B.H., J.H.T.).
- Cochylis* *smeathmanniana*, F. Recorded by Mr. Gregson as scarce in the Liverpool district.
- Cochylis* *ciliella*, Hüb. = *ruficiliana*, Haw. Local and not common.
Lanc.—Grange (J.H.T., J.B.H., E.M.M., x. 40); Longridge (J.B.H.).
Ches.—Puddington (J.F.B.); Stourton and Wallasey (C.S.G.).
- Cochylis* (*Eupœcilia*) *nana*, Haw. Recorded only from two localities, both in Lancashire, viz., Grange (J.H.T.) and Chat Moss (J.C.).
- Cochylis* (*Eupœcilia*) *roseana*, Haw. The insect has been bred by Mr. Gregson from teasle-heads gathered on Bidston Marsh, from whence it has been also recorded by Mr. Brockholes.
- Cochylis* (*Eupœcilia*) *rupicola*, Curt. Scarce.
Lanc.—Brockholes Wood, near Preston (J.B.H.); Ditton Marsh (C.S.G.).
Ches.—Bidston Marsh (C.S.G.) and Wirral, scarce (J.F.B.).
- Cochylis* (*Eupœcilia*) *notulana*, Zell. Recorded only from Martinmere by Mr. Hodgkinson.
- Cochylis* *ambiguana*, Froel. = *albicapitana*, Cooke. Taken at Wallasey by Nicholas Cooke and recorded by him, Zool., 1861, p. 7800. Also recorded from Wallasey by Mr. Brockholes.
- Cochylis* *atricapitana*, Steph. Local and confined to the coast, but common where it occurs.
Lanc.—Blackpool (J.C., J.H.T.); Crosby (J.W.E.); Lytham (J.B.H.).
Ches.—Birkenhead (J.F.B.); Wallasey (C.S.G.).
- RETINIA, Guen.
- Retinia* *pinivorana*, Zell. Not rare among firs.
Lanc.—Chat Moss (J.C.); Lancashire mosses (J.B.H.); Silverdale (J.H.T.).
Ches.—Bidston Hill and Burton (J.F.B.); Bidston (C.S.G.); Lindow Common and Rudd Heath (J.C.).
- Retinia* *turionana*, Hüb. Recorded only from Rudd Heath (R. S. Edleston, Zool., ii, 735).

Jan. 1889.

Retinia Buoliana, Schiff. Common where firs grow.

VAR. (Sp.?) *pinicolana*, Doub. In the same localities as the type.

PENTHINA, Tr.

Penthina profundana, F. Recorded only from a single (Lancashire) locality, viz., Hoghton (J.H.T.).

Penthina salicella, L. Not common.

Lanc.—Near Huyton (C.S.G.); one at Penwortham, near Preston (J.B.H.); Preston (J.H.T.).

Ches.—Patrick Wood, Bromborough (J.F.B.); Woolden Hall, Glazebrook (J.C.).

Penthina semifasciana, Haw. Recorded from near Fleetwood (J.B.H.) and from the Crosby sandhills (C.S.G.).

Penthina scriptana, Hüb. = *Hartmanniana*, L. Mr. Hodgkinson records the capture of a specimen near the Ferry Hotel, Windermere.

Penthina corticana, Hüb. Local.

Lanc.—Chat Moss (J.C.); Grange and Silverdale (J.H.T.); Kirkby and Hale (C.S.G.); Preston (J.B.H.).

Ches.—Wirral (J.F.B.).

Penthina betuletana, Haw. Local, but common where it occurs.

Lanc.—Chat Moss (J.C.); Grange and Silverdale (J.H.T.); Kirkby (C.S.G.); Preston (J.B.H.).

Ches.—Lindow Common (J.C.); Cheadle district, local (H.H.C.); Wirral (J.F.B.).

Penthina sororculana, Zett. = *prælongana*, Guen. Not common.

Lanc.—Grange and Silverdale (J.H.T.); Preston (J.B.H.).

Ches.—Bidston, a single specimen (J.F.B.); Cheadle Hulme (H.H.C.).

Penthina sauciana, Hüb. Common on the moors.

Lanc.—Longridge (J.B.H., J.H.T.); near Ribchester, abundant (J.B.H., Ent., xiii. 105).

Ches.—Cheshire moors, local (H.H.C.); Staley-brushes (J.C.).

Penthina variegana, Hüb. = *cynosbatella*, Wilk. Abundant everywhere.

Penthina pruniana, Hüb. Common everywhere.

Penthina ochroleucana, Hüb. Tolerably common.

Lanc.—Irlam, near Manchester (J.C.); Liverpool district (C.S.G.); Preston (J.B.H., J.H.T.).

Ches.—Wirral (J.F.B.).

Penthina dimidiana, Hüb. Not rare on the Lancashire mosses. Near Middleton (J.C.); Preston (J.B.H.); Risley and Formby Mosses (C.S.G., E.M.M., ix. 176); Simmonswood Moss (C.S.G.).

Penthina oblongana, Haw. = *marginana* Haw. Local, and not common.

Lanc.—Simmonswood Moss, scarce (C.S.G.); Windermere (J.B.H.).

Ches.—Knutsford (J.C.).

Penthina sellana, Hüb. Recorded from Windermere by Mr. Hodgkinson.

Penthina nigricostana, Haw. Recorded from Brockholes Wood, near Preston, by Mr. Hodgkinson.

Penthina postremana, Zell. Windermere (J.B.H.) is about the only British locality for this species.

Penthina mygindana, Schiff. = (*Euchromia*) *fulvipunctana*, Haw. Local, on the moors and mosses.

Lanc.—Chat Moss (J.B.H.).

Ches.—Staley-brushes (J.C., J.B.H.).

Penthina rufana, Scop. Recorded only from Grange (J.B.H., J.H.T.).

Penthina striana, Schiff. Local.

Lanc.—Gill brook, near West Derby (C.S.G.); Preston and Wyreside (J.H.T.).

Ches.—Bidston Marsh (J.F.B., C.S.G.); Claughton (J.F.B.).

Penthina (*Mixodia*) *Schulziana*, Zell. Common on the mosses.

Lanc.—Chat Moss (J.C.); Pilling Moss (J.B.H.); Silverdale (J.H.T.); Simmonswood Moss (C.S.G.).

Ches.—Knutsford and Rudd Heath (J.C.).

Penthina olivana, Tr. = *micana*, Froel. Recorded only from Pilling Moss (J.B.H., J.H.T.).

Penthina (*Roxana*) *arcuella*, Clerck. Recorded from a single locality in each county, viz., Windermere (J.B.H.) and Hooton (C.S.G.).

- Penthina rivulana*, Scop. = *conchana*, Hüb. Tolerably common.
 Lanc.—Hale marsh, abundant (C.S.G.); Lytham, Longridge, etc. (J.B.H.); Preston (J.H.T.).
 Ches.—Bramall, local (H.H.C.); Knutsford (J.C.); Wallasey sandhills (C.S.G.).
- Penthina urticana*, Hüb. Abundant everywhere.
- Penthina lacunana*, Dup. Abundant everywhere.
- Penthina cespitana*, Hüb. Local.
 Lanc.—Grange (J.B.H.); Preston (J.H.T.).
 Ches.—Knutsford (J.C.); Wallasey sandhills (J.F.B., C.S.G.).
- Penthina bifasciana*, Haw. Rare.
 Lanc.—Chat Moss, one specimen (J.C.); Grange (J.B.H.).
 Ches.—Hoylelake, two specimens (C.S.G.).
- Penthina trifoliana*, H.S. = *ericetana*, Westw. Not common.
 Lanc.—Liverpool district (C.S.G.); Preston (J.B.H., J.H.T.).
 Ches.—Ledsham (J.F.B.).
- Penthina antiquana*, Hüb. Local and not common.
 Lanc.—Preston (J.B.H., J.H.T.).
 Ches.—Bidston Marsh (C.S.G.); Wirral, not common (J.F.B.).

ASPIS, Steph.

- Aspis Udmanniana*, L. Common and generally distributed.

APHELIA, Steph. (BACTRA, St.).

- Aphelia lanceolana*, Hüb. Generally distributed among rushes.
- Aphelia furfurana*, Haw. Recorded only from two localities, both on the Cheshire side of the Mersey, but where the insect is common:—Bidston Marsh (J.F.B.); Pits near Liscard (C.S.G., J.W.E.).

EUDEMIS, Hüb.

- Eudemis (Sericoris) littoralis*, Curt. Local, on salt-marshes.
 Lanc.—Fylde district (J.H.T.); Preston and banks of Wyre (J.B.H.).
 Ches.—Puddington Marsh (J.F.B.); Wallasey (J.C.).

LOBESIA, Guen.

- Lobesia permixtana*, Hüb. = *reliquana*, Hüb. Recorded only from North Lancashire:—Grange (J.B.H. in E.M.M., x. 40) and Windermere (J.B.H.).

Naturalist,

GRAPHOLITHA, Tr.

B. PÆDISCA, Led.

- Grapholitha expallidana*, Haw. Recorded only from Grange, by Mr. Hodgkinson.
- Grapholitha Scopoliana*, Haw. Scarce.
 Lanc.—Grange (J.B.H.); Preston (J.H.T.).
 Ches.—Three specimens at Puddington (J.F.B.).
- Grapholitha Hohenwartiana*, Tr. Not common.
 Lanc.—Grange (J.B.H.); Liverpool district (C.S.G.); Withington (J.C.).
 Ches.—Wirral (J.F.B.).
- Grapholitha cæcimaculana*, Hüb. A single specimen is recorded from Tranmere by J. F. Brockholes.
- Grapholitha tedella*, Clerck = *Hyrciniana*, Wilk. Local.
 Lanc.—Croxteth Park, near Liverpool (C.S.G.); Grange (J.H.T.); Windermere (J.B.H.).
 Ches.—Bidston and Puddington (J.F.B.); Knutsford (J.C.).
- Grapholitha proximana*, H.S. = *distinctana* Wilk. Recorded only from Windermere (J.B.H., and Stainton's Manual, ii. 216).
- Grapholitha subocellana*, Don. = *campoliliana*, Tr. Local.
 Lanc.—Chat Moss (J.C.); Liverpool district (C.S.G.); Preston (J.B.H.).
 Ches.—Wirral (J.F.B.).
- Grapholitha nisella*, Clerck. Local.
 Lanc.—Preston (J.B.H., J.H.T.).
 Ches.—Puddington, scarce (J.F.B.); Hooton and Spital (C.S.G.).
- Grapholitha cinerana*, Haw. Recorded from Preston by J. B. Hodgkinson.
- Grapholitha Penkleriana*, F. Local.
 Lanc.—Preston (J.B.H., J.H.T.).
 Ches.—Flaybrick Hill near Birkenhead (C.S.G.); Knutsford (J.C.).
- Grapholitha ophthalmicana*, Hüb. Local and not common.
 Lanc.—Chat Moss (J.C.); Longridge (J.B.H., J.H.T.); near Ribchester (J.B.H., Ent., xiii. 105).
 Ches.—Tranmere (J.F.B., C.S.G.); Rock Ferry (J.F.B.).

Grapholitha solandriana, L. Not very common.

Lanc.—Chat Moss (J.C.); Longridge (J.B.H.); Preston (J.H.T.); Liverpool district, among birches (C.S.G.).

Ches.—Carrington Moss and Lindow Common (J.C.); Wirral (J.F.B.).

Grapholitha semifuscana, Steph. Recorded from two Lancashire localities:—the Fylde district (J.H.T.) and Longridge (J.B.H.).

Grapholitha sordidana, Hüb. = *stabilana*, Steph. Local.

Lanc.—Longridge (J.B.H.).

Ches.—Knutsford (J.C.); Wallasey sand-hills (C.S.G.).

Grapholitha bilunana, Haw. Tolerably common.

Lanc.—Chat Moss (J.C.); Croxteth, near Liverpool (C.S.G.); Grange (J.H.T.); Levenshulme (H.H.C.); Longridge and Windermere (J.B.H.).

Ches.—Bidston (J.F.B.); Bramall, common (H.H.C.); Prenton (C.S.G.).

Grapholitha tetraquetra, Haw. Local, and scarcely common.

Lanc.—Croxteth (C.S.G.); Longridge (J.B.H., J.H.T.).

Ches.—Wirral (J.F.B.).

Grapholitha immundana, Haw. Local.

Lanc.—Deysbrook and Walton, near Liverpool (C.S.G.); Longridge and Preston (J.B.H., J.H.T.).

Ches.—Wirral (J.F.B.).

Grapholitha similana, Hüb. = (*Halonota*) *bimaculana*, Don. Somewhat local.

Lanc.—Chat Moss (J.C.); Longridge (J.B.H.); Preston (J.H.T.).

Ches.—Cheadle, local (H.H.C.); Wallasey (J.W.E.).

Grapholitha incarnatana, Hüb. = (*Spilonota*) *amœnana*, Hüb.

A very abundant species on the Wallasey sand-hills; also recorded from Grange by J. B. Hodgkinson.

Grapholitha (*Spilonota*) *trimaculana*, Haw. Common and generally distributed.

Grapholitha (*Spilonota*) *rosæcolana*, Doub. Local.

Lanc.—Barlow Moor and Irlam (J.C.); Preston (J.B.H., J.H.T.).

Ches.—Bidston (C.S.G.); Puddington, scarce (J.F.B.).

Grapholitha tripunctana, F. Common and generally distributed.

Grapholitha cynosbana, Guen. = *roborana*, Tr. Generally distributed and tolerably common.

Grapholitha Pflugiana, Haw. = (*Halonota*) *scutulana*, Wilk. Tolerably common.

Lanc.—Liverpool district, among thistles (C.S.G.); Longridge (J.B.H.); Manchester district, common (J.C.).

Ches.—Formerly at Birkenhead (J.F.B.).

Grapholitha circiana, Zell. Local.

Lanc.—Grange (J.H.T.) and Longridge (J.B.H.).

Ches.—Marple and near Castle Mill (J.C.).

Grapholitha trigeminana, Steph. Local, but common where it occurs.

Lanc.—Preston (J.H.T.); St. Anne's-on-the-Sea and banks of the Wyre (J.B.H.).

Ches.—Birkenhead (C.S.G.); Tranmere (J.F.B.).

Grapholitha tetragonana, Steph. Very local.

Lanc.—Brockholes Wood and Salwick (J.B.H.).

Ches.—Wirral (J.F.B.).

Grapholitha Brunnichiana, Froel. Common and generally distributed.

Grapholitha turbidana, Tr. Local, all the localities being in Lancashire, viz., Agecroft and Stretford (J.C.); Hoghton and near Preston (J.B.H., J.H.T.); near Stoneyhurst (J.B.H., Ent., xii. 204).

D. SEMASIA, H.S.

Grapholitha citrana, Hüb. Lytham (J.B.H. and Stainton's Manual, ii. 255) is one of the very few British localities for this handsome species.

Grapholitha aspidiscana, Hüb. Recorded only from Grange (J.B.H., J.H.T.).

Grapholitha hypericana, Hüb. Local.

Lanc.—Grange (J.B.H. in litt. and E.M.M., vii. 63); Grange and Whitewell (J.H.T.).

Ches.—Castle Mill (J.C.); Flaybrick Hill (C.S.G.); near Seacombe (J.F.B.).

Grapholitha nebritana, Tr. = *nigricana*, Steph. Recorded only from the Wyre district, from among peas (J.B.H.).

Grapholitha roseticolana, Zell. = *Germanana*, Wilk. Not common.

Lanc.—Cleveleys (J.H.T.); Wyre district (J.B.H.).

Ches.—Tranmere, near Birkenhead (J.F.B., C.S.G.).

Grapholitha funebrana, Tr. Recorded only from Preston by Mr. Hodgkinson.

Grapholitha succedana, Froel. = *ulicetana*, Haw. Abundant everywhere.

Grapholitha splendidulana, Guen. Not common.

Lanc.—Preston (J.B.H.).

Ches.—Bidston, scarce (C.S.G.); Bromborough (J.W.E.); Cheadle Hulme (H.H.C.); Dunham Park (J.C.).

Grapholitha scopariana, H.S. Recorded from Longridge and the neighbourhood of Ribchester (J.B.H. in litt. and Ent., xvii. 38).

Grapholitha coniferana, Rtz. Among firs on the mosses, etc.

Lanc.—Chat Moss (R. S. Edleston, Zool., 1845, 1220); Salwick, near Preston (J.B.H.).

Ches.—Bidston and Burton (J.F.B.); Cheshire fir-woods, especially where they have been burnt (C.S.G.).

Grapholitha Woëberana, Schiff. This species has recently made its appearance in Mr. Gregson's garden, where the larvæ are feeding in the bark of an old pear-tree. Not recorded from elsewhere in either county.

Grapholitha rufillana, Wilk. Recorded only from the banks of the Wyre, near Fleetwood (J.B.H., J.H.T.).

Grapholitha nitidana, Fab. Recorded only from the Preston district (J.B.H., J.H.T.).

Grapholitha compositella, Fab. Recorded from Eastham Wood by Mr. Gregson.

Grapholitha perepidana, Haw. Mr. Gregson's record of the capture of this species near Hooton is unique so far as our counties are concerned.

Grapholitha aurana, Fab. Scarce, the localities of its capture being all in Lancashire, viz., Agecroft and Withington (J.C.); Cleveleys and Preston (J.H.T.); Grange (J.B.H.).

CARPOCAPSA, Tr.

Carpocapsa pomonella, L. Not often noticed, though probably much commoner than it appears to be.

Lanc.—Manchester district (J.C.); Preston (J.B.H.); Silverdale (J.H.T.).

No record for Cheshire.

Naturalist,

Carpocapsa splendana, Hüb. Local, in oak woods where the larva feeds on acorns. Both localities from which it is recorded are in Cheshire:—Dunham Park (J.C.); Eastham Wood (J.F.B., J.W.E.).

COPTOLOMA, Led.

Coptoloma janthinana, Dup. Very local, being recorded only from near Fleetwood (J.B.H.) and Grange (J.B.H., E.M.M., vii. 87) in Lancashire, and from Wallasey (C.S.G.) in Cheshire.

PHTHOROBlastIS, Led.

Phthoroblastis fimbriana, Haw. Common but local, all the localities being in Cheshire:—Cheadle district, common (H.H.C.); Staley-brushes and Dunham Park (J.C.).

Phthoroblastis argyrana, Hüb. Local.

Lanc.—Liverpool district (C.S.G.); Preston (J.B.H., J.H.T.).

Ches.—Bidston, occasionally (J.F.B.); Bromborough (J.W.E.); Knutsford, Dunham Park, and Moss-side near Bowdon (J.C.).

Phthoroblastis Juliana, Curt. Recorded only from two localities in Lancashire:—Withington (J.C.) and Silverdale (J.B.H.).

Phthoroblastis populana, F. Locally abundant.

Crosby, near Liverpool (C.S.G.); Lytham (J.B.H., J.H.T.).

Phthoroblastis regiana, Zell. Very local.

Lanc.—Manchester district, among sycamores (J.C.); Windermere (J.B.H.).

Ches.—Between Poulton and Seacombe (J.F.B.).

Phthoroblastis Rhediella, Clerck. Local.

Lanc.—Cleveleys (J.H.T.); Preston (J.B.H.); Old Swan, near Liverpool (C.S.G.).

Ches.—Bromborough (J.W.E.); Oxton and Upton (C.S.G.); Prenton (J.F.B.).

TMETOCERA, Led.

Tmetocera (Hedya) ocellana, Fab. Common, but local.

Lanc.—Liverpool district (C.S.G.); Manchester district, common (J.C.); Preston, common (J.B.H., J.H.T.).

STEGANOPTYCHA, Hüb.

Steganoptycha aceriana, Dup. Very scarce, being recorded only from St. Anne's-on-the-Sea (Lancashire), a single specimen in August 1888 (J.B.H.), and from Egremont (Cheshire) by Mr. Gregson.

Steganoptycha incarnana, Haw. = *dealbana*, Froel. Very local.

Lanc.—Preston (J.H.T.).

Ches.—Puddington, scarce (J.F.B.); river-bank between New Ferry and Bromborough Pool (C.S.G.).

Steganoptycha neglectana, Dup. Local, but common.

Lanc.—Manchester district, common (J.C.); Preston (J.B.H., J.H.T.).

Ches.—Liscard, common (C.S.G.); Wirral (J.F.B.).

Steganoptycha pauperana, Dup. Local, but common.

Lanc.—Chat Moss (J.C.); Preston (J.B.H.).

Ches.—Bidston Hill, common (J.F.B., C.S.G.).

Steganoptycha nigromaculana, Haw. Somewhat local.

Lanc.—Lytham and banks of the Wyre (J.B.H.).

Ches.—Liscard, common (J.W.E.); Kersall Moor, near Manchester, rare (R. S. Edleston, Zool., 1845, 1220); Wirral (J.F.B.).

Steganoptycha ramella, L. = *Paykulliana*, Wilk. Recorded only from Windermere (J.B.H.).

Steganoptycha pinicolana, Zell. = (*Retinia*) *occultana*, Wilk. Local, in fir-woods.

Lanc.—Chat Moss (J.C.); Grange (J.H.T.); Longridge (J.B.H., J.H.T.).

Ches.—Claughton (J.F.B.); Prenton (C.S.G.).

Steganoptycha (Pœcilocbroma) corticana, Hüb. Common and generally distributed.

Steganoptycha signatana, Doug. Very local.

Lanc.—Scorton, Salwick, and Windermere (J.B.H.); Grange (J.H.T.).

Ches.—Delamere Forest (C.S.G., Ent., vi. 453).

Steganoptycha nanana, Tr. Recorded only from Windermere (J.B.H.).

Steganoptycha ustomaculana, Curt. Local, being recorded from Staley-brushes (J.C., J.B.H.).

Steganoptycha vacciniانا, Zell. Local, but common where it occurs.

Lanc.—Barton Moss (J.C.); Windermere (J.B.H.).

Ches.—Flybrick Hill (C.S.G.).

Steganoptycha fractifasciana, Haw. Very local.

Lanc.—Halewood and Ditton Marsh (C.S.G.); Grange (J.B.H.).

Ches.—Near Tranmere (J.F.B.).

Steganoptycha quadrana, Hb. Rare, being recorded only from Newby Bridge, near Windermere (J.B.H.).

Steganoptycha (Hypermesia) augustana, Hüb. Abundant, but local.

Lanc.—Crosby sand-hills, abundant (C.S.G., J.W.E.); Lytham and Farrington (J.H.T.); Preston, common (J.B.H.).

Ches.—Heswall (J.W.E.); Wallasey (J.C.); Wirral (J.F.B.).

Steganoptycha trimaculana, Don. Common and generally distributed.

Steganoptycha minutana, Hüb. Recorded only from Pendleton, near Manchester (J.C.).

PHOXOPTERYX, Tr.

Phoxopteryx Mitterbacheriana, Schiff. Local, but common where it occurs.

Lanc.—Pendleton (J.C.); Windermere (J.B.H.); Liverpool district (C.S.G.).

Ches.—Wirral (J.F.B.).

Phoxopteryx obtusana, Haw. Recorded only from Grange (J.B.H., J.H.T.), from which locality Mr. Hodgkinson informs me it has been lost for some years.

Phoxopteryx biarcuana, Steph. Local.

Lanc.—Crosby, common (C.S.G.); Grange and Windermere (J.B.H.); Pilling (J.H.T.).

Ches.—Wirral (J.F.B.).

Phoxopteryx diminutana, Haw. Recorded from only two localities in Lancashire:—Pilling (J.H.T.) and Windermere (J.B.H.); and one in Cheshire:—Bebington, scarce (C.S.G.).

Phoxopteryx uncana, Hüb. Scarce.

Lanc.—Grange and Windermere (J.B.H.); Longridge (J.H.T.).

Ches.—Bidston and Prenton Hills (C.S.G.).

Phoxopteryx unguicella, L. Local.

Lanc.—Grange and Windermere (J.B.H.).

Ches.—Bidston (J.F.B., C.S.G.); Bramall, local (H.H.C.);

Lindow Common (J.C.).

Phoxopteryx siculana, Hüb. Local.

Lanc.—Grange (J.B.H.); Simmonswood Moss (C.S.G.).

Ches.—Knutsford (J.C.).

Phoxopteryx comptana, Froel. Recorded by Mr. Gregson as common on Flaybrick Hill, near Birkenhead.

Phoxopteryx lundana, F. Common everywhere.

Phoxopteryx myrtillana, Tr. Common on the moors.

Lanc.—Chat Moss (H.H.C.); Longridge (J.B.H.); near Stonehurst (J.B.H., Ent., xii. 204).

Ches.—Flaybrick Hill, scarce (C.S.G.); Staley-brushes (J.C.).

RHOPOBOTA, Led.

Rhopobota nævana, Hüb. Common wherever hollies grow.

VAR. (sp. ?) *geminana*, Steph. Common on the moors and mosses.

DICHRORAMPHA, Guen.

Dichrorampha petiverella, L. Fairly common.

Lanc.—Grange district (J.B.H., J.H.T.).

Ches.—Heswall (J.W.E.); Knutsford (J.C.); New Brighton (C.S.G.); Tranmere (J.F.B.).

Dichrorampha alpinana, Tr. Recorded from Grange (J.H.T.) and from near Rock Ferry (C.S.G.).

Dichrorampha simpliciana, Haw. Recorded by Mr. Gregson from Croxteth Park, near Liverpool.

Dichrorampha plumbagana, Tr. = *tanaceti*, Wilk. Local.

Lanc.—Grange and Preston (J.B.H., J.H.T.).

Ches.—Bidston Marsh (C.S.G.); near Crewe (Stainton's Manual, ii. 214).

Dichrorampha acuminatana, Zell. Grange (J.B.H., J.H.T.).

Dichrorampha consortana, Wilk. Grange (J.B.H., J.H.T.); near Manchester (Stainton's Manual, ii. 215).

Dichrorampha plumbana, Scop. = ? (*Endopisa*) *ulicana*, Guen. Recorded only from Grange by Messrs. Hodgkinson and Threlfall.

Naturalist,

TINEINA.

Fam. *CHOREUTIDÆ*.

CHOREUTIS, Hüb.

Choreutis myllerana, F. = *scintillulana*, Hüb. Very local, being recorded only from Hoghton, near Preston (J.H.T.), Dunham Park and Moss Side (J.C.), and from a quarry between Poulton and Wallasey (C.S.G.).

Choreutis oxyacanthella, L. = *fabriciana*, Steph. Abundant everywhere among nettles.

Fam. *TALÆPORIDÆ*.

TALÆPORIA, Hüb.

Talæporia pseudo-bombycella, Hüb. Local, and recorded only from Cheshire:—Bidston Hill, on heath and tree trunks (C.S.G.); Bidston Heath (J.F.B.); Delamere Forest (J.B.H.); Dunham Park (J.C.); and Knutsford (H.H.C.).

SOLENOBIA, Z.

Solenobia inconspicuellæ, Staint. Local, and not common.

Lanc.—Preston (J.B.H.); Prestwich Wood, on beech (R. S. Edleston, Zool., xvii. 6463); Prestwich and Pendlebury (J.C.).

Ches.—Jackson's Wood, Cloughton (C.S.G.); Wirral (J.F.B.).

Solenobia triquetrella, Fisch. Very local on the Lancashire and Cheshire moors, such as Withnell and Staleybrushes (J.B.H.).

Fam. *TINEIDÆ*.

DIPLODOMA, Z.

Diplodoma marginepunctella, Steph. Local, and not common.

Lanc.—Cleleys (J.H.T.); Preston (J.B.H., J.H.T.); on old posts near Simmonswood Moss (C.S.G.).

Ches.—Rock Ferry (J.F.B.).

XYSMATODOMA, Z.

Xysmatodoma melanella, Haw. Very rare, and recorded only from three localities in Cheshire, viz., Bowdon (J.H.T.), Eastham Wood (J.F.B.), and Prenton Wood, near Birkenhead, a single specimen (C.S.G.).

Feb. 1890.

BLABOPHANES, Z.

Blabophanes imella, Hüb. Rare.

Old posts on Linacre Marsh (a locality now built upon), three specimens (C.S.G.); Manchester (J.C.).

Blabophanes ferruginella, Hüb. Local, all the records being from Lancashire: Kirkby Wood, in rotten fir-logs (C.S.G.); Lytham (J.B.H., J.H.T.), and Manchester, in drysalteries and granaries (J.C.).

Blabophanes rusticella, Hüb. Common everywhere.

TINEA, Z.

Tinea fulvimitrella, Sodof. Not uncommon.

Lanc.—Agecroft and Prestwich (J.C.); Manchester (J.H.T.); Pighue Lane, Wavertree (C.S.G.).

Ches.—Dunham Park (J.C.) and Staleybrushes (J.B.H.).

Tinea tapetzella, L. Abundant everywhere in woollen materials.

Tinea arcella, F. Not common.

Lanc.—An old hedge near Little Britain, Kirkby (C.S.G.); Longridge and Penwortham (J.B.H.); Preston and Wardless (J.H.T.); Manchester district (Staint. Man. ii, 290).

Ches.—Puddington, scarce (J.F.B.).

Tinea corticella, Curt. Generally distributed.

Lanc.—Levenshulme (H.H.C.); Manchester district (Staint. Man. ii, 291); Penwortham and Warrington (J.B.H.); Preston district (J.H.T.).

Ches.—Bowdon (R. S. Edleston, Zool. 1857, 5719); Cheadle Hulme (H.H.C.); Dunham Park (J.C.); Daresbury (J.B.H.); Puddington, scarce (J.F.B.).

Tinea parasitella, Hüb. Recorded only by Mr. Brockholes as scarce at Bidston.

Tinea picarella, Clerck. Manchester district (Staint. Man., ii. 290).*

Tinea granella, L. Common throughout both counties in grain warehouses.

Tinea cloacella, Haw. Local.

Lanc.—Chat Moss and Prestwich (J.C.); Knowsley and Kirkby (C.S.G.); Levenshulme (H.H.C.); Preston (J.B.H., J.H.T.).

Ches.—Dunham Park (J.C.); Wirral (J.F.B.).

* The list of Lepidoptera occurring in the Manchester district was supplied to Mr. Stainton by Mr. R. S. Edleston, who was an accomplished micro-lepidopterist.

Tinea albipunctella, Haw. Very local and not common.

Lanc.—Cleveleys (J.H.T.); Grange (J.B.H., J.H.T.); one at Brockholes Wood near Preston (J.B.H.).

Ches.—Bidston, scarce (J.F.B.).

Tinea confusella, H.S. Recorded only from Morecambe, by Mr. Threlfall.

Tinea nigripunctella, Haw. Mr. Gregson records the capture of two specimens at Wallasey, and Mr. Threlfall's record 'Liverpool' probably applies to these.

Tinea misella, Z. Very local, being recorded only from Huyton near Liverpool (J.H.T.); and Tranmere, in granaries (C.S.G.).

Tinea fuscipunctella, Haw. Abundant everywhere.

Tinea pellationella, L. Abundant everywhere.

Tinea pallescentella, Staint. Abundant in warehouses.

Tinea merdella, Z. Occurs in wool warehouses, being first discovered and described as British by the late Nicholas Cooke.

Tinea lapella, Hüb. Local.

Lanc.—Grange and Preston (J.H.T.); Liverpool district, in old hedges (C.S.G.); Manchester district, frequent (H.H.C.); Pendleton and Eccles (J.C.).

Ches.—Wirral (J.F.B.).

Tinea semifulvella, Haw. Local.

Lanc.—Chat Moss (J.C.); Grange (J.B.H., J.H.T.).

Ches.—Cheadle Hulme, occasionally (H.H.C.); Claughton Park fences, and bred from old birds'-nests (C.S.G.); Dunham Park and Knutsford (J.C.).

Tinea argentimaculella, Staint. Recorded from Bowdon by Mr. R. S. Edleston (Zool., 1858, xvi. 6214) and Mr. Threlfall.

PHYLLOPORIA, Hein.

Phylloporia bistrigella, Haw. Very scarce, being recorded only from Birch Wood, Woolton (C.S.G.), and Grange (J.H.T.), both in Lancashire, and as scarce at Bidston (J.F.B.) in Cheshire.

TINEOLA, H.S.

Tineola biselliella, Hummel. One of the most abundant of 'clothes-moths.'

LAMPRONIA, Z.

Lampronia morosa, Z. = **quadripunctella**, Steph. Common and generally distributed.

Lampronia luzella, Hüb. Recorded only from two localities, both in Lancashire: Grange (J.B.H. in litt. and Ent., x, 40) and Withington (J.C.).

Lampronia prælatella, Schiff. Local, and only in Lancashire. Brockholes Wood near Preston (J.B.H.), Grange (J.H.T.); Manchester district (Staint. Man., ii, 296); and Withington (J.C.).

Lampronia rubiella, Bjerk. Fairly common.

Lanc.—Barton Moss (J.C.); Brockholes Wood (J.B.H.); Grange (J.H.T.); Liverpool district, in old gardens among raspberries (C.S.G.).

Ches.—Marple and Delamere Forest (J.C.).

INCURVARIA, Haw.

Incurvaria muscullella, F. Common and generally distributed.

Incurvaria pectinea, Haw. Local.

Common among birches in April, in the Liverpool district (C.S.G.); Grange (J.H.T.); Windermere (J.B.H.).

Incurvaria tenuicornis, Staint. Recorded from the Manchester district (Staint. Man., ii, 297) and from Preston (J.B.H.).

Incurvaria capitella, Clerck. The only notice of the occurrence of this species in our district is in Stainton's Manual (ii, 297), the locality being Manchester.

Incurvaria Ehlmanniella, Tr. Local, and not common.

Lanc.—Birch Wood, Woolton (C.S.G.); Grange (J.H.T.); Manchester district (Staint. Man., ii, 297); Preston district (J.B.H.).

Ches.—Bidston and Hooton, scarce (C.S.G.).

Incurvaria canariella, Staint. Near Grange (J.B.H.).

NEMOPHORA, Hüb.

Nemophora Swammerdamella, L. Locally abundant.

Lanc.—Grange and Silverdale (J.H.T.); Prestwich (J.C.).

Ches.—Alderley, Bramall, and Taxal (H.H.C.); Dunham Park, Knutsford, and Delamere (J.C.).

Nemophora Schwartziella, L. Locally common.

Lanc.—Liverpool district (C.S.G.); Lake side, Windermere (J.H.T.).

Ches.—Dunham Park and Knutsford (J.C.); Eastham Wood (J.W.E.); Taxal (H.H.C.); Wirral (J.F.B.).

Nemophora pilella, F. Recorded from the Longridge moors (J.H.T., J.B.H. in litt. and Ent., xiii, 164).

Nemophora metaxella, Hüb. Longridge moors (J.B.H. in litt. and Ent. xii, 204) and Salwick near Preston (J.H.T.).

Fam. ADELIDÆ.

ADELA, Latr.

Adela fibulella, F. Local.

Lanc.—Glazebrook and Withington (J.C.); Grange (J.H.T., J.B.H. in Ent. Mo. Mag., x, 40); Preston (J.B.H.).

Ches.—Patrick Wood near Bromborough (C.S.G.).

Adela rufimitrella, Scop. Local.

Lanc.—Glazebrook (J.C.); Howick near Preston (J.B.H.); Preston (J.H.T.); Manchester district (Staint. Man., ii, 299).

Ches.—Bidston Marsh, on flowers of *Cardamine pratensis* (C.S.G.); Bollin Valley (J.C.).

Adela DeGeerella, L. Very local, being recorded only from Rainford Moss (C.S.G.), and Worsley and Woollen Woods (J.C.).

Adela crœsella, Scop. = *sulzella*, Schiff. Brockholes Wood near Preston (J.B.H.).

Adela viridella, Scop. Locally common.

Lanc.—Grange (J.H.T.) and Preston (J.B.H.).

Ches.—Dunham Park, Knutsford, and Delamere Forest (J.C.); Woodford and Bramall, local (H.H.C.); Eastham Wood (C.S.G., J.W.E.).

Adela cuprella, Thunb. Recorded only by Mr. Chappell, from Dunham Old Park.

NEMATOIS, Hüb.

Nematois cupriacellus, Hüb. Manchester district (Staint. Man., ii, 301).

Nematois minimellus, Z. Longridge and near Ribchester (J.B.H. in litt. and Ent., xiii, 105).

Fam. OCHSENHEIMERIDÆ.

OCHSENHEIMERIA, Hüb.

Ochsenheimeria birdella, Curt. Local.

Lanc.—Blackpool (R. S. Edleston, Intell., 1859, ii, 27); Preston (J.B.H., J.H.T.).

Ches.—Bramall and the Bollin Valley (J.C.); plentiful in a field opposite Hose Farm, Liscard (C.S.G.); near Seacombe (J.F.B.).

Ochsenheimeria bisontella, Z. Local.

Lanc.—Lees, near Oldham (J.C.); Longridge (J.B.H., J.H.T.); Manchester district (Staint. Man., ii, 288); near Ribchester (J.B.H., Ent., xiii, 105).

Ches.—Recorded from Bidston Lighthouse (C.S.G.).

Ochsenheimeria vaculella, Fisch. Manchester district (Staint. Man., ii, 288).

Fam. *TEICHOBIDÆ*.

TEICHOBIA, H.S.

Teichobia verhuellera, Staint. Recorded only from the coast of North Lancashire: Old lanes near Cleveleys, not uncommon on hart's tongue (J.B.H., J.H.T.); Grange (J.H.T.).

Fam. *ACROLEPIDÆ*.

ACROLEPIA, Curt.

Acrolepia granitella, Tr. Local, and not common.

Lanc.—Grange (J.B.H.); Pendleton and Irlam (J.C.); Preston and Cleveleys (J.H.T.).

Ches.—One specimen taken at Bidston or Claughton (J.F.B.); two specimens taken by Mr. Edmondson at Liscard, near the Trafalgar Hotel (C.S.G.).

Acrolepia pygmæna, Haw. Grange (J.B.H.).

Fam. *HYPONOMEUTIDÆ*.

SCYTHROPIA, Hüb.

Scythropia cratægella, L. Manchester district (Staint. Man., ii, 307); Stretford near Manchester (J.C.).

HYPONOMEUTA, Z.

Hyponomeuta plumbellus, Schiff. Recorded from Grange (J.B.H., J.H.T.).

Hyponomeuta padellus, L. Locally common.

Lanc.—Grange (J.B.H.); Manchester, common (J.C.); Greenbank near Liverpool (J.W.E.).

Ches.—Cheadle Hulme, abundant (H.H.C.); Upton, near Birkenhead (C.S.G.); Wirral (J.F.B.).

Hyponomeuta cagnagellus, Hüb. = *evonymellus*, Scop., Staint. Local.

Lanc.—Grange (J.B.H.); Longridge (J.H.T.).

Ches.—Bollin Valley and near Castle Mill (J.C.); Claughton (J.F.B., C.S.G.).

Hyponomeuta evonymellus, L. = *padi*, Zell. Locally common.

Lanc.—Grange (J.B.H.); Hale (C.S.G.).

Ches.—Bramall, abundant (H.H.C.); Marple, Bramall, and Reddish (J.C.).

Naturalist,

SWAMMERDAMIA, Hüb.

Swammerdamia combinella, Hüb. = *apicella*, Don. Local.

Lanc.—Grange (J.B.H.); Liverpool district, common among blackthorn (C.S.G.); Manchester, common (J.C.).

Ches.—Wirral (J.F.B.).

Swammerdamia griseocapitella, Staint. Local.

Lanc.—Chat Moss (J.C.); Grange and Silverdale (J.H.T.); Rainford Moss (C.S.G.).

Ches.—Bidston and Puddington, occasionally (J.F.B.); Cheadle district, abundant (H.H.C.).

Swammerdamia oxyacanthella, Dup. = *cæsiella*, Staint. Local.

Lanc.—Grange (J.B.H.); Manchester district, common (J.C.).

Ches.—Claughton and Prenton (C.S.G.); Liscard (J.W.E.).

Swammerdamia lutarea, Haw. Recorded only from Tranmere, near Birkenhead (J.F.B.).

Swammerdamia pyrella, Villers. Common and generally distributed.

PRAYS, Hüb.

Prays curtisellus, Don. Generally distributed.

Lanc.—Grange (J.H.T.); Liverpool district (C.S.G.); Manchester district, common (J.C.); Preston (J.B.H., J.H.T.).

Ches.—Cheadle Hulme, common (H.H.C.); Wirral (J.F.B.).

ZELLERIA, Staint.

Zelleria hepariella, Staint. Recorded only from Grange (J.B.H., J.H.T.).

Zelleria insignipennella, Staint. Recorded only from Grange (J.B.H., Ent. Mo. Mag., xii, 163).

ARGYRESTHIA, Hüb.

Argyresthia ephippella, F. Very local, being recorded only from Grange (J.B.H., J.H.T.), Windermere (J.B.H.), Manchester (Staint. Man., ii, 369), and a single specimen from an un-noted locality near Birkenhead (J.F.B.).

Argyresthia nitidella, F. Abundant everywhere.

Argyresthia semitestacella, Curt. Local.

Lanc.—Croxteth Park, among beeches (C.S.G.); Grange and Windermere (J.B.H.); Irlam (J.C.).

Ches.—Wirral (J.F.B.).

- Argyresthia albistria**, Haw. Local.
Lanc.—Grange and Windermere (J.B.H.); Irlam and Withington (J.C.); Preston, common (J.H.T.).
Ches.—Between Hose side and Wallasey village (C.S.G.); Wirral (J.F.B.).
- Argyresthia spiniella**, Z. Recorded from Grange and Windermere (J.B.H.); Manchester (Staint. Man., ii, 369); Simmonswood Moss and Bidston Hill (C.S.G.).
- Argyresthia conjugella**, Z. Generally distributed.
Lanc.—Chat Moss (J.C.); Grange and Windermere (J.B.H.); Liverpool district, among mountain ash (C.S.G.).
Ches.—Bidston Hill (J.F.B.); Staleybrushes (J.C.).
- Argyresthia ærariella**, Staint. Staleybrushes (J.B.H., J.H.T., Ent., xiii, 164). In berries of mountain ash.
- Argyresthia semifusca**, Haw. Local.
Lanc.—Grange and Windermere (J.B.H.); Preston (J.H.T.).
Ches.—Bidston Hill (J.F.B.); Cheadle Hulme, local (H.H.C.); Heswall (J.W.E.).
- Argyresthia mendica**, Haw. Local.
Lanc.—Grange (J.B.H., J.H.T.); Windermere (J.B.H.); Withington (J.C.).
Ches.—Wirral (J.F.B.).
- Argyresthia glaucinella**, Z. Local.
Lanc.—Wildbottoms, near Preston (J.B.H. in litt. and Ent. Mo. Mag., ii, 160).
Ches.—Bowdon (J.H.T.); Dunham Park (J.C.); Patrick Wood near Bromborough (C.S.G.).
- Argyresthia retinella**, Z. Local.
Lanc.—Chat Moss (J.C.); birch plantations near the Lancashire mosses (C.S.G.); Grange (J.B.H., J.H.T.); Windermere (J.B.H.).
Ches.—Cheadle Hulme (H.H.C.); Wirral (J.F.B.).
- Argyresthia dilectella**, Z. Grange (J.C., J.B.H.).
- Argyresthia Andereggiella**, Dup. Grange (J.B.H., J.H.T.) and Windermere (J.B.H.).
- Argyresthia cornella**, F. = *curvella*, Staint. Local.
Lanc.—Grange and Windermere (J.B.H.); Preston (J.H.T.).
Ches.—Bromborough and Frankby, on apple-trees (C.S.G.).
- Argyresthia sorbiella**, Tr. Local.
Lanc.—Chat Moss (J.C.); between Knowsley and Kirkby (C.S.G.); Windermere (J.B.H.).
Ches.—Dunham Park (J.C.).

- Argyresthia pygmaella**, Hüb. Local.
Lanc.—Chat Moss (J.C.); Grange and Preston (J.H.T.); Liverpool district, among willows (C.S.G.); Windermere (J.B.H.).
Ches.—Flaybrick Hill and Tranmere (J.F.B.).
- Argyresthia Goedartella**, L. Locally common.
Lanc.—Astley, Irlam, and Worsley (J.C.); Grange and Preston (J.B.H., J.H.T.); Liverpool district, among old birches (C.S.G.).
Ches.—Cheadle Hulme, common (H.H.C.); Wirral (J.F.B.).
- Argyresthia Brockella**, Hüb. Local.
Lanc.—Chat Moss (J.C.); Grange (J.B.H., J.H.T.); Liverpool district (C.S.G.); Levenshulme (H.H.C.); Windermere (J.B.H.).
Ches.—Bidston and Rock Ferry (J.F.B.); Dunham Park and Knutsford (J.C.).
- Argyresthia arceuthina**, Z. Grange (J.B.H.).
- Argyresthia aurentella**, Staint. Also recorded from Grange by Mr. Hodgkinson.

CEDISTIS, Z.

- Cedistis farinatella**, Dup. Local.
Lanc.—Chat Moss (J.C.); Grange (J.H.T.); Longridge (J.B.H.).
Ches.—Bidston Hill (C.S.G., J.W.E.); Claughton and Burton (J.F.B.); Lindow and Wilmslow (J.C.).

OCNEROSTOMA, Z.

- Ocnerosstoma piniariella**, Z. Local among firs.
Lanc.—Chat Moss (J.C.); Liverpool district (C.S.G.).
Ches.—Bidston and Claughton (J.F.B.).

Fam. PLUTELLIDÆ.

EIDOPHASIA, Steph.

- Eidophasia Messingiella**, F. Recorded only from a few localities in Lancashire: Brockholes Wood near Preston, on *Cardamine amara* (J.B.H., Ent. Mo. Mag., ii, 160; J.H.T., Ent., x, 75); near Ribchester (J.B.H., Ent., xiii, 105); Hoghton (J.H.T.); Manchester (Staint. Man., ii, 311).

PLUTELLA, Schr.

- Plutella porrectella**, Z. Very local, recorded from Liverpool district, in old gardens (C.S.G.), Preston (J.B.H., J.H.T.), and scarce at Rock Ferry (J.F.B.).

Plutella cruciferarum, Z. Abundant everywhere.

Plutella annulatella, Curt. Recorded from Morecambe by Messrs. Hodgkinson and Threlfall.

Plutella Dalella, Staint. Very local, all the localities being in Cheshire, viz.: Bidston Hill (J.F.B., C.S.G.); Claughton (J.F.B.) and Staleybrushes (J.C.).

CEROSTOMA, Latr.

Cerostoma vittella, L. Local.

Lanc.—Preston (J.B.H.).

Ches.—Cheadle district (H.H.C.); Dunham Park (J.C.); Puddington (J.F.B.).

Cerostoma sequella, L. Dunham Park (R. S. Edleston, Zool., xv (1857), 5719).

Cerostoma radiatella, Don. Local.

Lanc.—Croxteth Woods (C.S.G.); Grange (J.H.T.); Preston (J.B.H.).

Ches.—Dunham Park (J.C.); Wirral (J.F.B.).

Cerostoma parantesella, L. = *costella*, F. Very local.

Lanc.—Grange (J.B.H., J.H.T.).

Ches.—Dunham Park (J.C.); Patrick Wood near Bromborough (J.F.B.).

Cerostoma sylvella, Z. Recorded from Dunham Park by Mr. Chappell.

Cerostoma lucella, F. Recorded from Manchester in Stainton's Manual (ii, 314).

→ *Cerostoma scabrella*, L. Grange (J.B.H.).

Cerostoma nemorella, L. Local.

Lanc.—Cleveleys and Wardless (J.H.T.); Preston district (J.B.H.).

Ches.—Bidston (C.S.G.).

Cerostoma xylostella, L. Common and generally distributed among honey-suckle.

Fam. ORTHOTÆLIDÆ.

ORTHOTÆLIA, Steph.

Orthotælia sparganella, Thunb. Very local, being recorded only from one locality in Lancashire: Pendleton (J.C.), and two in Cheshire: Bidston Marsh (J.F.B.), and pits near Birkenhead (C.S.G.).

Naturalist.

Fam. CHIMABACCHIDÆ.

DASYSTOMA, Curt.

Dasystoma salicella, Hüb. Of very rare occurrence, being recorded from the Manchester district (Staint. Man., ii, 282), from Huyton, and from near Bromborough Mill (C.S.G.).

CHIMABACCHE, Z.

Chimabacche phryganella, Hüb. Nearly all the localities for this autumn species are in Cheshire.

Lanc.—Grange.

Ches.—Delamere Forest (J.B.H.); Dunham Park, Agecroft, and Knutsford (J.C.); Eastham Wood (J.F.B., C.S.G., J.W.E.).

Chimabacche fagella, F. Abundant in oak-woods in South Lancashire and Cheshire, but apparently not so common in the north.

Fam. GELECHIDÆ.

SEMIOSCOPIA, Hüb.

Semioscopia avellanella, Hüb. Recorded only from Bidston Park Wood, by Mr. Gregson.

EPIGRAPHIA, Steph.

Epigraphia Steinkellneriana, Schiff. Very local.

Lanc.—Grange (J.H.T.).

Ches.—Alderley (J.C.); Bidston and about Upton (C.S.G.); Delamere Forest (C.S.G., Ent. vi, 453); Wirral (J.F.B.).

EXÆRETIA, Staint.

Exæretia Allisella, Staint. Local.

Lanc.—Liverpool district, among *Artemisia vulgaris* (C.S.G.); Warrington (J.B.H.).

Ches.—Stockport (J.C.); Wallasey (J.F.B.).

DEPRESSARIA, Haw.

Depressaria costosa, Haw. Common among broom and gorse all over both counties.

Depressaria flavella, Hüb. = *litorella*, Tr. Common and generally distributed.

Depressaria pallorella, Z. Local, being recorded from Delamere Forest (C.S.G., Ent. vi, 453), Rudd Heath (R. S. Edleston, Zool., ii, 735), and Stretford (J.C.).

Depressaria umbellana, Z. Local, but common where it occurs.

Lanc.—Broadgreen and Roby, on broom (C.S.G.); Lytham (J.B.H.); Rivington (J.H.T.).

Ches.—Bidston Hill, common (J.W.E.); Wirral (J.F.B.).

Depressaria nanatella, Staint. A coast species, feeding on the leaves of *Carlina vulgaris*. Occurs at Lytham (J.B.H., J.H.T. in litt. and Ent. x, 75) and New Brighton (C.S.G.).

Depressaria atomella, Hüb. Local.

Lanc.—Longridge (J.B.H.); Manchester district (Staint. Man. ii, 322); Preston, on *Genista tinctoria* (J.H.T., Ent. x, 75); Samelsbury, near Preston (J.H.T.); near Stoneyhurst (J.B.H., Ent. xii, 204).

Ches.—Bidston Marsh (C.S.G.).

Depressaria arenella, Schiff. Local.

Lanc.—Liverpool district (C.S.G.); Lytham (J.B.H.); Preston (J.H.T.); Weaste, near Manchester (J.C.).

Ches.—Wirral (J.F.B.).

Depressaria propinquella, Tr. Found only on or near the coast, especially on the sand-hills, as at Lytham (J.B.H.); at Grange (J.H.T.); Wallasey (J.F.B., C.S.G.); Bidston (J.F.B.).

Depressaria subpropinquella, Staint. Same localities as the preceding species.

? **VAR. rhodochrella**, H.S. Recorded from Blackpool (R. S. Edleston, Intell., 1859, ii, 27) and Fleetwood (J.B.H., Ent. Mo. Mag., ix, 162).

Depressaria carduella, Hüb. Recorded from one locality only in each county, viz., Grange (J.B.H., J.H.T.), and the Wallasey sand-hills, near Leasowe Castle (C.S.G.).

Depressaria Yeatiana, F. Exclusively a coast species.

Lanc.—Blackpool (J.B.H., Ent. Mo. Mag., ix, 113); Lytham (id., Ent. Mo. Mag., ii, 187; J.H.T.); Formby (J.W.E.).

Ches.—Wallasey sandhills (C.S.G.).

Depressaria ocellana, F. Generally distributed.

Lanc.—Chat Moss (J.C.); Liverpool district (C.S.G.); Lytham (J.B.H., Ent. Mo. Mag., ii, 187); Preston (J.H.T.).

Ches.—Bowdon (J.C.); Wirral (J.F.B.).

Depressaria alstroemeriana, Clerck. Recorded from Lytham (J.B.H.); New Brighton (C.S.G.); and Wirral (J.F.B.).

Depressaria purpurea, Haw. = *vaccinella*, Hüb. Coast sand-hills, etc.

Lanc.—Blackpool (J.B.H., Ent. Mo. Mag., ix, 113); Lytham (J.B.H., J.H.T.).

Ches.—Prenton and Wallasey sand-hills (C.S.G.); Wirral (J.F.B.).

Depressaria liturella, Hüb. = *hypericella*, Tr. Scarce, recorded only from Childwall near Liverpool (C.S.G.); Grange (J.B.H., J.H.T.), and the Bollin Valley near Bowdon (J.C.).

Depressaria conterminella, Z. Local.

Lanc.—Lytham (J.B.H., in litt. and Ent. Mo. Mag., ii, 187); Pilling Moss (id., Ent. Mo. Mag., ii, 186); Preston (J.H.T.); Stretford and Withington (J.C.).

Ches.—Bidston (J.F.B.); Wallasey (J.F.B., C.S.G.).

Depressaria applanata, F. Common everywhere among Umbelliferae.

Depressaria ciliella, Staint. Local, but common where it occurs.

Lanc.—Lytham (J.B.H.); Preston, common (J.H.T.); Stretford and Withington (J.C.).

Ches.—Bidston (J.F.B., C.S.G.); Prenton (C.S.G.); Upton (J.F.B.).

Depressaria capreolella, Z. Recorded only from Grange (J.B.H., J.H.T.) and Delamere Forest (C.S.G., Ent., vi, 452).

Depressaria rotundella, Doug. Leasowe sand-hills (Cheshire), among sea-holly (C.S.G.).

Depressaria angelicella, Hüb. Local.

Lanc.—Lytham (J.B.H.); Pilling Moss (id., Ent. Mo. Mag., ii, 186); Preston and Salwick (J.H.T.); Manchester district (Staint. Man., ii, 324).

Ches.—Bidston Marsh (C.S.G.).

Depressaria pimpinellæ, Z. Not common.

Lanc.—Grange (J.B.H., J.H.T.); Pilling Moss (J.B.H., Ent. Mo. Mag., ii, 186).

Ches.—One specimen taken near New Brighton (C.S.G.).

Depressaria badiella, Hüb. Local.

Lanc.—Liverpool district (C.S.G.); Lytham (J.B.H.); Pilling Moss (id., Ent. Mo. Mag., ii, 186).

Ches.—One specimen taken on the Wallasey sand-hills (J.F.B.).

Depressaria heracleana, DeG. Local.

Lanc.—Chat Moss, Withington, and Glazebrook (J.C.); Lytham (J.B.H.); Penwortham (J.H.T.).

Ches.—Bidston and Tranmere (J.F.B.); about Wallasey Mill (C.S.G.).

Depressaria discipunctella, H.S. Grange (J.B.H.).

Depressaria albipunctella, Hüb. Scarce, recorded only from the coast: Cleveleys (J.H.T.), Hightown and Wallasey (C.S.G.).

Depressaria Weirella, Staint. Recorded from the Liverpool district, among *Anthriscus sylvestris* (C.S.G.); Lytham (J.B.H.); Penwortham (J.H.T.); and Pilling Moss (J.B.H., Ent. Mo. Mag., ii, 186).

Depressaria pulcherimella, Staint. Local.

Lanc.—Grange (J.B.H., J.H.T.); Pilling Moss (J.B.H., Ent. Mo. Mag., ii, 186); Preston (J.H.T.).

Ches.—Bidston and Leasowe (J.F.B.); Claughton and Upton (C.S.G.).

Depressaria Douglasella, Staint. Confined to the Lancashire coast.

Lanc.—Blackpool (J.B.H., Ent. Mo. Mag., ix, 113); Crosby sand-hills, four specimens (C.S.G.); Fleetwood (J.B.H.); Wardless (J.H.T.).

Depressaria chærophylli, Z. Recorded from Prenton and Woolton, both near Liverpool, by C. S. Gregson.

Depressaria nervosa, Haw. Local.

Lanc.—Lytham (J.B.H.); Penwortham (J.H.T.).

Ches.—Wirral (J.F.B.).

GELECHIA, Staint.

Gelechia rhombella, Schiff. Recorded only from Lancashire: Cheetham Hill (R. S. Edleston, Zool., 1845, 1220); Grange (J.B.H., J.H.T.); Irlam (J.C.).

Gelechia distinctella, Z. Recorded from Lytham (J.B.H., Ent. Mo. Mag., ii, 187; J.H.T.) and Wallasey sand-hills (J.F.B., C.S.G.).

Gelechia celerella, Staint. Recorded only from the Cheshire sand-hills (Staint. Man., ii, 337), Leasowe (C.S.G.).

Gelechia sororecullella, Hüb. Local.

Lanc.—Lytham (J.B.H., Ent. Mo. Mag., ii, 187); Manchester (Staint. Man., ii, 332); Preston (J.H.T.).

Ches.—Wallasey sand-hills (J.F.B., C.S.G.).

Gelechia velocella, Dup. Recorded only from the Wallasey sand-hills by Mr. Brockholes, and from Manchester (Staint. Man., ii, 331).

Gelechia peliella, Tr. Manchester (Staint. Man., ii, 332).

Gelechia fumatella, Doug. On the sand-hills midway between Wallasey and Leasowe (C.S.G.).

Gelechia ericetella, Hüb. Abundant wherever heather grows.

Naturalist,

Gelechia lentiginosella, Z. Scarce and local.

Lanc.—Near Stoneyhurst (J.B.H., Ent., xii, 204); Samelsbury, near Preston (J.H.T.).

Ches.—Bidston Marsh, on *Genista* (C.S.G.).

Gelechia mulinella, Z. Locally common.

Lanc.—Cleveleys (J.H.T.); Liverpool district, among gorse (C.S.G.); Manchester (Staint. Man., ii, 331).

Ches.—Knutsford (J.C.); Wallasey and Tranmere (J.F.B.).

Gelechia malvella, Hüb. Manchester, common (Staint. Man., ii, 330).

Gelechia longicornis, Curt. Common on the Lancashire and Cheshire moors and mosses.

Gelechia diffinis, Haw. Common on moors and mosses.

BRACHMIA, Hein.

Brachmia Mouffetellæ, Schiff. Very local, being recorded only from Cleveleys on the Lancashire coast (J.H.T.), Withington and Glazebrook (J.C.), and Tranmere (J.F.B.).

BRYOTROPHA, Hein.

Bryotropha terrella, Hüb. Abundant everywhere.

Bryotropha politella, Staint. Recorded only from the Wallasey sand-hills (J.F.B.).

Bryotropha desertella, Doug. A common species on the coast sand-hills of both counties.

Bryotropha senectella Z. Coast sand-hills, etc.

Lanc.—Grange (J.H.T.); Lytham (J.B.H., in litt. and Ent. Mo. Mag. ii, 187).

Ches.—Wallasey sand-hills (J.F.B., C.S.G.).

Bryotropha mundella, Doug. Recorded from Lytham (J.B.H., J.H.T.) and Wallasey sand-hills (J.F.B., C.S.G.).

Bryotropha affinis, Doug. Local.

Lanc.—Lytham (J.B.H.); Preston (J.H.T.).

Ches.—Wallasey sand-hills (J.F.B., C.S.G.).

Bryotropha umbrosella, Z. Recorded only from Lytham (J.H.T., J.B.H., in litt. and Ent. Mo. Mag. iii, 37).

Bryotropha domestica, Haw. Local.

Lanc.—Churchtown near Southport (J.B.H.); Liverpool (C.S.G.).

Ches.—Bowdon (J.C.); Wirral (J.F.B.).

LITA, Tr.

- Lita artemisiella*, Tr. Abundant on the coast sand-hills.
Lita atriplicella, F. Fleetwood (J.B.H.).
Lita ocellatella, Staint. Fleetwood (J.B.H.).
Lita instabilella, Doug. Fleetwood (J.B.H.); Humphrey Head near Grange (J.B.H., Ent. Mo. Mag. vii, 87); Wardless (J.H.T.).
Lita acuminatella, Sircom. Lytham (J.B.H.).
Lita æthiops, Westw. Local on heaths and mosses.
 Lanc.—Chat Moss (J.C.); Lancashire mosses in places where they have been burnt (C.S.G.); Longridge (J.H.T.).
 Ches.—Prenton (J.F.B.).
Lita Hubneri, Haw. Recorded only from the Manchester district (Staint. Man. ii, 339); Irlam and Glazebrook (J.C.).
Lita maculea, Haw. Local.
 Lanc.—Lytham (J.B.H.); Pilling Moss (id, Ent. Mo. Mag. ii, 186); Preston (J.H.T.).
 Ches.—Flixton and Carrington Mosses (J.C.); Wirral (C.S.G.); Claughton? (J.F.B.).
Lita fraternella, Doug. Local.
 Lanc.—Fylde district (J.H.T.); Pilling Moss (J.B.H., Ent. Mo. Mag., ii, 186); Preston (J.B.H., J.H.T.); Withington (J.C.).
 Ches.—Prenton, etc. (C.S.G.).
Lita viscariella, Staint. Recorded only from the Lancashire coast at Cleveleys (J.H.T.) and Fleetwood (J.B.H.).
Lita tricolorella, Haw. Local and not common.
 Lanc.—Manchester (Staint. Man. ii, 338); Preston (J.B.H., J.H.T.).
 Ches.—Dunham Park, rare (R. S. Edleston, Zool., 1845, 1220); Eastham (J.F.B.); Wirral (C.S.G.).
Lita costella, Westw. A single specimen beaten from *Solanum dulcamara* at Olive Mount near Liverpool (C.S.G.).
Lita maculiferella, Doug. Local.
 Lanc.—Lytham (J.B.H., Ent. Mo. Mag., ii, 187; J.H.T., Ent. Mo. Mag., xix, 112); Preston (J.B.H.).
 Ches.—Wallasey sand-hills (J.F.B.).
Lita junctella, Doug. Manchester (Staint. Man., ii, 339).
Lita marmorea, Haw. Recorded only from the Lytham (J.B.H., J.H.T.) and Wallasey sand-hills (C.S.G., J.F.B.).
Lita semidecandrella, Threll. Lytham (J.B.H., J.H.T.).

Naturalist,

TELEIA, Hein.

- Teleia vulgella*, Hüb. Locally common.
 Lanc.—Irlam (J.C.); Preston (J.B.H.).
 Ches.—Wirral, common (J.F.B., C.S.G.).
Teleia sequax, Haw. Grange (J.B.H., J.H.T.).
Teleia fugitivella, Z. Recorded from Croxteth, near Liverpool (C.S.G.).
Teleia humeralis, Z. = *Lyella*, Curt. Grange (J.B.H.).
Teleia proximella, Hüb. Local.
 Lanc.—Chat Moss (J.C.); around the mosses on trunks of alders (C.S.G.); Preston (J.H.T.).
 Ches.—Bidston, scarce (J.F.B.); Cheadle Hulme district, common (H.H.C.).
Teleia notatella, Hüb. Local.
 Lanc.—Manchester (Staint. Man., ii, 335); Preston (J.H.T.); Windermere (J.B.H.).
 Ches.—Wirral, occasionally (J.F.B.).
Teleia triparella, Z. Local; found at Grange (J.H.T.), around the Lancashire mosses (C.S.G.), and recorded for the Manchester district (Staint. Man., ii, 342).
Teleia luculella, Hüb. Local, and not very common.
 Lanc.—Levenshulme (H.H.C.); Preston (J.H.T.); Withington (J.C.).
 Ches.—Bramall (H.H.C.); Dunham Park (J.C.).
Teleia dodecella, L. Local, among firs.
 Lanc.—Chat Moss (J.C.); Grange (J.H.T.); Liverpool district (C.S.G.).
 Ches.—Bidston and Claughton (J.F.B.); Lindow, common (J.C.).

POECILIA, Hein.

- Poecilia nivea*, Haw. = *gemmella*, Z. Taken only at Grange (J.H.T.) and Bidston and Rock Ferry (J.F.B.).

ARGYRITIS, Hein.

- Argyritis pictella*, Z. Taken by Mr. Gregson near the mouth of the Alt, at Hightown.

NANNODIA, Hein.

- Nannodia stipella*, Haw. = *næviferella*, Dup. Staint. Recorded from Grange (J.H.T.); Church Road, Stanley near Liverpool, and Prenton near Birkenhead (C.S.G.); and Manchester, common (Staint. Man., ii, 345).

March 1890.

Nannodia Hermanella, F. Recorded from Lytham by J. B. Hodgkinson and J. H. Threlfall, and from Wallasey, Tranmere, and Oxtan by J. F. Brockholes.

SITOTROGA, Hein.

Sitotroga cerealella, Ol. Abundant in grain warehouses in Liverpool (C.S.G., J.B.H.).

PTOCHENUSA, Hein.

Ptochenusa littorella, Doug. Wallasey sand-hills (J.F.B.).

Ptochenusa inopella, Z. = **paupella**, Z. Cleveleys (J.H.T.).

Ptochenusa ossiella, Staint. Grange (J.B.H., J.H.T.).

PARASIA, Dup.

Parasia lappella, L. Local; recorded by J. F. Brockholes as abundant between Flaybrick Hill and Claughton, and by C. S. Gregson as occurring near Hose Farm, Liscard, and on the clay banks at Egremont.

Parasia Metzneriella, Staint. Recorded from Grange and Longridge (J.B.H., J.H.T.).

CHELARIA, Haw.

Chelaria Hubnerella, Doug. Local.

Lanc.—Chat Moss (J.C.); Silverdale (J.H.T.); Windermere (J.B.H.).

Ches.—Bidston (J.F.B.); Tranmere (C.S.G.).

ERGATIS, Hein.

Ergatis ericinella, Dup. Local.

Lanc.—Chat Moss (J.C.); Grange and Farrington (J.H.T.); Liverpool district, on heaths and mosses (C.S.G.).

Ches.—Oxtan Heath near Birkenhead (J.F.B.).

DORYPHORA, Hein.

Doryphora lucidella, Steph. Recorded by C. S. Gregson from Liscard (Cheshire) and from pits near Tue Brook (Liverpool).

MONOCHROA, Hein.

Monochroa tenebrella, Hüb. Local.

Lanc.—Farrington (J.H.T.); Liverpool, on the lawn opposite the hot-houses in the botanic gardens (C.S.G.); Lytham (J.B.H.).

Ches.—Cheadle Hulme, common (H.H.C.); Oxtan (J.F.B.).

LAMPROTES, Hein.

Lamprotes atrella, Haw. Taken only at Grange (J.H.T.) and Lytham (J.B.H.).

ANACAMPSIS, Curt.

Anacamopsis sircomella, Staint. Recorded from Preston (J.H.T.) and from Crewe (Staint. Man., ii, 343).

Anacamopsis immaculatella, Doug. Taken at Wardless by Threlfall.

Anacamopsis athyllidella, Hüb. Common on the Cheshire sand-hills (J.F.B., C.S.G., J.W.E.) and at Lytham (J.B.H.).

Anacamopsis ligulella, Z. Local.

Lanc.—Lytham (J.B.H., Ent. Mo. Mag., ii, 187); Preston (J.H.T.).

Ches.—New Brighton (C.S.G.).

Anacamopsis tæniolella, Z. Local.

Lanc.—Grange (J.H.T.); Lytham (J.B.H.); Manchester (Staint. Man., ii, 343).

Ches.—Wallasey sand-hills (J.F.B.).

TACHYPTILIA, Hein.

Tachyptilia populella, Clerck. Common and generally distributed.

Tachyptilia temerella, Z. A coast-sand-hill species, occurring at Lytham (J.B.H., Ent. Mo. Mag., ii, 187; J.H.T.), Crosby (C.S.G.) and Wallasey (J.F.B.).

BRACHYXROSSATA, Hein.

Brachyrossata cinerella, Clerck. Local.

Lanc.—Grange (J.H.T.); Lytham (J.B.H., *in litt.* and Ent. Mo. Mag., ii, 187); Stretford (J.C.).

Ches.—On the roadside between Poulton and Wallasey (C.S.G.); Wallasey sand-hills (J.F.B.).

CERATOPHORA, Hein.

Ceratophora rufescens, Haw. Local, occurring on the Lancashire and Cheshire coast near Liverpool (C.S.G., J.F.B.), and at Stretford near Manchester (J.C.).

CLEODORA, Curt.

Cleodora cytisella, Curt. Manchester (Staint. Man., ii, 349).

YPSOLOPHUS, F.

Ypsolophus marginellus, F. = **striatellus**, Hüb. Recorded from Grange by Hodgkinson.

SOPHRONIA, Hüb.

Sophronia semicostella, Hüb. = **parenthesella**, L. Recorded from the Manchester district (Staint. Man., ii, 351), from Dunham Park (J.C.), and from Jackson's Wood, Claughton (C.S.G.).

ANARSIA, Z.

Anarsia spartiella, Schrk. Local.

Lanc.—Preston (J.H.T.).

Ches.—Bidston and Wallasey (J.F.B.); gorse bushes between New Brighton and Wallasey (C.S.G.).

? VAR. *genistæ*, Staint. Morecambe (J.H.T.).

PLEUROTA, Hüb.

Pleurota bicostella, Clerck. Common on heaths and mosses.

CARCINA, Hüb.

Carcina quercana, F. Common and generally distributed among oaks.

HARPELLA, Schrk.

Harpella Geoffrella, L. Very local and scarce.

Lanc.—A few specimens in a lane near the old mill-dam at Garston (C.S.G.); Manchester (Staint. Man., ii, 353).

Ches.—Puddington (J.F.B.).

DASYCERA, Haw.

Dasycera sulphurella, F. Abundant everywhere. I had the pleasure of breeding (in 1880) two specimens in which the yellow markings were replaced by bronze—a variety quite unknown to Mr. Gregson.

ÆCOPHORA, Z.

Æcophora tinctella, Hüb. Cheetham Hill (R. S. Edleston, Zool. ii, 735).*Æcophora flavifrontella*, Hüb. Very local.Lanc.—Grange (J.B.H. in *litt.* and Ent. Mo. Mag., x, 40; J.H.T.); Windermere (J.B.H.).

Ches.—Bidston, scarce (J.F.B.).

Æcophora subaquileia, Staint. Very local, being recorded only from Staleybrushes (J.B.H.) and Bidston (J.F.B., C.S.G.).*Æcophora pseudospretella*, Staint. Abundant everywhere.*Æcophora fuscescens*, Haw. Local.

Lanc.—Grange and Wardless (J.H.T.); Manchester, common (J.C.); Windermere (J.B.H.).

Ches.—Bidston Hill, in old gorse bushes (C.S.G.); Puddington (J.F.B.).

Æcophora stipella, L. = *similella*, Staint. Recorded only from the Manchester district (J.B.H., and Staint. Man. ii, 356) and Disley (J.C.).

Naturalist,

Æcophora minutella, L. Local.

Lanc.—Manchester (J.B.H., and Staint. Man., ii, 356); Preston (J.B.H.).

Ches.—Puddington (J.F.B.).

Æcophora tripuncta, Haw. Local.

Lanc.—Manchester (J.B.H., and Staint. Man., ii, 356); Preston (J.B.H.).

Ches.—Oxton, near Birkenhead (C.S.G.).

Æcophora Woodiella, Curt. About fifty or sixty specimens of this species were taken by Robert Cribb, about 1840, in a rotten tree on Kersall Moor, near Manchester; all but three of these specimens (one in the Curtis collection in Australia, and two in the Carter collection at Owens College) were accidentally destroyed, and the insect has never been taken since either there or elsewhere.

Fam. GLYPHIPTERYGIDÆ.

GLYPHIPTERYX, Hüb.

Glyphipteryx fuscoviridella, Haw. Locally abundant.

Lanc.—Chat Moss (J.C.); Crosby sand-hills (J.W.E.); Preston (J.B.H., J.H.T.).

Ches.—Lindow Common (J.C.); Prenton and Tranmere (J.F.B.); Wallasey sand-hills (C.S.G.).

Glyphipteryx thrasonella, Scop. Local but common.

Lanc.—Preston (J.B.H., J.H.T.); Liverpool district, among rushes (C.S.G.).

Ches.—Bidston Marsh and Prenton (J.F.B.); Knutsford (J.C.).

Glyphipteryx Haworthana, Steph. Locally common.

Lanc.—Bury (J.H.T.); Chat Moss (J.C.); Lancashire mosses—feeding on seeds of cotton grass (C.S.G.).

Ches.—Lindow Common (H.H.C.).

Glyphipteryx equitella, Scop. Very local.

Lanc.—Grange (J.H.T.); Humphrey Head (J.B.H., Ent. Mo. Mag., vii, 87).

Ches.—Old walls where *Sedum acre* grows, near Wallasey church (C.S.G.).*Glyphipteryx Fischeriella*, Z. Locally abundant.

Lanc.—Irlam (J.C.); Longridge (J.B.H.); Preston (J.H.T.).

Ches.—Alderley, rare (H.H.C.); Bidston and Tranmere (J.F.B.); Bromborough, near the Station (J.W.E.).

March 1890.

Fam. GRACILARIDÆ.

GRACILARIA, Z.

- Gracilaria alchemiella*, Scop. = *Swederella*, Thunb. Common, and generally distributed.
- Gracilaria stigmatella*, F. Local.
 Lanc.—Chat Moss (J.B.H.); Cheetham Hill (R. S. Edleston, Zool., 1845, 1220); Preston and Grange (J.H.T.).
 Ches.—Cheshire sand-hills (C.S.G., J.F.B.).
- Gracilaria hemidactylella*, F. Recorded only from Dunham Park, by Mr. Chappell.
- Gracilaria semifascia*, Haw. Grange (J.B.H.).
- Gracilaria populetorum*, Z. Grange (J.B.H., J.H.T.).
- Gracilaria elongella*, Z. Very local.
 Lanc.—Croxteth Park, among silver firs (C.S.G.); Grange (J.H.T., J.B.H. *in litt.*, and Ent. Mo. Mag., xii, 163).
 Ches.—Delamere Forest (C.S.G., Ent., vi, 453); Dunham Park (J.C.).
- Gracilaria tringipennella*, Z. Local.
 Lanc.—Fleetwood (J.H.T.); Grange (J.B.H.); Withington (J.C.).
 Ches.—Puddington and near Birkenhead (J.F.B.); Wallasey (J.W.E.).
- Gracilaria syringella*, F. Abundant everywhere among lilacs.
- Gracilaria phasianipennella*, Hüb. Local.
 Lanc.—Grange (J.B.H. *in litt.*, and Ent. Mo. Mag., xii, 163).
 Ches.—Cloughton, a single specimen (C.S.G.); Delamere Forest (C.S.G., Ent., vi, 453).
- Gracilaria auroguttella*, Steph. Local, all the localities being in Lancashire:—Lane leading from Broad Green toll-bar to Woolton, near Liverpool (C.S.G.); Chorlton-cum-Hardy (J.C.); Grange (J.B.H., Ent. Mo. Mag., xiii, 16); Pilling Moss (*id.*, Ent. Mo. Mag., ii, 186); Scorton, near Preston (J.H.T.).

CORISCIMUM, Z.

- Coriscium cuculipennellum*, Hüb. Grange (J.B.H., J.H.T.) and Windermere (J.B.H.) are the only recorded localities.
- Coriscium sulphurellum*, Haw. Boor's Wood, Hale (C.S.G.).

ORNIX, Z.

- Ornix guttea*, Haw. Local.
 Lanc.—Grange and Preston (J.H.T.); Windermere (J.B.H.).
 Ches.—Bidston and Moreton (C.S.G.); Upton and Tranmere (J.F.B.).

- Ornix Loganella*, Staint. Local, taken in Lancashire only, at Grange (J.H.T.); Simmonswood Moss, beaten from mountain ash (C.S.G.); Windermere (J.B.H.).
- Ornix avellanella*, Staint. Local.
 Lanc.—Croxteth Woods (C.S.G.); Preston (J.H.T.); Windermere (J.B.H.).
 Ches.—Hale Barn and Bucklow Hill (J.C.); Prenton Lane (C.S.G.).
- Ornix torquilella*, Z. Local.
 Lanc.—Cleveleys and Grange (J.H.T.); Windermere (J.B.H.).
 Ches.—Tranmere (J.F.B.).
- Ornix scoticella*, Staint. Very local.
 Lanc.—Grange (J.H.T.) and Windermere (J.B.H.).
 Ches.—One specimen, Bidston (J.F.B.).
- Ornix betulæ*, Staint. Very local, being recorded only from Simmonswood Moss (C.S.G.) and Windermere (J.B.H.).
- Ornix scutulatella*, Staint. Windermere (J.B.H.).

Fam. COLEOPHORIDÆ.

COLEOPHORA, Z.

- Coleophora juncicolella*, Staint. Local.
 Lanc.—Farrington and Longridge (J.H.T.); Grange (J.B.H.).
 Ches.—Bidston Hill (C.S.G., J.F.B.); Bowdon (R. S. Edleston, Zool., 1857, 5406); Knutsford (J.C.); Puddington (J.F.B.).
- Coleophora limosipennella*, Dup. Grange (J.B.H.).
- Coleophora laricella*, Hüb. Local, among larches.
 Lanc.—Grange (J.B.H., J.H.T.); Liverpool district (C.S.G.); Manchester district (Staint. Man., ii, 384); Windermere (J.H.T.).
 Ches.—Bidston Hill (J.F.B.) and Dunham Park (J.C.).
- Coleophora adjunctella*, Hodgk. Preston (J.B.H.).
- Coleophora Wilkinsoni*, Scott. Grange (J.B.H., J.H.T.).
- Coleophora lutipennella*, Z. Local.
 Lanc.—Chat Moss (J.C.); Preston (J.B.H., J.H.T.).
 Ches.—Dunham Park (J.C.); Eastham Wood (C.S.G.); Tranmere (J.F.B.).
- Coleophora fuscadinella*, Z. Local.
 Lanc.—Chat Moss (J.C.); Liverpool district, common among alders (C.S.G.); Preston (J.B.H.).
 Ches.—Puddington (J.F.B.).

- Coleophora viminetella*, Z. Local on heaths and mosses.
Lanc.—Chat Moss; Farrington and Longridge (J.H.T.); Preston (J.B.H.); Simmonswood Moss (C.S.G.).
Ches.—Wallasey and near Birkenhead (J.F.B.).
- Coleophora bicolora*, Scott. Grange (J.B.H.).
- Coleophora vitisella*, Gregs. Staleybrushes (J.C., J.B.H.).
- Coleophora orbitella*, Z. Recorded only from Carrington Moss (R. S. Edleston, Ent. ii, 150).
- Coleophora siccifolia*, Staint. Preston (J.B.H., J.H.T.).
- Coleophora gryphipennella*, Bouché. Local.
Lanc.—Cleveleys (J.H.T.); Withington and Irlam (J.C.); Liverpool district, common among roses (C.S.G.).
Ches.—Northenden (J.C.) and Wirral (J.F.B.).
- Coleophora nigricella*, Steph. Abundant everywhere on hawthorn.
- Coleophora paripennella*, Z. Grange (J.B.H., J.H.T.).
- Coleophora fusco-cuprella*, H.S. Grange (J.B.H., Ent. Mo. Mag., xii, 163; and J.H.T., Ent. x, 100).
- Coleophora alcyonipennella*, Kollar. Common and generally distributed.
- Coleophora deauratella*, Z. Windermere (J.B.H., J.H.T.).
- Coleophora fabriciella*, Vill. Local.
Lanc.—Grange (J.B.H., J.H.T.); Preston (J.H.T.).
Ches.—Bidston (C.S.G.); near Claughton (J.F.B.).
- Coleophora anatipennella*, Hüb. Local.
Lanc.—Farrington (J.H.T.); Preston (J.B.H., J.H.T.); Withington and Irlam (J.C.).
Ches.—Bidston (J.F.B.); Wallasey sand-hills (C.S.G.).
- Coleophora albicosta*, Haw. Local.
Lanc.—Cleveleys (J.H.T.); Preston (*id.*; J.B.H.); Manchester (Staint. Man., ii, 388).
Ches.—Bidston and New Brighton (C.S.G.); Wirral (J.F.B.).
- Coleophora pyrrhulipennella*, Z. Common on heaths and mosses.
- Coleophora fuscociliella*, Z. Grange (J.B.H., Ent. Mo. Mag. x, 40).
- Coleophora ochrea*, Haw. Recorded from Upton and Moreton (Cheshire) by Gregson.
- Coleophora discordella*, Z. Local.
Lanc.—Crosby sand-hills among *Lotus corniculatus* (C.S.G.); Lytham (J.H.T.); Pilling Moss (J.B.H., Ent. Mo. Mag., ii, 186); Preston (J.B.H., J.H.T.); Manchester (Staint. Man., ii, 390).
Ches.—Wallasey sand-hills and New Ferry (J.F.B.).
- Coleophora niveicostella*, Z. Manchester (Staint. Man., ii, 390).

- Coleophora therinella*, Tgstr. Recorded only from Preston (J.B.H.) and a single specimen from the Wallasey sand-hills (J.F.B.).
- Coleophora tripoliella*, Hodgk. On *Aster tripolium* at Fleetwood (J.B.H., Ent. viii, 55).
- Coleophora virgaureæ*, Staint. = *albicans*, Frey. Very local.
Lanc.—Grange (J.B.H., J.H.T.); Warrington (N. Greening, Ent. Mo. Mag., iv, 137).
Ches.—Wallasey sand-hills, common on mugwort (J.W.E.).
- Coleophora laripennella*, Zett. = *annulatella*, Tgstr. Recorded from Fleetwood and Preston in Lancashire (J.B.H.) and Bidston and Wallasey in Cheshire (J.F.B.).
- Coleophora salinella*, Staint. Fleetwood (J.B.H.); Humphrey Head (*id.*, Ent. Mo. Mag., vii, 87).
- Coleophora murinipennella*, Dup. Recorded from Preston (J.B.H., J.H.T.) and Pilling Moss (J.B.H., Ent. Mo. Mag. ii, 186).
- Coleophora cæspititiella*, Z. Locally abundant on rushes.
Lanc.—Chat Moss (J.C.); Preston (J.B.H., J.H.T.).
Ches.—Bidston Hill (J.F.B., C.S.G., J.W.E.); Knutsford and Staleybrushes (J.C.).

Fam. LAVERNIDÆ.

CHAULIODES, Tr.

- Chauliodes chærophyllellus*, Gœze. Not common, being recorded only from Cleveleys (J.H.T.), Grange (J.B.H.), and near West Kirby (J.F.B.).

LAVERNA, Curt.

- Laverna propinquella*, Staint. = *paludicolella*, Doub. Local.
Lanc.—Pilling Moss (J.B.H., Ent. Mo. Mag., ii, 186); Preston (J.B.H., J.H.T.).
Ches.—Prenton near Birkenhead (C.S.G.).
- Laverna lacteella*, Steph. Dutton near Ribchester (J.B.H., Ent., xiii, 105); Windermere (J.B.H.); and Tranmere (C.S.G.).
- Laverna miscella*, Schiff. Grange (J.B.H., J.H.T.).
- Laverna rhamniella*, Z. Grange (J.B.H., J.H.T.) and Silverdale (J.H.T.).
- Laverna ochraceella*, Curt. Very local.
Lanc.—Preston (J.B.H.).
Ches.—Bidston Marsh, among *Epilobium* (C.S.G.); Puddington (J.F.B.).
- Laverna Schrankella*, Hüb. Local, but only in Lancashire. Brockholes near Preston (J.B.H., Ent. Mo. Mag., ii, 160); Pilling Moss (J.B.H., Ent. Mo. Mag., ii, 186); Liverpool district (C.S.G.); Salwick, near Preston (J.H.T.); Windermere (J.B.H.).

- Laverna decorella*, Steph. Grange (J.H.T.).
Laverna hellerella, Dup. Cleveleys and Preston (J.H.T.).
Laverna atra, Haw. Local.
 Lanc.—Chat Moss (R. S. Edleston, Zool., 1845, 1220);
 Preston (J.B.H.); Liverpool district (C.S.G.).
 Ches.—Knutsford (J.C.); Tranmere (J.F.B.).
- Laverna vinoletella*, H.S. Preston (J.B.H.).
 PANCALIA, Curt.
- Pancalia leuwenhoekella*, L. Recorded from North Lancashire
 only. Grange (J.H.T., J.B.H. *in litt.*, and Ent. Mo. Mag., x, 40);
 Lytham (J.B.H., Ent. Mo. Mag., ii, 187); Silverdale (J.H.T.).
 ENDROSIS, Hüb.
- Endrosis lacteella*, Schiff. = *fenestrella* Staint. Abundant every-
 where.
 SCHRECKENSTEINIA, Hüb.
- Schreckensteiniella festaliella*, Hüb. Locally common.
 Lanc.—Chat Moss (J.C.); Dutton, Grange, and Windermere
 (J.B.H.); Preston district (J.H.T.).
 Ches.—Bidston, Prenton, and Eastham (J.F.B.).
 BATRACHEDRA, Staint.
- Batrachedra præangusta*, Haw. Local.
 Lanc.—Chat Moss (J.C.); sand-hills between Crosby and
 Hightown (C.S.G.); Grange (J.B.H.).
 Ches.—Bidston and Ledsham (J.F.B.); Marple (J.C.).
 ANTISPILA, Hüb.
- Antispila pfeifferella*, Hüb. Recorded only from Pendlebury
 (R. S. Edleston, Zool., 1845, 1220).
 HELIOZELA, H.S.
 (TINAGMA, Dup.).
- Heliozela sericiella*, Haw. Local.
 Lanc.—Grange (J.B.H., J.H.T.); Liverpool district (C.S.G.);
 Prestwich (J.C.).
 Ches.—Tranmere (J.F.B.).
- Heliozela stanneella*, F. Recorded only from the Manchester
 district (Staint. Man., ii, 367).
Heliozela resplendella, Staint. Recorded only from Manchester
 (Staint. Man., ii, 367) and Preston (J.B.H., J.H.T.).
 CHRYSOCLISTA, Staint.
- Chrysoclista bimaculella*, Haw. Windermere (J.B.H.).
Chrysoclista terminella, Westw. Grange (J.B.H.).
Chrysoclista aurifrontella, Hüb. = *flavicaput*, Haw. Common
 and generally distributed. Naturalist.

- PERITTIA, Staint.
- Perittia obscurepunctella*, Staint. Scarce.
 Lanc.—Edge Lane, Liverpool (C.S.G.); Grange (J.B.H.,
 J.H.T.).
 Ches.—Patrick Wood and Puddington (J.F.B.).
 HEYDENIA, Hofm.
- Heydenia profugella*, Staint. Near Grange (J.B.H.).
Heydenia fulviguttella, Z. = *flavimaculella* Stt. Local.
 Lanc.—Barton, near Manchester (J.C.); Preston (J.B.H.,
 J.H.T.); Wardless (J.H.T.); Liverpool district, among *Angelica*
sylvestris (C.S.G.).
 Ches.—Castle Mill and Mobberley (J.C.).
 Fam. ELACHISTIDÆ.
- BUTALIS, Tr.
- Butalis grandipennis*, Haw. Common and generally distributed
 on heaths.
Butalis fusco-ænea, Haw. Grange (J.B.H., J.H.T.).
Butalis senescens, Staint. Recorded from Bidston Hill (C.S.G.)
 and Grange (J.B.H.).
Butalis laminella, H.S. Recorded only from Grange (J.B.H.).
Butalis fuscocuprea, Haw. Grange (J.B.H., J.H.T.).
 AMPHISBATHIS, Z.
- Amphisbathia incongruella*, Staint. Recorded from Staleybrushes
 (J.B.H.); Delamere Forest (C.S.G., Ent., vi, 453); and
 Carrington Moss (R. S. Edleston, Zool., 1857, 5406).
 STEPHENSIA, Staint.
- Stephensia brunnichiella*, L. Near Grange (J.B.H.).
 ELACHISTA, Staint.
- Elachista trapeziella*, Staint. Caton, near Lancaster (J.H.T.).
Elachista gleichenella, F. Grange (J.B.H., *in litt.* and Ent.
 Mo. Mag., vii, 87); Prestwich (J.C.).
Elachista densicornella, Hodg. Grange (J.B.H.).
Elachista apicipunctella, Staint. From Lancashire localities
 only; Chat Moss (J.C.); Dutton near Ribchester (J.B.H., Ent.,
 xiii, 105); Grange (J.B.H.); Preston (J.H.T.); Simmonswood
 Moss (C.S.G.).
Elachista albifrontella, Hüb. Common and generally distributed.
Elachista cinereopunctella, Haw. Recorded from Grange (J.H.T.)
 and Knutsford (J.C.).

Elachista luticornella, Z. Local.

Lanc.—Preston (J.H.T.); Prestwich (J.C.).

Ches.—Knutsford (J.C.); Rock Ferry and Bromborough (J.F.B.).

Elachista atricornella, Staint. Local.

Lanc.—Grange (J.B.H.); Preston (J.H.T.).

Ches.—Knutsford (J.C.).

Elachista Kilmunella, Staint. Locally abundant.

Lanc.—Dutton, near Ribchester (J.B.H., Ent., xiii, 105); Grange district (J.H.T.); Kirkby Moss (C.S.G.).

Ches.—Castle Mill (J.C.); Prenton (C.S.G.); Petty Pool, Delamere (J.W.E.).

Elachista perplexella, Staint. Recorded from Brockholes near Preston (J.B.H., Ent. Mo. Mag., ii, 160) and Grange (J.H.T.).**Elachista subnigrella**, Doug. Grange (J.H.T., J.B.H. *in litt.* and Ent. Mo. Mag., xiii, 16).**Elachista nigrella**, Haw. Recorded from Liverpool district (C.S.G.); Preston (J.H.T.); Grange (J.B.H.); and Rock Ferry (J.F.B.). It used to be common in Ullet Road, Liverpool.**Elachista Gregsoni**, Staint. First described (Ent. Ann., 1855, 70) by Stainton from specimens taken by Gregson on the cinder-path leading from Edge Lane to Church Road, Stanley.**Elachista Bedellella**, Sircom. Recorded only from North Lancashire; Grange (Humphrey Head), by Hodgkinson (*in litt.* and Ent. Mo. Mag., vii, 87).**Elachista humilis**, Zett. Recorded by J. B. Hodgkinson from Wildbottoms, near Preston (Ent. Mo. Mag., ii, 160), and by Brockholes from Rock Ferry.**Elachista obscurella** Staint. = *subobscura*, Doub. Local.

Lanc.—Preston, common (J.H.T.).

Ches.—Dunham Park (J.C.); Cheshire sand-hills (C.S.G.); Wirral (J.F.B.).

Elachista megerlella, Staint. Local.

Lanc.—Grange (J.B.H.); Preston (J.H.T.); Manchester (Staint. Man., ii, 409).

Ches.—Between Seacombe and Liscard (C.S.G.); Rock Ferry (J.F.B.).

Elachista adscitella, Staint. Grange (J.B.H., J.H.T.).**Elachista tæniatella**, Staint. Grange (J.B.H., J.H.T., Ent., xii, 87 and *in litt.*).**Elachista gangabella**, Z. Grange (J.B.H.).**Elachista zonariella**, Tgstr. Preston (J.H.T.).**Elachista cerusella**, Hüb. Local, being recorded from Grange (J.B.H.); Preston, common (J.H.T.); and the Lancashire mosses, on wet parts (C.S.G.).**Elachista rhynchosporiella**, Staint. On the mosses, where it feeds in cotton grass.**Elachista biatomella**, Staint. Local.

Lanc.—Grange (J.B.H., J.H.T.) and Silverdale (J.H.T.).

Ches.—Bidston Hill and New Brighton (C.S.G.).

Elachista pollinariella, Z. Grange (J.H.T.).**Elachista serricornis**, Logan. Pilling Moss (J.B.H.).**Elachista rufocinerea**, Haw. Abundant everywhere.**Elachista triatomea**, Haw. Recorded from Morecambe (J.H.T.) and Bidston Hill and New Brighton (C.S.G.).**Elachista dispunctella**, Dup. Grange (J.H.T., J.B.H.).**Elachista argentella**, Clerck. = *cygnipennella*, Hüb. Abundant everywhere.**Elachista subalbidella**, Schlg. = *ochreella*, Staint. Recorded from Pilling Moss (J.B.H.); Bidston Marsh (J.F.B.); and Bidston, three specimens only (C.S.G.).

Fam. *LITHOCOLLETIDÆ*.

(*ENOPHILA*, Steph.

Enophila V-flavum, Haw. Ashton-on-Ribble (J.B.H.).

LITHOCOLLETIS, Zell.

Lithocolletis roborella, Z. Windermere (J.B.H.).**Lithocolletis amyotella**, Dup. Windermere (J.B.H.).**Lithocolletis hortella**, F. Windermere (J.B.H.).**Lithocolletis cramerella**, F. Common and generally distributed among oaks.**Lithocolletis tenella**, Z. Windermere (J.B.H.).**Lithocolletis Heegerella**, Z. Windermere (J.B.H.).**Lithocolletis alniella**, Z. = *alnifoliella*, Dup. Common wherever alders grow.**Lithocolletis irradiala**, Staint. Windermere (J.B.H.).**Lithocolletis lautella**, Z. Windermere (J.B.H.).**Lithocolletis ulmifoliella**, Hüb. Locally common.

Lanc.—Croxteth Park (C.S.G.); Grange and Preston (J.H.T.); Manchester district, common (Staint. Man., ii, 417); Windermere (J.B.H.).

Ches.—Mobberley (J.C.).

March 1890.

- Lithocolletis spinolella*, Dup. Local, being recorded only from Lancashire; Chat Moss (J.C.); Preston district (J.H.T.); near Simmonswood Moss (C.S.G.); Windermere (J.B.H.).
- Lithocolletis viminetorum*, Staint. Local. Grange (J.H.T.); Liverpool district, among osiers (C.S.G.); Manchester, abundant (Staint. Man., ii, 417); Windermere (J.B.H.).
- Lithocolletis salicicolella*, Sircom. Recorded from the Liverpool district (C.S.G.); Longridge (J.B.H.); and Manchester (Staint. Man., ii, 418).
- Lithocolletis pomifoliella*, Z. Abundant among *Pyrus malus*.
- Lithocolletis torminella*, Frey. Manchester, common (Staint. Man., ii, 418).
- Lithocolletis spinicolella*, Staint. Locally abundant.
 Lanc.—Preston (J.H.T.); Windermere (J.B.H.); Withington (J.C.); Manchester (Staint. Man., ii, 418).
 Ches.—Liscard (C.S.G.).
- Lithocolletis faginella*, Z. Common in beech-hedges.
- Lithocolletis coryli*, Nic. Local among hazel.
 Lanc.—Grange and Preston (J.H.T.); Manchester (Staint. Man., ii, 419).
 Ches.—Knutsford (J.C.); Prenton (C.S.G.); Wirral (J.F.B.).
- Lithocolletis Junoniella*, Z. = *vacciniella*, Staint. Lancashire and Cheshire moorlands, as Dutton near Ribchester (J.B.H., Ent., xiii, 105); Longridge (J.B.H.); Staleybrushes (C.S.G., Intell., 1856, 76).
- Lithocolletis quinqueguttella*, Staint. A coast species, feeding on the dwarf sallow on the sand-hills at Lytham (J.B.H., J.H.T.) and Wallasey (C.S.G., J.F.B.).
- Lithocolletis quercifoliella*, Z. Common in oak woods.
- Lithocolletis messaniella*, Z. Among oaks, but not so common as the preceding. Recorded from Agecroft, near Manchester (J.C.); Liverpool: Aigburth Road and Edge Lane, among evergreen oaks (C.S.G.); Preston (J.H.T.); Windermere (J.B.H.).
- Lithocolletis scopariella*, Z. Dutton, near Ribchester (J.B.H., Ent., xiii, 105).
- Lithocolletis ulicicolella*, Staint. Local among gorse.
 Lanc.—Fleetwood (J.B.H.) and Stalmine (J.H.T.).
 Ches.—Between Poulton and Wallasey (C.S.G.); Prenton and Wallasey (J.F.B.).
- Lithocolletis viminiella*, Staint. Farrington and Grange (J.H.T.); Manchester (Staint. Man., ii, 420); Windermere (J.B.H.).

- Lithocolletis corylifoliella*, Haw. Common among hazel.
- Lithocolletis caledoniella*, Staint. Grange (J.H.T.) and Windermere (J.B.H.). Recorded also from Manchester (Staint. Man., ii, 421).
- Lithocolletis Nicellii*, Staint. Local. Croxteth (C.S.G.); Grange and Preston (J.H.T.); Windermere (J.B.H.).
- Lithocolletis Dunningiella*, Staint. Croxteth (C.S.G.); Grange (J.H.T., J.B.H., Ent., x, 40); Preston (J.H.T.); Windermere (J.B.H.).
- Lithocolletis Froehlichella*, Z. Local.
 Lanc.—Grange and Preston (J.H.T.); Huyton Quarry (C.S.G.); Windermere (J.B.H.).
 Ches.—Tranmere, near Birkenhead (J.F.B.).
- Lithocolletis Stettinensis*, Nic. Local, recorded from Formby (C.S.G.); Preston (J.H.T.); Windermere (J.B.H.).
- Lithocolletis Kleemanella*, F. Formby (C.S.G.); Manchester (Staint. Man., ii, 422); Preston (J.H.T.); Clifton Park, Birkenhead (J.F.B.).
- Lithocolletis Schreberella*, F. Preston (J.H.T.); Manchester (Staint. Man., ii, 422).
- Lithocolletis emberizæpennella*, Bouché. Local.
 Lanc.—Woods at Hale (C.S.G.); Preston, common (J.H.T.); Windermere (J.B.H.).
 Ches.—Eastham Wood (C.S.G.); Mobberley and Knutsford (J.C.).
- Lithocolletis tristrigella*, Haw. Locally abundant.
 Lanc.—Cheetham Hill, Manchester (R. S. Edleston, Zool., 1845, 1220); Preston and Grange (J.H.T.); Prescott (C.S.G.).
 Ches.—Bidston Hill (J.F.B.); Upton (C.S.G.).
- Lithocolletis trifasciella*, Haw. Generally distributed.

TISCHERIA, Z.

- Tischeria complanella*, Hüb. Common in oak woods.
- Tischeria marginea*, Haw. Locally common.
 Lanc.—Grange and Preston (J.H.T.); Manchester (Staint. Man., ii, 413); Windermere (J.B.H.).
 Ches.—Flaybrick Hill and Patrick Wood (C.S.G.); Wirral (J.F.B.).
- Tischeaia angusticolella*, Z. Manchester (Staint. Man., ii, 413).
- Tischeria dodonæa*, Heyd. Grange (J.H.T.) and Windermere (J.B.H.).

Fam. *LYONETIDÆ*.*LYONETIA*, Hüb.

Lyonetia Clerkella, L. Recorded from Grange (J.B.H., Ent. Mo. Mag., xii, 163), Liverpool district (C.S.G.), and Silverdale (J.H.T.) in Lancashire, and Bowdon (J.C.) in Cheshire.

CEMIOSTOMA, Z.

Cemiostoma spartifoliella, Hüb. Locally common.

Lanc.—Grange and Preston (J.H.T.); Longridge (J.B.H.); Morley Green near Wilmslow (J.C.).

Ches.—Claughton and Bidston (C.S.G.); Tranmere (J.F.B.).

Cemiostoma Wailesella, Staint. Local.

Lanc.—Dutton near Ribchester, and Samelsbury (J.H.T.); Longridge (J.B.H.).

Ches.—Near Mottram (Staint. Man., ii, 426).

Cemiostoma laburnella, Staint. Locally common, among laburnums, but recorded only from Lancashire: Ashton (J.B.H.); Grange (J.B.H., J.H.T.); Manchester district, common (J.C.).

Cemiostoma scitella, Z. Local.

Lanc.—Flixton and Glazebrook (J.C.); Preston, common (J.H.T.); Pighue Lane, near Liverpool (C.S.G.).

Ches.—Tranmere (J.F.B.).

BUCCULATRIX, Z.

Bucculatrix nigricomella, Z.

VAR. aurimaculella, Staint. Recorded from Grange (J.H.T., J.B.H., *in litt.* and Ent. Mo. Mag., x, 40); Preston (J.H.T.); and Bidston (J.F.B.).

Bucculatrix cidarella, Z. Manchester, abundant (Staint. Man., ii, 427).

Bucculatrix ulmella, Z. Grange (J.B.H., J.H.T.); Preston (J.H.T.); and Manchester (Staint. Man., ii, 428).

Bucculatrix DeMaryella, Staint. Grange (J.B.H., J.H.T.).

Bucculatrix maritima, Staint. Fleetwood (J.B.H. *in litt.* and Ent. Mo. Mag., ix, 162); Stalmine (J.H.T.).

Bucculatrix frangulella, Goeze. Grange (J.H.T., J.B.H., Ent. Mo. Mag., x, 40).

Bucculatrix thoracella, Thunb. = *hippocastanella*, Dup. Grange (J.B.H.); Manchester (Staint. Man., ii, 429).

Bucculatrix cristatella, Z. Grange (J.B.H.).

Naturalist,

Fam. *NEPTICULIDÆ*.*OPOSTEGA*, Z.

Opostega saliciella, Tr. Recorded from Barton Moss (J.C.) and Preston (J.B.H.).

Opostega crepusculella, Z. Grange and Preston (J.B.H., J.H.T.); Bidston (C.S.G.).

TRIFURCULA, Z.

Trifurcula pallidella, Z. Recorded only from Dutton near Ribchester (J.H.T., J.B.H. *in litt.* and Ent., xiii, 105).

Trifurcula immundella, Z. Recorded from Dutton (J.B.H.); Lytham and Rivington (J.H.T.).

NEPTICULA, Z.

Nepticula pomella, Vaughan. Preston, Grange (J.B.H., J.H.T.).

Nepticula pygmaella, Haw.

Lanc.—Grange (J.B.H.); Liverpool district (C.S.G.); Preston (J.H.T.).

Ches.—Bowdon (R.S.E.).*

Nepticula ruficapitella, Haw.

Lanc.—Preston (J.H.T.); Windermere (J.B.H.).

Ches.—Bowdon (R.S.E.); lane leading from Bromborough to Eastham, on oaks (C.S.G.).

Nepticula tilia, Frey. Grange (J.B.H.).

Nepticula anomalella, Goeze. Recorded from Bowdon (R.S.E.); Grange (J.B.H.); Preston (J.H.T.); and the Liverpool district (C.S.G.).

Nepticula viscerella, Staint. Bowdon (R.S.E.).

Nepticula aucuparia, Frey. Bowdon (R.S.E.); Grange (J.H.T.); and Windermere (J.B.H.).

Nepticula minusculella, H.S. Preston (J.B.H., J.H.T.).

Nepticula oxyacanthella, Staint. Bowdon (R.S.E.); Grange (J.B.H.); Preston (J.H.T.); Tranmere (J.F.B.).

Nepticula desperatella, Frey. Grange (J.H.T.); Windermere (J.B.H.).

Nepticula regiella, H.S. Bowdon (R.S.E.); Preston (J.B.H.).

Nepticula æneofasciella, H.S. Grange, Lytham (J.H.T.), and Windermere (J.B.H.).

Nepticula splendidissimella, H.S. Lytham (J.H.T.); Windermere (J.B.H.).

* This and following records of *Nepticulæ* at Bowdon are from a list given by R. S. Edleston, in the *Zoologist* for 1857, p. 5327.

March 1890.

- Nepticula aurella*, Staint. Abundant everywhere among bramble.
Nepticula Hodgkinsoni, Staint. Preston (J.B.H., J.H.T.).
Nepticula gratiosella, Staint. Bowdon (R.S.E.); Preston (J.B.H., J.H.T.).
Nepticula ulmivora, Hein. Dutton (J.B.H. *in litt.* and Ent., xiii, 105); Grange (J.H.T.).
Nepticula prunetorum, Staint. Bowdon (R.S.E.); Grange (J.B.H.).
Nepticula marginecolella, Staint. Preston (J.B.H., J.H.T.); Grange (J.H.T.).
Nepticula alnetella, Staint. Bowdon (R.S.E.); Preston (J.H.T.); Windermere (J.B.H.).
Nepticula centifoliella, Z. Preston (J.B.H., J.H.T.).
Nepticula microtheriella, Staint. Bowdon (R.S.E.); Grange (J.B.H.).
Nepticula betulicula, Staint. Bowdon (R.S.E.); Grange (J.B.H., J.H.T.).
Nepticula plagiolella, Staint. Bowdon (R.S.E.); Preston and Grange (J.B.H., J.H.T.).
Nepticula ignobilella, Staint. Bowdon (R.S.E.); Preston (J.B.H., J.H.T.).
Nepticula poterii, Staint. Grange (J.B.H.).
Nepticula glutinosæ, Staint. Preston (J.H.T.); Windermere (J.B.H.).
Nepticula luteella, Staint. Grange and Windermere (J.B.H., J.H.T.).
Nepticula sorbi, Staint. Preston and Longridge (J.H.T.); Windermere (J.B.H.).
Nepticula Woolhopiella, Staint. Grange (J.H.T.).
Nepticula argentipedeella, Z. Bowdon (R.S.E.); Grange (J.B.H., J.H.T.).
Nepticula tityrella, Staint. Bowdon (R.S.E.); Grange (J.B.H.); Preston (J.H.T.).
Nepticula malella, Staint. Bowdon (R.S.E.); Grange district (J.H.T.).
Nepticula atricollis, Staint. Bowdon (R.S.E.); Grange (J.H.T.).
Nepticula angulifasciella, Staint. Bowdon (R.S.E.); Grange (J.H.T.); Preston (J.B.H., J.H.T.).
Nepticula arcuatella, H.S. Grange (J.B.H., J.H.T.).
Nepticula myrtillella, Staint. Windermere (J.B.H.).
Nepticula salicis, Staint. Bowdon (R.S.E.); Chat Moss (J.C.); Grange (J.B.H.); Preston (J.H.T.); Wirral (J.F.B.).

Naturalist,

- Nepticula castanella*, Edlest. Bowdon (J.H.T.).
Nepticula fulgens, Staint. Grange and Preston (J.H.T.); Windermere (J.B.H.).
Nepticula floslactella, Haw. Common everywhere.
Nepticula lapponica, Wilk. Grange (J.H.T.); Windermere (J.B.H.).
Nepticula septembrella, Staint. Bowdon (R.S.E.); Grange (J.B.H., J.H.T.); Silverdale (J.H.T.).
Nepticula catharticella, Staint. Grange (J.B.H., J.H.T.); Silverdale (J.H.T.).
Nepticula intimella, Z. Grange (J.B.H.).
Nepticula Weaveri, Staint. Bowdon (R.S.E.); Dutton (J.B.H.); Staleybrushes (J.C.).
Nepticula trimaculella, Haw. Bowdon (R.S.E.); Leyland (J.H.T.).
Nepticula sub-bimaculella, Haw. Common everywhere.
Nepticula argyropeza, Z. Grange (J.B.H.).
Nepticula apicella, Staint. Grange (J.B.H.).
Nepticula (Trifurcula) pulverosella, Staint. Dutton (J.B.H.); Grange (J.H.T.).
Nepticula cryptella, Staint. Grange (J.B.H.).

BOHEMANNIA, Staint.

- Bohemannia quadrimaculella*, Boh. Preston (J.H.T.).

MICROPTERYGINA.

MICROPTERYX, Hüb.

- Micropteryx calthella*, L. Locally abundant in flowers of Ranunculaceæ.
 Lanc.—Childwall (C.S.G.); Grange and Preston (J.H.T.); Otterspool, near Liverpool (J.W.E.); Windermere (J.B.H.); Withington (J.C.).
 Ches.—Bromborough Wood (J.W.E.); Dunham Park and Knutsford (J.C.); Patrick Wood near Bromborough, and New Brighton (C.S.G.).
Micropteryx aruncella, Scop. Recorded from Dunham Park and Knutsford by Mr. Chappell, and Manchester, common (Staint. Man., ii, 302).
Micropteryx Seppella, F. Local.
 Lanc.—Grange and Preston (J.H.T.); Manchester (Staint. Man., ii, 303); Windermere (J.B.H.).
 Ches.—Bidston and Tranmere (J.F.B.); Knutsford (J.C.); New Brighton (C.S.G.).

March 1890.

Micropteryx mansuetella, Z. Manchester (Staint. Man., ii, 303).

Micropteryx aureatella, Scop. = **allionella**, F. Local, but common where it occurs.

Lanc.—Chat Moss (J.C.); Grange (J.H.T.); Windermere (J.B.H.).

Ches.—Knutsford (J.C.).

Micropteryx Thunbergella, F. Local, and recorded only from Lancashire. Croxteth Wood, by beating hollies (C.S.G.); Grange (J.H.T., J.B.H., Ent. Mo. Mag., x, 40); Manchester (Staint. Man., ii, 303); Windermere (J.B.H.).

Micropteryx Sparmanella, Bosc. Local, and not recorded from Cheshire. Grange (J.H.T.); Manchester (Staint. Man., ii, 304); Simmonswood Moss (C.S.G.); Windermere (J.B.H.).

Micropteryx subpurpurella, Haw. Local, but abundant where it occurs.

Lanc.—Chat Moss and Prestwich (J.C.); Grange and Preston (J.H.T.); Windermere (J.B.H.).

Ches.—Dunham Park (J.C.); lane leading from Bromborough to Eastham Wood (C.S.G., J.W.E.); Wirral (J.F.B.).

Micropteryx unimaculella, Zett. Local.

Lanc.—Chat Moss (J.C.); Lancashire mosses (C.S.G.); Windermere (J.B.H.); Withnell (J.H.T.).

Ches.—Abundant in Delamere Forest (C.S.G., Ent., vi, 453).

Micropteryx semipurpurella, Steph. Local; recorded only from Lancashire. Chat Moss (J.C.); Grange (J.H.T.); Lancashire mosses (C.S.G.); Windermere (J.B.H.).

Micropteryx purpurella, Haw. On the mosses, recorded by R. S. Edleston from Coppy Wood near Middleton (Zool., ii, 735); by C. S. Gregson from the Lancashire mosses; and in Stainton's Manual (ii, 303) from the Manchester district.

PTEROPHORINA.

PLATYPTILIA, Hüb.

Platyptilia ochroductyla, Hüb. Local.

Lanc.—Bedford Leigh (J.C.); banks of the Alt and at Hale (C.S.G.); Manchester (Staint. Man., ii, 440); Grange (J.B.H.); Pendlebury (R. S. Edleston, Zool., 1845, 1220).

Ches.—Bromborough Pool (C.S.G.); Wirral (J.F.B.).

Platyptilia Bertrami, Rössl. Recorded by J. B. Hodgkinson from Dutton near Ribchester (Ent., xiii, 105) and Grange.

Platyptilia gonodactyla, Schiff. = **trigonodactyla**, Staint. Common and generally distributed among coltsfoot.

Naturalist,

AMBLYPTILIA, Hüb.

Amblyptilia acanthodactyla, Hüb. Recorded from Lancashire only. Dutton (J.B.H., Ent., xiii, 105); Grange (J.B.H.); Hale Marsh (C.S.G.).

Amblyptilia cosmodactyla Hüb. = **punctidactyla**, Haw. Local.

Lanc.—Hale (C.S.G.).

Ches.—Bidston and Tranmere (J.F.B.); Claughton (C.S.G.).

OXYPTILUS, Z.

Oxyptilus hieracii, Z. Recorded only from Bidston near Birkenhead by J. F. Brockholes.

Oxyptilus teucii, Greening. Delamere (J.B.H.).

Oxyptilus parvidactylus Haw. = **microdactylus**, Steph. Recorded only from Grange (J.B.H.).

MIMÆSOPTILUS, Wallgr.

Mimæsoptilus serotinus, Z. = **bipunctidactylus**, Haw. Local.

Lanc.—Grange (J.B.H.); Kenyon (J.C.); Manchester (Staint. Man., ii, 442).

Ches.—Knutsford (J.C.); New Brighton (C.S.G.); Wallasey sand-hills (J.F.B.).

Mimæsoptilus zophodactylus, Dup. = **Loewii**, Z. The first recorded capture of this species in Britain was at Southport by Gregson, a single specimen in August 1857, and recorded in the Zoologist for 1857, 5855.

Mimæsoptilus plagiodactylus, Staint. Recorded from Grange (J.B.H.); Manchester (Staint. Man., ii, 442); and Knutsford (J.C.).

Mimæsoptilus Hodgkinsoni, Gregson. Grange (J.B.H.).

Mimæsoptilus pterodactylus, L. = **fuscus**, Retz. Locally common.

Lanc.—Grange (J.B.H.); Pendlebury (R. S. Edleston, Zool., 1845, 1220); Warbreck Moor (C.S.G.).

Ches.—Dunham Park (J.C.); Wallasey sand-hills (J.F.B., J.W.E.).

CEDEMATOPHORUS, Wallgr.

Cedematophorus lithodactylus, Tr. Grange (J.B.H., Ent., x, 40) and Manchester (Staint. Man. ii, 443).

PTEROPHORUS, Wallgr.

Pterophorus monodactylus, L. = **pterodactylus**, Hüb. Recorded from Grange (J.B.H.) and Wirral (J.F.B.).

March 1890.

LEIOPTILUS, Wallgr.

Leioptilus tephradactylus, Hüb. Grange (J.B.H.); Manchester (Staint. Man., ii, 443).

Leioptilus microdactylus, Hüb. Grange (J.B.H.).

ACIPTILIA, Hüb.

Aciptilia tetradactyla, L. Grange (J.B.H.).

Aciptilia pentadactyla, L. Common, but local.

Lanc.—Grange (J.B.H.); Irlam, Patricroft, and Withington (J.C.).

Ches.—Wallasey and Tranmere (J.F.B., C.S.G.); Liscard (J.W.E.).

ALUCITINA.

ALUCITA, Z.

Alucita hexadactyla, L. = *polydactyla*, Hüb. Local among honeysuckle in Cheshire; Bowdon, Knutsford, and Mobberley (J.C.); Delamere Forest (J.B.H.); Eastham Wood (J.W.E.); Wirral (J.F.B.).

SUMMARY.

SUB-ORDERS..	Total British Species.*	Number recorded for Lancashire and Cheshire.	Percentage.
RHOPALOCERA	65	47	72
HETEROCERA—			
<i>Sphingina</i>	39	25	64
<i>Bombycina</i>	111	66	59
<i>Noctuina</i> (including <i>Deltoides</i>)	324	223	68
<i>Geometrina</i>	279	204	73
<i>Pyrilidina</i> and <i>Crambina</i> ...	161	85	52
<i>Tortricina</i>	343	209	61
<i>Tineina</i>	708	465	65
<i>Micropterygina</i>	12	11	91
<i>Pterophorina</i> and <i>Alucitina</i> ...	37	20	54
Total	2079	1355	65

* 'The Entomologist' synonymic list of British Lepidoptera, by Richard South, F.E.S.

The arrangement followed in the preceding pages has been that of W. F. Kirby ('European Butterflies and Moths') for the Microlepidoptera, and the 'Catalog der Lepidopteren des Europäischen Faunengebiets' by Dr. Wock, for the Pyralidina, Tortricina, Tineina, and Pterophorina.

Naturalist,

INDEX TO GENERA.

	PAGE		PAGE		PAGE		PAGE
Ablabia ...	82	Brephos ...	49	Cucullia ...	44	Eurymene ...	51
Abraxas ...	54	Bryophila ...	28	Cymatophora ...	26	Euzophora ...	77
Abrostola ...	45	Bryotropha ...	111	Dasycera ...	116	Exeretia ...	107
Acherontia ...	13	Bucculatrix ...	128	Dasychira ...	20	Exapate ...	83
Achroea ...	78	Butalis ...	123	Dasyptilia ...	31	Fidonia ...	55
Acidalia ...	58	Cabera ...	53	Dasystoma ...	107	Fumea ...	22
Aciptilia ...	134	Cacocia ...	80	Deilephila ...	14	Gelechia ...	110
Acrobasis ...	77	Calamia ...	29	Deiopeia ...	19	Geometra ...	58
Acrolepia ...	102	Calocampa ...	44	Demas ...	27	Glyphipteryx ...	117
Acronycta ...	27	Capua ...	82	Depressaria ...	107	Gnophos ...	56
Adela ...	101	Caradrina ...	30	Dianthæcia ...	40	Gnophria ...	18
Aglossa ...	71	Carcina ...	116	Dichelia ...	82	Gonepteryx ...	6
Agriopis ...	40	Carpocapsa ...	92	Dichonia ...	40	Gonophora ...	26
Agrotis ...	36, 38	Carsia ...	61	Dichrorampha ...	96	Gortyna ...	34
Alucita ...	134	Cataclysta ...	74	Dictyopteryx ...	78	Gracilaria ...	118
Amblyptilia ...	133	Catocala ...	47	Diloba ...	27	Grammesia ...	30
Amphidasis ...	57	Cedistis ...	105	Diorctria ...	76	Graphiphora ...	36
Amphipyra ...	35	Celæna ...	42	Diplodoma ...	97	Grapholitha ...	89
Amphisbatis ...	123	Cemiostoma ...	128	Dipterygia ...	43	Habryntis ...	43
Amphysa ...	82	Ceratophora ...	115	Doryphora ...	114	Hadena 40, 41, 42, 43	
Anacampsis ...	115	Cerigo ...	39	Drymonia ...	25	Halia ...	49
Anaitis ...	61	Cerostoma ...	106	Dryobota ...	40	Halonota 81, 90, 91	
Anarsia ...	116	Cerura ...	24	Dyschorista ...	33	Harpella ...	116
Anarta ...	45	Charæas ...	31	Ebulea ...	73	Hecatera ...	41
Anchocelis ...	31	Chauliodes ...	121	Egira ...	44	Hedya ...	93
Anerastia ...	77	Cheimatobia ...	67	Eidophasia ...	105	Heliaca ...	45
Anisopteryx ...	60	Cheimatophila ...	83	Elachista ...	123	Heliodes ...	45
Antispila ...	122	Chelaria ...	114	Ellopia ...	50	Heliolithis ...	34, 45
Apamea ...	39, 42	Chesias ...	61	Endrosis ...	122	Heliophobus ...	39
Aphelia ...	88	Chilo ...	75	Ennychia ...	72	Heliözela ...	122
Aphomia ...	78	Chimabacce ...	107	Ephestia ...	77	Hemaris ...	16
Aplecta ...	39, 41	Chærocampa ...	15	Ephyra ...	60	Hemerophila ...	56
Aporophyla ...	39	Choreutis ...	97	Epigraphia ...	107	Hepialus ...	21
Arctia ...	19	Chrysoclista ...	122	Epinephile ...	10	Herbula ...	73
Argynnis ...	8	Cilix ...	22	Epione ...	52	Herminia ...	48
Argyresthia ...	103	Cirrædia ...	33	Epunda 30, 39, 40		Hesperia ...	12
Argyritis ...	113	Cleoceris ...	30	Erebia ...	9	Heterognomon ...	81
Argyrolepis ...	84	Cleodora ...	115	Ergatis ...	114	Heydenia ...	123
Asopia ...	71	Clepsis ...	82	Eriogaster ...	24	Hibernia ...	54
Asphalia ...	26	Clisiocampa ...	23	Eromene ...	76	Himera ...	51
Aspilates ...	52	Cloantha ...	44	Eubolia ...	62	Hipparchia ...	9
Aspis ...	88	Cochylis ...	84	Euchelia ...	19	Homœosoma ...	77
Asteroscopus ...	31	Cœnobia ...	28	Euchloe ...	4	Hydrelia ...	67
Axylia ...	37	Cœnonympha ...	10	Euchromia ...	87	Hydrocampa ...	74
Bactra ...	88	Coleophora ...	119	Euclidia ...	47	Hydræcia ...	34
Bapta ...	54	Colias ...	5	Eudemis ...	88	Hypena ...	48
Batodes ...	82	Collix ...	63	Eudorea ...	71	Hypenodes ...	48
Batrachedra ...	122	Coptoloma ...	93	Eugonia ...	50	Hypermesia ...	95
Biston ...	57	Coriscium ...	118	Eulia ...	81	Hyponomeuta ...	102
Blabophanes ...	98	Cosmia ...	34	Euperia ...	34	Hyppa ...	43
Boarmia ...	56	Cossus ...	21	Eupithecia ...	68	Hyria ...	59
Bohemannia ...	131	Crambus ...	75	Euplexia ...	43	Idiographis ...	81
Botys ...	72, 74	Craniophora ...	27	Eupœcilia ...	84, 85	Incurvaria ...	100
Brachmia ...	111	Crocallis ...	51	Eurrhyncha ...	72	Ino ...	17
Brachycrossata ...	115	Cryptoblabes ...	77	Eurycreon ...	73	Laelia ...	21

	PAGE		PAGE		PAGE		PAGE
Lampetia ...	30	Nola ...	49	Poecilochroma ...	94	Spilodes ...	73
Lampronia ...	99	Nomophila ...	74	Poedisca ...	89	Spilonota ...	90
Lamprotes ...	114	Nonagria ...	28	Poecilia... ..	113	Spilosoma ...	20
Larentia ...	63	Notodonta ...	25	Polia ...	40	Steganoptycha	93
Lasiocampa ...	23	Nudaria ...	18	Polyommatus...	10	Stenopteryx ...	74
Laverna ...	121	Numeria ...	53	Porthesia ...	21	Stephensia ...	123
Leiocampa ...	25	Ochsenheimeria	101	Prays ...	103	Sterrhia ...	60
Leioptilus ...	134	Ochneria ...	21	Prothedes ...	48	Stilbia ...	29
Lemiodes ...	74	Ochnerostoma	105	Prothymia ...	48	Swammerdamia	103
Leptogramma ...	78	Odezia ...	60	Psamotis ...	74	Tachyptilia ...	115
Leucania ...	29	Odontopera ...	50	Pseudoterpna...	58	Taeniocampa ...	31
Leucoma ...	21	Oecophora ...	116	Pterophorus ...	133	Taleporia ...	97
Leucophasia ...	4	Edematophorus	133	Pterostoma ...	25	Tapinostola ...	29
Lita ...	112	Enophila ...	125	Ptochuusa ...	114	Teichobia ...	102
Lithocolletis ...	125	Olindia ...	83	Ptycholoma ...	81	Teleia ...	113
Lithosia ...	18	Oporabia ...	67	Pygara ...	24	Teras ...	78
Lobesia ...	88	Opostega ...	129	Pyrallis ...	71	Thamnonoma ...	55
Lobophora ...	61	Orgyia ...	20	Pyrausta ...	72	Thanaos ...	12
Lomaspilis ...	54	Ornix ...	118	Pyrrhia... ..	34	Thecla ...	12
Lophoderus ...	81	Orrhodia ...	35	Retinia... ..	85, 94	Tholomiges ...	59
Lophopteryx ...	25	Ortholitha ...	62	Rhacodia ...	78	Thyatira ...	26
Lozopera ...	84	Orthosia ...	32	Rhodaria ...	73	Timandra ...	59
Lozotania ...	80, 81	Orthotelia ...	106	Rhopobota ...	96	Tinagma ...	122
Luperina ...	39	Oxyptilus ...	133	Rivula ...	49	Tinea ...	98
Lycæna ...	11	Pachnobia ...	32	Roxana ...	87	Tineola... ..	99
Lyonetia ...	128	Pamphila ...	12	Rumia ...	52	Tischeria ...	127
Macaria ...	52	Pancalia ...	122	Rusina ...	31	Tmetocera ...	93
Macroglossa ...	15	Pandemis ...	80	Sarrothripa ...	49	Tortricodes ...	83
Mamestra ...	40, 42	Panolis ...	31	Saturnia ...	23	Tortrix ...	80
Melanargia ...	9	Paraponyx ...	74	Satyrus ...	9	Trachea ...	31
Melitæa ...	8	Parasia ...	114	Schoenobius ...	74	Trifurcula ...	129
Mesotype ...	62	Pempelia ...	76	Schreckensteina	122	Triphæna ...	35
Metrocampa ...	50	Penthina ...	86	Sciaphila ...	82, 83	Trochilium ...	16
Miana ...	30, 43, 48	Pericallia ...	51	Scodiona ...	53	Urapteryx ...	52
Micropteryx ...	131	Peridia ...	25	Scoliopteryx ...	35	Vanessa ...	6
Mimæsoptilus ...	133	Perittia... ..	123	Scoparia ...	71	Venilia ...	52
Miselia ...	39	Peronea ...	78	Scopelosoma ...	35	Venusia ...	67
Mixodia ...	87	Petasia ...	31	Scopula ...	73	Xanthia ...	33, 34
Monochroa ...	114	Phalera... ..	24	Scotosia ...	63	Xanthosetia ...	84
Mormo... ..	43	Phasiane ...	53	Scythropia ...	102	Xylina ...	43
Myelois ...	77	Phibalapteryx	62	Selenia ...	51	Xylocampa ...	44
Nannodia ...	113	Phoxopteryx	95	Selidosema ...	55	Xylophasia ...	42
Nematois ...	101	Phragmatobia	20	Semasia ...	91	Xysmatodoma ...	97
Nemeobius ...	10	Phthoroblastis	93	Semioscopis ...	107	Ypsolophus ...	115
Nemeophila ...	19	Phylloporia ...	99	Sericoris ...	81, 88	Zanclognatha...	48
Nemophora ...	100	Rieris ...	5	Sesia ...	16	Zelleria... ..	103
Nemoria ...	58	Pionea ...	74	Setina ...	18	Zephyrus ...	11
Nephropteryx	73	Plastenis ...	33	Sitotroga ...	114	Zerene ...	54
Nepticula ...	129	Platypteryx ...	22	Smerinthus ...	15	Zeuzera ...	21
Neuria ...	40	Platyptilia ...	132	Solenobia ...	97	Zonosoma ...	60
Neuronia ...	39	Pleurota ...	116	Sophronia ...	115	Zygæna ...	17
Nisoniades ...	12	Plusia ...	46	Spæliotis ...	37		
Nænia ...	43	Plutella ...	105	Sphinx ...	13		