



# A List of the Micro-Lepidoptera of the Oxford District

BY

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It is purely for reasons of practical convenience that the tradition of separating Macro- and Micro-lepidoptera has been followed in the present publication. Although any dividing-line drawn between the two is necessarily arbitrary and unscientific, the distinction corresponds to a real division of labour. Few entomologists can spare the time, or combine the different methods which must be adopted, for an equally thorough study of both. The so-called Micro-lepidoptera receive so inadequate a share, considering their number and importance, of the interest of entomologists that there is ample justification for concentrating one's attention upon them. For a number of years I have found them a fascinating object of study, and have devoted to them such spare hours as could be snatched from other labours. The present list is therefore based mainly on my own observations; whereas a list of Macro-lepidoptera would have been to a far greater extent a compilation based on the work of others. Moreover, the Macro-lepidoptera have unfortunately acquired a commercial value, and any entomologist worthy of the name hesitates to disclose information concerning them, lest he should unwittingly encourage the plundering of our countryside by professional collectors and their helpers; but with the Micro-lepidoptera, for the most part, this danger is negligible. It remains open to some entomologist better qualified than myself to compile a list of Macro-lepidoptera on a similar scale, but perhaps more cautiously worded, and so complete the task here left unfinished.

No satisfactory list of the Micro-lepidoptera of the Oxford district has hitherto been put together. The list of Lepidoptera printed in the Report of the Ashmolean Society for 1901 is a bare string of names, extremely incomplete and sometimes erroneous. The Berkshire list, published in 1906 in the Victoria County History, added hardly any fresh records from the Oxford district. The Oxfordshire list, prepared about the same time for publication in the same series, has never

been printed, and was not compiled under favourable conditions. The region of which Oxford is the centre deserves for many reasons to have its insect fauna fully chronicled. It has obvious limitations, being far from the coast, without mountainous or upland country, including no extensive heaths, moors or pine-woods, and only slight relics of fenland. The plants which require such habitats, and consequently the insects attached to them, are absent or very rare. Nevertheless, it is an area possessing a certain unity and definite characteristics, and may be regarded as a favourable specimen of the more low-lying parts of the southern midlands. Its flora is rich and varied, including many local plants, and the Micro-lepidoptera in consequence are well represented and abundant. Since 1914 a series of papers by the present writer, published for the most part in the 'Entomologist's Monthly Magazine,' has dealt in some detail with the more interesting species observed in the district. A general survey of the Micro-lepidoptera of the Oxford district was published in 1926 in the handbook presented to members of the British Association. To that survey, which makes it possible to confine these remarks to a few indispensable explanations, the present list forms a natural complement.

No moment could be more suitable than the present for the production of this list. On the one hand the character of the Oxford country is rapidly changing. Almost every year one or more of the most interesting localities falls a prey to the builder, the farmer, the grower of live-stock, or the golfer. Rough banks and ditches are transformed into tidy paths, barbed-wire fences spring up on ground always hitherto open, ancient woodland is replaced by fir plantations. Local plants are uprooted, burnt or otherwise destroyed. Many interesting insects are therefore on the point of extinction, if not already extinguished. It is very desirable to put on record, before the opportunity has passed, some account of the entomological resources of the Oxford district in what will soon be looked back upon as the 'good old days.' On the other hand, several collections of Micro-lepidoptera formed to a large extent within the area have lately come into the possession of the University Museum. It was important to examine them and record the more interesting of their contents before they were incorporated and while doubtful data could still be verified. Having had the advantage of utilising virtually all the existing material, both specimens and written records, I have tried to settle all outstanding problems and clear the field for future observers. Finally, the appearance in the course of 1928 of two

eagerly awaited works provided me most opportunely with a solid basis in matters of classification and nomenclature. Mr. Meyrick's 'Revised Handbook of British Lepidoptera,' by the chief living authority on the Micro-lepidoptera, has at last provided a really satisfactory classification of the smaller moths; I have followed implicitly both its arrangement and (with a few insignificant exceptions) its nomenclature. The new 'Flora of Oxfordshire' by our distinguished Treasurer, Dr. G. C. Druce, has served as an authoritative and up-to-date guide in the thorny questions of botanical nomenclature.

It is obvious that a list of this kind must be very imperfect. An observer whose time is limited inevitably concentrates his attention upon a small number of familiar localities. In order that it may have some permanent value, in spite of its incompleteness, special efforts have been made to ensure the reliability of all the information given. In the large majority of instances, the records are based on the specimens themselves and the data attached to them, the identity of each example having been carefully verified at the outset. No account has been taken of specimens lacking data, while the data themselves have been controlled, whenever there was any possibility of error, by entries in entomological diaries. My own collection and diary, dating from 1908 (so far as the Oxford district is concerned), but furnishing hardly any records of the smaller moths prior to 1911, have naturally formed the basis of the list. In addition, I have worked through the collections housed in the Hope Department, including those formed by Messrs. A. Sidgwick, N. V. Sidgwick, W. G. Pogson-Smith and Prof. W. M. Geldart, and the entomological diaries relating to them. Most of the Oxford district specimens in these collections bear the inadequate and often misleading label 'Oxford,' with the date of capture; but by consulting the diaries at the date indicated I have usually been able to determine the actual locality, and often the circumstances, in which they were obtained. Mr. A. H. Hamm has allowed me to examine a small but interesting accumulation of Micro-lepidoptera, picked up from time to time in the course of his search for other insects. Exceptionally I have included in the list a small number of records, about which no doubt was possible, culled from diaries and unsupported by specimens, and a few others supplied to me by trustworthy collaborators, notably Prof. A. W. Pickard-Cambridge, Mr. O. W. Richards and Commander J. J. Walker. But every record accepted without an examination of the actual specimen or material on which it is based has been distinguished by a special sign.

As in the 1901 list, the term 'Oxford district' has been taken to mean the country lying within a radius of ten miles from Carfax. In reality, a seven-mile radius could have been adopted without materially altering the present list, all the more productive localities lying close at hand; but the ten-mile radius, while not seriously infringing the natural unity of the district, allows more scope for future additions. A few records of special interest from spots outside the radius have been included, but are enclosed in square brackets. In mentioning localities, the general principle has been to work from south-west to north-east, but to deal successively with the three counties, Berkshire, Oxfordshire and Buckinghamshire. Dates have been given in the case of the older records, the rarer species and isolated occurrences of the commoner species, and an attempt has been made to indicate, so far as possible, the quantity observed of each species. Finally, in view of the fact that most Micro-lepidoptera are dependent on some particular plant or plants, it has been deemed important to mention the plants to which each species is known to be attached in this district. Such information has only been given when there was definite evidence available, and is therefore very incomplete, especially for the larger insects; but it seemed best to follow the same system throughout, if only to indicate how much remains to be known.

In the course of my task I have been obliged to invoke the assistance, and probably try the patience, of many kind friends. My thanks are due, and are warmly offered, to Mr. E. Meyrick for identifying numerous specimens and discussing difficulties of nomenclature; to Mr. W. G. Sheldon for identifying various Tortricids, especially the aberrations of species of *Peronea*; to Mr. O. W. Richards for examining the genitalia of a large number of specimens, especially of the genus *Coleophora*, and supplying particulars of his own captures; to Mr. W. Petersen for examining the genitalia of several species of *Lithocolletis* and *Nepticula*; to Prof. A. W. Pickard-Cambridge for sending me a list of captures and answering my queries; to Mr. N. V. Sidgwick for enabling me to examine his collection and entomological diary (both now presented to the University Museum) and for information communicated verbally; to Mrs. W. M. Geldart and Mrs. W. G. Pogson-Smith for allowing me to consult entomological diaries written by their late husbands; to the Proprietor of the Victoria County History and to the General Editor (Wm. Page, Esq., F.S.A.) for generously placing at my disposal the manuscript list of Oxfordshire Lepidoptera in their possession; to Mr. A. H. Hamm for handing over to me or permitting me to examine much useful material

and for many hints and items of information; to Dr. G. C. Druce and Mr. T. R. Gambier-Parry for assistance in the identification of plants; to Prof. E. B. Poulton for allowing me unrestricted access to the collections in the Hope Department; to Commander J. J. Walker for information supplied, and for supervising with an experienced eye the production of this list; and to my wife for undertaking the heavy task of preparing the list for the printer.

The following manuscript sources and publications have been utilised in the compilation of the list, in addition to my own material. Before each item is placed the short title used for reference:—

#### MANUSCRIPT SOURCES.

- A. S. diary.** An entomological diary kept by A. Sidgwick, 1887—1911; in four note-books, now in the Hope Department.
- N.V.S. diary.** An entomological diary kept by N. V. Sidgwick, 1880—1906; hardly concerned with the Oxford district until 1896; in two note-books, now in the Hope Department.
- W.G.P.-S. diary.** An entomological calendar kept (intermittently) by W. G. Pogson-Smith, 1896—1903; in one note-book.
- W.M.G. diary.** An entomological diary kept by W. M. Geldart, 1902—1912; in two note-books, the second of which is in the Hope Department.
- Oxfordshire list.** A list of the Lepidoptera of Oxfordshire, compiled about 1905 for the Victoria County History of Oxfordshire by A. H. Hamm and W. Holland.

#### PUBLICATIONS.

- Nat. Hist. Tin.** H. T. Stainton, *The Natural History of the Tineina*, 13 vols, London, 1855—1873.
- Stainton's Manual.** H. T. Stainton, *A Manual of British Butterflies and Moths*, Vol. II, London, 1859.
- Wilkinson.** S. J. Wilkinson, *The British Tortrices*, London, 1859.
- Staudinger-Rebel.** O. Staudinger und H. Rebel, *Catalog der Lepidopteren des palaearctischen Faunengebietes*, third edition, Berlin, 1901, Part II.

- 1901 list.** [A. Sidgwick] Lepidoptera of the Oxford District, in the Ashmolean Natural History Society of Oxfordshire Report for Year 1901, Oxford, 1902, pp. 16-31.
- Barrett.** C. G. Barrett, The Lepidoptera of the British Islands, Vols. IX, X, XI, London, 1904, 1905, 1907.
- Berkshire list.** [W. Holland and A. H. Hamm] Lepidoptera, in A History of Berkshire, edited by P. H. Ditchfield and W. Page (The Victoria History of the Counties of England), Vol. I, London, 1906, pp. 100-116.
- Nat. Hist. Ox.** E. G. R. Waters, Micro-lepidoptera, in The Natural History of the Oxford District, edited by J. J. Walker, Oxford, 1926, pp. 230-247.
- Meyrick's Handbook.** E. Meyrick, A Revised Handbook of British Lepidoptera, London [1928].
- Entom.** The Entomologist. An Illustrated Monthly Journal of General Entomology. London, from 1864.
- Ent. Mo. Mag.** The Entomologist's Monthly Magazine. London, from 1864.

Specimens and records other than my own are assigned in every instance to the captor or observer to whom they are due. The initials are to be interpreted as follows:—

<b>A.H.H.</b>	A. H. Hamm.
<b>A.S.</b>	A. Sidgwick († 1920).
<b>A.W.P.-C.</b>	(Professor) A. W. Pickard-Cambridge.
<b>E.B.P.</b>	(Professor) E. B. Poulton.
<b>H.A.P.</b>	(Rev.) H. Adair Pickard.
<b>J.C.</b>	J. Collins.
<b>J.J.W.</b>	(Commander) J. J. Walker.
<b>N.V.S.</b>	N. V. Sidgwick.
<b>O.W.R.</b>	O. W. Richards.
<b>W.F.</b>	W. Fassnidge.
<b>W.G.P.-S.</b>	W. G. Pogson-Smith († 1907).
<b>W.H.</b>	W. Holland.
<b>W.M.G.</b>	(Professor) W. M. Geldart († 1922).

The following signs are used:—

- \* Found in the larval or pupal stage and reared.
- \*\* Identified from the larva, larval case, mine, or other pre-imaginal evidence, but not actually reared.
- † I have not examined the specimen or material on which the record is based.
- [ ] Outside the ten-mile radius.

## PYRALIDINA.

## PHYCITIDAE.

- Pempelia dilutella** Hübn. Wytham Hill. On the south side of Stow Wood. Very local.
- Salebria fusca** Haw. North Oxford: an example of this species, in fresh condition, came into my study on August 7th, 1926. [Wallingford, one specimen, now in the Hope Department, captured by H. R. Smith in 1894.] The occurrence of this heath-frequenting insect in localities so unsuitable is difficult to explain; perhaps due to accidental introduction?
- S. betulae** Göze. Cothill. Boar's Hill. Hen Wood, several at light, 1899 and 1901 (A.S., N.V.S.); larvae and pupae found in 1923. Waterperry Wood. Shabbington Wood. The moth itself is not often captured, but the larvae are fairly common. On *Betula alba*.\*
- Alispa angustella** Hübn. Near Dry Sandford, larvae found in hedges, 1919-20. Bagley Wood, larvae plentiful on one tree, September and October, 1921. Wytham Hill, one on June 10th, 1911; traces of larvae seen there subsequently. On *Euonymus europaeus*.\* The moth is very seldom captured.
- Hypochalcia ahenella** Hübn. Holton Pits, one captured on June 27th, 1924.
- Dioryctria abietella** Fabr. Tubney Warren, one captured on August 9th, 1920.
- Phycita spissicella** Fabr. Tubney Wood. Boar's Hill and Bagley Wood. Wytham Woods. Yarnton, one in 1922. Waterperry Wood. Hell Coppice. Shabbington Wood. Rather common in oak woods.
- Ephestia elutella** Hübn. North Hinksey, in a rick, 1913. Oxford, common in shops and dwelling-houses. Headington Hill, on a fence, 1922.
- E. kuehniella** Zell. Oxford: plentiful in the Castle Mill and in grain shops. Bred from oatcake and biscuit, 1897-99 (A.S.).
- Cateremna terebrella** Zinck. Tubney Wood, since 1920. Hitch Copse, since 1915. Bagley Wood, since 1921. Bladon Heath, larvae found in April, 1915. Obtained

only in the larval stage, in stunted cones of *Pinus Abies*\* fallen from the larger trees. Irregular in its occurrence, but turns up repeatedly in different spots, often in plenty. Cf. Ent. Mo. Mag., LVI, 1920, p. 258.

**Homoeosoma binaevella** Hübn. Boar's Hill, a few captured in 1901 (A.S., N.V.S.). Oxford district, one specimen labelled 1910 (in error for 1901?) (W.G.P.-S.).

**H. nebulella** Hübn. [Cherbury Camp, one in 1920.] Tubney, one in 1920. Boar's Hill, 1899 and 1901, many specimens (A.S., N.V.S., W.G.P.-S., W.M.G.). [Cornbury Park, 1899 (A.H.H.).] Otmoor, one in 1928.

**Myelois cribrella** Hübn. [Cherbury Camp, 1920.] Tubney, frequent (J.J.W.). Between Boar's Hill and South Hinksey, plentiful in various spots. North Hinksey. By the Canal north of Wolvercote. North Oxford, on street-lamps. Headington, one in 1902 (A.H.H.); many in 1905 (N.V.S.). In and around Bullingdon Bog (A.H.H.).† Holton Pits, one in 1925. A common insect in this district. On *Cirsium eriophorum*\*, *C. lanceolatum*\* and *Arctium Lappa*.\* Cf. Ent. Mo. Mag., LIX, 1923, p. 182.

**Eurhodope advenella** Zinck. Tubney, one in 1920. Hen Wood, at light, 1899-1902 (A.S., N.V.S.). Boar's Hill and Chilswell, in hedges. Bagley Wood, one in 1920. Wytham Hill. Marston fields, 1890 (A.S.). Marston, one in a garden hedge, 1920. Hell Coppice. Widely distributed, but occurs sparingly.

**E. suavella** Zinck. Hen Wood, several captured at light, 1899 and 1901 (A.S., N.V.S.). Hell Coppice, locally common. On *Prunus spinosa*.\*

**Cryptoblabes bistriga** Haw. Cothill, one larva in 1928. Hen Wood, 1893 and 1901 (A.S.). Bagley Wood, sometimes abundant in the larval stage, though the imago is less in evidence. On *Quercus Robur*.\*

**Acrobasis consociella** Hübn. Common in all the woods of the district. On *Quercus Robur*.\*

**A. Zelleri** Rag. Common in oak woods, sometimes very abundant. On *Quercus Robur*.\*

#### CALLERIADAE.

**Meliphora grisella** Fabr. Many 'Oxford district' specimens, bred in 1906, in the Sidgwick collections. North Oxford, one at light, 1907 (A.S. diary).† Summertown, many bred from old honeycomb from the hives of Mr. H. R. Best, 1914 (J.J.W.).



**Aphomia sociella** Linn. Hen Wood, 1897 and 1901 (A.S., N.V.S.). Oxford, common. Headington Hill, on a fence, 1920. Bullingdon Bog, 1906 (A.H.H.).

**Galleria mellonella** Linn. Summertown, bred in plenty from old honeycomb from the hives of Mr. H. R. Best, 1914 (J.J.W.). Iffley, one on a tree trunk in a garden, 1906 (A.H.H.)

#### CRAMBIDAE.

**Crambus uliginosellus** Zell. Cothill (J.J.W.).† Boar's Hill. Marston fields, one in 1899 (N.V.S.). Bullingdon Bog, plentiful. On marshy ground.

**C. pascuellus** Linn. Common.

**C. pratellus** Linn. Common.

**C. culmellus** Linn. Very common.

**C. hortuellus** Hübn. Very common.

[**C. chrysonuchellus** Scop. Cornbury Park, near Charlbury, found commonly on June 18th, 1899 (A.H.H.).]

**C. falsellus** Schiff. Hen Wood, at light, 1897, 1901 (A.S.). South Hinksey, one in thatch, 1913. Summertown, occasionally comes indoors (J.J.W.).

**C. pinellus** Linn. Tubney, on flowers of ragwort at night. Cothill, 1920. Foxcombe Hill, 1922. Boar's Hill and Hen Wood, many specimens, from 1890 onwards (A.S., N.V.S.); one in the Youlbury grounds, 1928. Bagley Wood, 1898 (N.V.S. diary).† Bladon Heath, 1927. Frequents sandy localities.

**C. perlellus** Scop. Common.

**C. inquinatellus** Schiff. Tubney. Boar's Hill and Hen Wood. Cumnor Hurst. North Oxford. The University Parks (A.H.H.).† Commonest in sandy localities.

**C. geniculeus** Haw. Tubney, common. Foxcombe Hill. Hen Wood, 1899 (N.V.S.). Cumnor Hurst. Wytham Hill. North Hinksey. Oxford, at light, 1898-99 (A.S.); in the University Parks (A.H.H.).† Shotover (A.H.H.).

**C. tristellus** Fabr. Common.

**C. selasellus** Hübn. Cothill. Binsey. Yarnton, 1922. Oxford, one attracted to light, 1924. Marston fields, 1898-1902 (A.S., N.V.S., W.M.G.). Bullingdon Bog, 1900 (A.S. and N.V.S. diaries).† Otmoor. Local, in wet meadows and along ditches.

#### PYRAUSTIDAE.

**Acentropus niveus** Ol. On the Thames at Binsey, 1924 (O.W.R.).† On the Cherwell near Marston Ferry, one male dated August, 1899 (A.H.H.). Oxford district, one male specimen dated July, 1897 (W.G.P.-S.).

- Schoenobius forcicellus** Thunb. Hen Wood, one female at light, 1901 (A.S.). Binsey: common in a wet ditch by the Upper River. Oxford: by the Canal.
- Donacaula mucronella** Schiff. The Canal near Yarnton, abundant in 1913. Marston fields, many specimens dated 1898-1900 (A.S., N.V.S., W.G.P.-S., W.M.G.).
- Cataclysta lemnata** Linn. Binsey: in a wet ditch by the Upper River. Marston fields, from 1894 (A.S.). Locally common.
- Nymphula stagnata** Don. Hen Wood, at light, 1901 (A.S. and N.V.S. diaries).† Binsey. The Canal. Marston fields, from 1899 (A.S.). Otmoor. Locally common, in wet ditches and slow-running streams.
- N. stratiotata** Linn. Cothill. The Canal between Yarnton and Oxford. North Oxford, frequent on street-lamps. Marston fields, from 1890 (A.S., W.M.G.). Locally common.
- Hydrocampa nymphaeata** Linn. Cothill. Binsey. The Canal. Marston fields, from 1890 (A.S., W.M.G.). Otmoor. In ponds, wet ditches and semi-stagnant streams; rather common.
- Notarcha ruralis** Scop. Common.
- Eurrhynx urticata** Linn. Common.
- Perinephela lancealis** Schiff. Tubney, 1911. Cothill, locally common among *Eupatorium cannabinum*.
- Phlyctaënia crocealis** Hübn. Cothill. Hen Wood, 1899 (A.S.). Wytham Woods, among *Inula Conyza*. South Hinksey. Yarnton. Polecat End Lane near Forest Hill. Otmoor. Hell Coppice. Common among *Pulicaria dysenterica*.
- P. lutealis** Hübn. Common.
- P. ferrugalis** Hübn. Common in some years, absent in others.
- P. prunalis** Schiff. Common. On *Anthriscus sylvestris*,\* etc.
- P. fuscalis** Schiff. Waterperry Wood, locally common among *Melampyrum pratense*.
- P. sambucalis** Schiff. Common.
- Nomophila noctuella** Schiff. Irregular in occurrence, but often common.
- Pyrausta nigrata** Scop. Wytham Hill (J.J.W.). Holton Pits. On calcareous soil, very local.
- P. purpuralis** Linn. Common.

- P. aurata** Scop. Cothill, locally common on marshy ground among *Lamiaceae*.
- P. cespitalis** Schiff. Common.
- P. olivalis** Schiff. Common. On *Eupatorium cannabinum*,\* etc.
- Loxostege verticalis** Linn. Boar's Hill and Hen Wood, frequent (A.S., N.V.S.). Bagley Wood, 1895-96 (A.S.). Radley, one in 1919. Culham, one in 1919 (A.H.H.). Oxford, 1889 and 1890 (A.S. diary)†; occasionally comes to light. Marston, one in 1906 (A.S.).
- Scoparia angustea** Steph. Bagley Wood, 1921. Wytham, in a rick, 1919. Bladon Heath, 1927. Wolvercote. Oxford, common on walls and fences. Headington. Holton, in thatch, 1927. One of the most familiar Oxford insects, found in every month of the year.
- S. frequentella** Staint. Common.
- S. crataegella** Hübn. Bagley Wood, locally abundant on oak-trunks. Godstow Holt. North Oxford, 1927.
- S. truncicolella** Staint. Tubney Wood. Cothill, 1922. Bagley Wood. Waterperry Wood. Locally abundant in woods. Larva on moss growing on the ground.\*
- S. pallida** Steph. Cothill. The Canal from Yarnton to Oxford. Bullingdon Bog, 1904 (W.M.G.). Locally common in marshy places.
- S. cembrae** Haw. Hen Wood, 1901 (A.S.). Bagley Wood, 1913. North Hinksey. Oxford, on a street-lamp, 1920. Summertown, found indoors (J.J.W.).
- S. dubitalis** Hübn. Common. Var. **purbeckensis** Bankes (or a form closely approaching it): one on a sycamore trunk in Tubney Wood, June 20th, 1924.
- S. ambigualis** Treits. Common. Abounds in woods on oak trunks.
- Mesographe forficalis** Linn. Common.

### PYRALIDIDAE.

- Endotricha flammealis** Schiff. Hen Wood, several captured at sugar on July 22nd, 1901 (N.V.S.).
- Pyralis glaucinalis** Linn. Hen Wood, several captured at light and sugar in July, 1901 (A.S., N.V.S.). Summertown, in a house (J.J.W.).† Oxford district, two specimens dated 1898 and 1900 (W.G.P.-S.).

- P. costalis** Fabr. Tubney, 1927. Cothill. Bagley Wood, not uncommon in 1922. North Oxford and Summertown, sometimes attracted to light. Headington Hill, on a fence, 1920. Usually found in or near outbuildings, but the Bagley locality is far from any habitation.
- P. farinalis** Linn. Hen Wood, at sugar, 1906 (A.S. diary). † Bagley Wood, 1888 (A.S. diary). † Oxford, found indoors or resting on walls, 1898 (A.S.), 1901 (A.H.H.), 1906 (A. J. Chitty); in the Castle Mill, 1915. Not common.
- P. lienigialis** Zell. Oxford is one of the few British localities for this rarity. A specimen taken 'near Oxford,' August 22nd, 1902, was exhibited by Mr. South at a meeting of the South London Entomological Society the same year (cf. Ent. Mo. Mag., XXXVIII, 1902, p. 273, and Entom., XL, 1907, p. 291). Commander J. J. Walker captured a specimen in his bedroom at Summertown in early August, 1906, and a second in the first week of August, 1907 (cf. Ent. Mo. Mag., XLIV, 1908, p. 16). On July 5th, 1911, he met with a third example, resting on the stone wall of a barn at Lower Wolvercote (cf. Ent. Mo. Mag., XLVII, 1911, p. 192). Another was taken in August, 1907, in North Oxford by the Rev. W. Mansell Merry (cf. Ent. Mo. Mag., XLIV, 1908, p. 17). My own specimen, found resting on a telegraph pole by the Canal between Wolvercote and Oxford, on May 9th, 1912, seems to be the most recent capture.
- Aglossa pinguinalis** Linn. Cothill, in an outhouse, 1927. Hen Wood, several captured at light, 1897 and 1899 (A.S., N.V.S.). Oxford, frequent in houses. In the University Museum, not uncommon (A.H.H.).

#### PTEROPHORIDAE.

- Oxyptilus heterodactylus** Vill. Boar's Hill: in the Youlbury grounds and above Chilswell. Cumnor Hurst. Bagley Wood, one in 1920. Locally common among *Teucrium Scorodonia*.
- Platyptilia acanthodactyla** Hübn. South Hinksey: one in the old Rifle Range, August 17th, 1920. Oxford: one captured in the University Museum by A. Robinson, November 1st, 1904. Rare in this district.
- P. gonodactyla** Schiff. Foxcombe Hill, 1899 (W.H.). Boar's Hill, 1898 (A.H.H.). Kennington, 1925. North Hinksey, in a stone-pit. South Hinksey. North Oxford, on waste ground. Kirtlington, 1925 (O.W.R.). Bullingdon Bog, 1905 (W.M.G. diary). † Among *Tussilago Farfara*, locally common.

- P. pallidactyla** Haw. Foxcombe Hill, Boar's Hill and Hen Wood. North Hinksey. Oxford. Shotover, 1889 (A.S. diary). † Frequent on waste ground, and comes to light.
- Alucita tetradactyla** Linn. Figures in the 1901 list, but no specimen supporting the record has been traced. On the south side of Stow Wood, very local. Oxford district, one specimen dated July 7th, 1911, in the Pogson-Smith collection.
- A. pentadactyla** Linn. Common.
- A. galactodactyla** Hübn. Cothill. Hen Wood, 1898 (W.G.P.-S.). Bagley Wood. Wytham Woods. Larvae plentiful in woods on *Arctium Lappa*.\* The moth is seldom seen in the open, but flies at night.
- Adaina microdactyla** Hübn. Tubney. Cothill. Bagley Wood, many captured in 1901 (W.G.P.-S.). South Hinksey: in the old Rifle Range. Locally plentiful. Larvae in stems of *Eupatorium cannabinum*.\*
- Pterophorus lienigianus** Zell. In a lane between Bessels Leigh and Hen Wood, larvae common, 1914. Headington Quarry, larvae and pupae, 1928 (W.F.). † On *Artemisia vulgaris*.\*
- P. lithodactylus** Treits. Cothill. Hen Wood, 1901 (A.S.). South Hinksey: in the old Rifle Range. Bladon Heath, 1927. Near Forest Hill: in Polecat End Lane. Hell Coppice. Among *Pulicaria dysenterica*.
- P. monodactylus** Linn. Common.
- Marasmarcha phaeodactyla** Hübn. Boar's Hill, 1899-1904 (A.S., N.V.S., W.M.G.). Cumnor Hill, 1906 (A.S. and N.V.S. diaries). † South Hinksey: in the Happy Valley. Headington, in a quarry, 1905 (N.V.S. and W.M.G. diaries). † Very local, but occurs in plenty among *Ononis*.
- Stenoptilia zophodactyla** Dup. On the south side of Stow Wood, one captured on June 27th, 1924, among *Centaureium Centaureium*.
- S. bipunctidactyla** Haw. Tubney. Cothill. Bagley Wood and Kennington. North and South Hinksey. Waterperry Wood. Hell Coppice. Rather common in woods and meadows. On *Scabiosa Succisa*.\*
- S. pterodactyla** Linn. Common.

## TORTRICINA.

## PHALONIADAE.

- Lozopera francillana** Fabr. Hen Wood, two specimens captured at light, 1899 and 1901 (A.S.). Near Forest Hill: one captured in a meadow by Holton Brook, July 21st, 1921. Remarkably scarce in this district.
- L. dilucidana** Steph. Near Cumnor: in a stone-pit on the Tubney road, and in the Chawley brick-yard. Kennington, 1920. North Hinksey, in a stone-pit. Headington, in a quarry, 1905 (N.V.S.). Bullingdon Bog, 1925. Holton Pits. Locally plentiful. On *Peucedanum sativum*.\*
- Phalonia zephyrana** Treits. Yarnton, on a railway embankment, infrequent.
- P. smeathmanniana** Fabr. Sunningwell, one on August 16th, 1915. Boar's Hill, 1897 and 1899 (A.S.), 1902 (N.V.S.), 1904 (W.M.G.). South Hinksey: in the Happy Valley, a few in 1913. Yarnton railway embankment, one in 1912. Shotover, one in 1902 (W.H.). Scarce, but widely distributed.
- P. badiana** Hübn. Tubney, locally common. Cothill, 1925. Cumnor, in a stone-pit, 1925. Boar's Hill, one in 1897 (A.S.). On *Arctium Lappa*.\*
- P. cnicana** Doubl. Cothill. Hen Wood and Youlbury, 1899 (A.S., E.B.P.). South Hinksey. Bullingdon Bog. Waterperry Wood. Hell Coppice. Locally common in meadows and woods among *Cirsium palustre*.
- P. tesserana** Treits. South Hinksey: in the Happy Valley, two captured in 1899 (W.G.P.-S.); plentiful there in 1912.
- P. luridana** Gregs. Kennington, several captured and others seen on June 28th, 1925. Bullingdon Bog, one on June 25th, 1925.
- P. manniana** Fisch. v. Rösl. Tubney. Cothill. Foxcombe Hill, one in 1921. South Hinksey. Binsey. In marshy places, scarce except at Cothill.
- P. alismana** Rag. Binsey: in a ditch by the tow-path, and commonly in 1922 on a mud-patch by the Hinksey Stream. Between Wolvercote and Yarnton, one in 1912. Otmoor, one in 1928.

- P. rupicola** Curt. Tubney. Cothill. South Hinksey: in the old Rifle Range. Locally common among *Eupatorium cannabinum*.
- P. implicitana** Wocke. Sunningwell, one in 1915. Boar's Hill: several captured on the wing at night, in a fallow field among *Matricaria*, July, 1922.
- P. roseana** Haw. Boar's Hill, 1899 and 1902 (W.G.P.-S.). Wytham Hill, 1913-14. Very local and irregular, but plentiful when it occurs, among *Dipsacus sylvestris*.
- P. ciliella** Hübn. Chawley, 1911. Between Godstow and Eynsham, 1902 (N.V.S., W.M.G.). Bladon Heath. Yarnton railway embankment. Elsfeld, 1906 (N.V.S., W.M.G.). Hell Coppice, 1921. Rather common among cowslip.
- P. flavicilliana** Wilk. This beautiful insect was found commonly in a locality at Kennington in June and July, 1925, among *Scabiosa arvensis*. It was still there in 1927, though in danger of extinction.
- P. nana** Haw. Cothill. Hen Wood. Boar's Hill: above Chilswell. Waterperry Wood. Shabington Wood, 1921. Frequent among birch.
- P. dubitana** Hübn. Tubney: in sandy fields on the outskirts of the wood. Foxcombe Hill, common in 1915 among *Senecio Jacobaea*.
- P. hybridella** Hübn. South Hinksey: one captured in the Happy Valley, August 16th, 1913.
- Chlidonia baumanniana** Schiff. Tubney. Cothill. Bagley Wood. Hell Coppice. Locally common in meadows and woods, among *Scabiosa Succisa*.
- Phtheochroa rugosana** Hübn. Tubney, one in 1913. Hen Wood, at light, 1903 and 1906 (A.S., N.V.S.). Near Wolvercote: one on the Canal Bank, 1901 (W.H.). Oxford, one in 1892 (A.S.); occasionally found flying on waste ground and resting on fences. Bullingdon Bog, one in 1918 (A.H.H.).
- P. maculosana** Haw. Tubney Wood. Hitch Copse. Hen Wood, 1897 (A.S.), 1899 (A.H.H.). Bagley Wood. South Hinksey. Wytham, 1899 (A.W.P.-C.). Shotover. Waterperry Wood. Frequent and sometimes common among *Scilla nonscripta*.
- Euxanthis angustana** Hübn. Generally distributed and rather common, on dry flowery road-sides and waste ground.

- E. straminea** Haw. Bagley Wood, one in 1898 (A.S.). South Hinksey, two in 1912. Yarnton railway embankment, one in 1912. By the Canal near Wolvercote, one in 1899 (A.H.H.).
- E. zoegana** Linn. Boar's Hill and Hen Wood, frequent, from 1895 (A.S.). Binsey: one in a meadow by the church, 1922. Marston, 1894 (A.S.), 1899 (N.V.S.). Ab. **ferrugana** Haw. (cf. Wilkinson, p. 317; Barrett, X, p. 340): one captured at Boar's Hill, July 10th, 1904 (W.M.G.).
- E. hamana** Linn. Common in waste places and in fallow or badly cultivated fields, among thistles.
- Hysterosia inopiana** Haw. Cothill. Boar's Hill, 1900-01 (A.S., N.V.S., W.G.P.-S.). South Hinksey. Binsey, 1925. Beckley, 1928. Otmoor, 1928. Among *Pulicaria dysenterica*.

### TORTRICIDAE.

- Batodes angustiorana** Haw. Cothill. Bagley Wood. Oxford, abundant in gardens and shrubberies. Headington Hill, on fences. On *Taxus baccata* (W.G.P.-S., 1899), etc.
- Capua favillaceana** Hübn. Cothill, 1922. Boar's Hill. Bagley Wood. Bladon Heath, one in 1912. Scarce except in the Boar's Hill and Bagley Wood area. Usually found among hazel.
- C. grotiana** Fabr. Hen Wood, many captured in 1899 and 1901 (A.S., N.V.S.). Bagley Wood, not uncommon, 1899 and 1901 (W.M.G.), 1919, 1922. Often comes to sugar.
- Cacoecia podana** Scop. Common. Ab. **sauberiana** Sorh. (cf. Staudinger-Rebel, 1507a): one captured at Boar's Hill, June, 1896 (N.V.S.); one 'Oxford district' specimen, dated July 1st, 1904, in the Geldart collection; one captured in my study in North Oxford, July 20th, 1922. Polyphagous.
- C. crataegana** Hübn. Bagley Wood. Waterperry Wood. Shabbington Wood, 1928. Not uncommon in the two former localities.
- C. xylosteara** Linn. Cothill. Boar's Hill. Bagley Wood. North Hinksey. Oxford, at light, 1898 (A.H.H.). Holton Pits. Hell Coppice. Rather common. On *Betula alba*,\* *Populus canescens*,\* etc.
- C. rosana** Linn. Common. On *Prunus spinosa*,\* *Salix viminalis*,\* etc.





- C. sorbiana** Hübn. Cothill. Bagley Wood. Water Eaton, 1924. Waterperry Wood. Common among oaks.
- C. lecheana** Linn. Common in all woods. Polyphagous.
- Pandemis corylana** Fabr. Rather common in all the woods of the district. In the Geldart collection is a handsome example, captured in late August, 1904, in Bagley Wood, of the variety having no markings except for darker terminal cilia (cf. Barrett, X, p. 172).
- P. cinnamomeana** Treits. Boar's Hill, many captured in 1897 and 1899 (A.S., N.V.S.). Bagley Wood, two in a fir plantation, 1924.
- P. heparana** Schiff. Common. On *Pyrus Malus*,\* *Salix viminalis*,\* etc.
- P. ribeana** Hübn. Very common; especially among oaks, but polyphagous.
- Tortrix loeflingiana** Linn. Common. On *Quercus Robur*.\*
- T. viridana** Linn. Common everywhere among oaks, sometimes extremely abundant in the principal woods. On *Quercus Robur*\*; exceptionally on *Salix viminalis*,\* Wolvercote, 1926.
- [**T. paleana** Hübn. Cherbury Camp, one on July 17th, 1920.]
- T. forsterana** Fabr. Hen Wood, 1896 (N.V.S. diary).† Oxford, common in gardens, feeding especially on ivy.
- T. costana** Fabr. Binsey. The Canal from Yarnton to Oxford. Oxford: frequent by the Cherwell (A.S.). Marston Ferry, Kirtlington, 1927 (O.W.R.).† Local, found only near water. On *Glyceria aquatica*,\* *Epilobium hirsutum*,\* *Salix viminalis*,\* *Urtica dioica*\* (O.W.R.), *Scrophularia aquatica*\* (O.W.R.).
- T. unifasciana** Dup. Common, especially in gardens.
- T. diversana** Hübn. Shabbington Wood, one on July 19th, 1928. Oxford district, two specimens dated July 22nd, 1901 (W.G.P.-S.).
- T. musculana** Hübn. Common.
- Eulia ministrana** Linn. Common.
- Tortricodes tortricella** Hübn. Very common in woods and copses. On *Quercus Robur*.\*
- Cnephasia osseana** Scop. [Cherbury Camp, common, 1920.] Oxford district, one specimen dated August 1st, 1896 (A.S.).
- C. longana** Haw. Boar's Hill. Radley, in river meadows, 1919. North Hinksey. New Hinksey, 1925. Binsey, 1913. Yarnton. East Oxford, one in 1911 (A.H.H.). Marston fields, 1899 (N.V.S.), 1900 (W.G.P.-S.). Locally common.

- C. incanana** Steph. Tubney Wood, one in 1925. Hen Wood, many specimens dated 1897-1901 (A.S., N.V.S.). Bagley Wood, frequent. Wytham Woods, one in 1914. On *Scilla nonscripta*.\*
- C. virgaureana** Treits. Very common. Larvae found on a great variety of plants.
- C. communana** Herr.-Schäff. Cothill, several in 1912. Kennington, seen in 1921. Oxford district, several specimens dated 1896-1902 (N.V.S., W.G.P.-S., W.M.G.). Usually mistaken for the following species.
- C. chrysanthemana** Dup. Common.
- C. pascuana** Hübn. Boar's Hill. Kennington. North Hinksey. Godstow Holt. Yarnton. Oxford, at light, 1921. Headington Hill, on a fence, 1924. Widely distributed, but not common.
- C. incertana** Treits. Common.
- C. nubilana** Hübn. Hen Wood, 1903 (N.V.S.). Kennington. North Hinksey. North Oxford, 1902 (W.H.). The University Parks, 1902 (N.V.S. diary).† Hell Coppice. Commoner than these records indicate. On *Crataegus*\* and *Prunus spinosa*.\*
- Isotrias rectifasciana** Haw. Cothill. Hen Wood, 1896-1901 (A.S., N.V.S.). Kennington. North and South Hinksey. Yarnton. Upper Wolvercote. Oxford: in the University Parks. Rather common in hedges.
- Argyrotoxa forskaleana** Linn. Tubney Wood. Cothill. Boar's Hill. Hen Wood, 1901 (N.V.S.). Bagley Wood. Wytham Woods. Marston, 1890 (A.S.), 1898 (N.V.S.). Rather common among sycamore and maple.
- A. bergmanniana** Linn. Common. On *Rosa*.\*
- A. conwayana** Fabr. Very common.
- Spatalistis bifasciana** Hübn. Bagley Wood, one captured on the wing, July 19th, 1920.
- Peronea holmiana** Linn. Hen Wood, 1897 (A.S.). Kennington. South Hinksey. Binsey. Yarnton. North Oxford. Shabbington Wood, 1928. Rather common.
- P. caudana** Fabr. Common among willows. Ab. **emargana** Fabr. is frequent.
- P. contaminana** Hübn. Very common. On *Crataegus*\* and *Prunus spinosa*.\* Some interesting varieties occur.
- P. aspersana** Hübn. Cothill. Bagley Wood, 1915. South Hinksey. Hell Coppice. Local, but occurring in both wet and dry localities.

- P. ferrugana** Schiff. Tubney Wood. Cothill. Hen Wood, 1900 (A.S.). Bagley Wood. Fairly common in some woods, but apparently missing from others.
- P. shepherdana** Steph. Twelve 'Oxford district' specimens, all captured on July 30th, 1904, in the Geldart collection; there is no mention of these in the diary of Prof. Geldart, who was away from Oxford at the time. Cothill. South Hinksey: in the old Rifle Range. Yarnton, one on September 2nd, 1924. Weston-on-the-Green, one on September 11th, 1928. Locally common among *Spiraea Ulmaria*. Cf. Ent. Mo. Mag., LXIV, 1928, p. 45.
- P. schalleriana** Linn. and ab. **comparana** Hübn. Rather common. Ab. **perplexana** Barr.: one in Bagley Wood, 1919; one in Hell Coppice, 1925; Oxford district, probably Hen Wood, one in 1891 (A.S.).
- P. logiana** Schiff. Tubney Wood. Cothill. Bagley Wood. Wytham Woods, larva seen in 1928. Locally common. On *Viburnum Lantana*.\* The variation, which is more marked in the summer than in the autumn brood, presents no feature of special interest.
- P. variegana** Schiff. Common. On *Rosa*\*; very troublesome in Oxford gardens. The usual variation occurs. [A white form with only the costal blotch and apex fuscous was captured near Glympton on September 20th, 1920.]
- P. sponsana** Fabr. Tubney Wood. Boar's Hill, 1897-1900 (N.V.S.). Bagley Wood. South Hinksey: above the old Rifle Range. Wytham Woods. Marston, 1900 (N.V.S.). Headington. Shotover, 1898 (A.H.H.). Prattle Wood, 1928. Common among beech; also occurs among *Acer Pseudo-platanus*, and in hedges among *Acer campestre*. The normal form in this district is almost unicolorous grey. An example of the form with whitish ground-colour and a fuscous costal blotch was captured near Marston in 1900 (N.V.S.). In the Pogson-Smith collection is an example of the form with a ferruginous costal blotch, captured in the Oxford district in 1901.
- P. cristana** Fabr. Bagley Wood. [Finstock, 1919.] Holton Wood, one in 1919. Waterperry Wood, one in 1921. Hell Coppice. Sometimes common in the first- and last-mentioned localities. Nearly always found in thickets of *Prunus spinosa*. The following forms of this most variable insect have been noticed:—**P. cristana** Fabr.; ab. **albipunctana** Steph. (one in Bagley Wood, 1919); ab. **nigrocristana** Clark; ab. **unicolorana** Desv. (one at Hell

Coppice, 1921); ab. **subunicolorana** Clark (one at Hell Coppice, 1920); ab. **subvittana** Steph. (one at Hell Coppice, 1928); ab. **chantana** Curt. (Bagley Wood); ab. **postchantana** Webb (one in Bagley Wood, 1919); ab. **spadiceana** Haw.; ab. **vittana** Steph.; ab. **brunneana** Steph.; ab. **substriana** Steph.; ab. **striana** Haw.; ab. **prostria** Clark (one at Hell Coppice, 1921); ab. **fulvostriana** Desv.; ab. **profanana** Fabr. (Finstock and Hell Coppice); ab. **semiustana** Curt.; ab. **bentleyana** Curt.; ab. **desfontainana** Fabr.; ab. **consimilana** Steph.; ab. **albovittana** Steph.; ab. **fulvocristana** Steph.; ab. **cristalana** Don.; ab. **procrystalana** Webb (one in Bagley Wood, 1919); ab. **subcristalana** Curt. (Waterperry Wood and Hell Coppice); ab. **subfulvovittana** Clark. No localities are given for forms found on both sides of the Thames. Cf. Entom. LIX, 1926, p. 25. There is no trace here of the melanic tendency now prevailing in the New Forest and elsewhere.

- P. hastiana** Linn. Boar's Hill and Foxcombe Hill. Bagley Wood, one in 1900 (A.S.). Yarnton, larvae in 1924-25. North Oxford: one came to the lighted window of my study on February 1st, 1921. Weston-on-the-Green, a larva, 1928. On *Salix viminalis*\* and *S. cinerea*.\* The scarcity of this species in a district which appears so favourable is very remarkable. Only the following forms have been noticed:—ab. **subcristana** Steph. (Yarnton); ab. **autumnana** Hübn. (Yarnton); ab. **transversana** Sheld. (Yarnton); ab. **aquilana** Hübn. (Yarnton); ab. **brunneana** Sheld. (Boar's Hill and Oxford); ab. **albitriana** Haw. (Weston-on-the-Green); ab. **centrovittana** Steph. (Foxcombe Hill); ab. **flavicostana** Sheld. (Bagley).
- P. literana** Linn. Tubney Wood. Bagley Wood. Wytham Woods. Waterperry Wood, 1921. Fairly frequent in oak-woods on the Berkshire side of the Thames. No aberration of particular interest has been noticed.

#### EUCOSMIDAE.

- Spilonota ocellana** Fabr. Common. On *Pyrus communis*\* (H.A.P., 1902), *Prunus spinosa*,\* etc. Var. **lariciana** Zell.: Tubney; Hen Wood, 1903 (N.V.S.); Bagley Wood, 1897-1903 (A.S.); Wytham Woods; among larch.
- Acroclita naevana** Hübn. Common. On *Crataegus*,\* etc.
- Evetria pinicolana** Doubl. Tubney, one in 1925, among *Pinus sylvestris*. Hen Wood, 1897 and 1899 (A.S., N.V.S.). Oxford district, one in 1899 (A.S.); one in 1911 (W.G.P.-S.); one in 1915 (A.H.H.).

- E. buoliana** Schiff. Tubney, rather common in 1915. Hen Wood, 1922. On *Pinus sylvestris*.\*
- E. pinivorana** Zell. Tubney, fairly common among *Pinus sylvestris*. Oxford district, one in 1892 (A.S.); one in 1901 (W.G.P.-S.).
- Ancylis lundana** Fabr. Common. On *Vicia Cracca*,\* *V. sepium*,\*\* etc.
- A. obtusana** Haw. Tubney Wood. Cothill. Wytham Woods, 1912. Waterperry Wood. Hell Coppice. Shabbington Wood, 1923. Local, but sometimes occurs rather freely.
- A. comptana** Fröl. Wytham Hill, on the Coralline Oolite.
- A. uncana** Hübn. Tubney, one captured on May 30th, 1890 (A.S.). Bagley Wood, one captured on May 20th, 1901 (W.G.P.-S.). There is one other 'Oxford district' specimen, dated August 8th, 1900, in the Pogson-Smith collection.
- A. diminutana** Haw. Tubney Wood, 1913. Cothill. Boar's Hill: in Salter's Wood (i.e. Tommy's Heath), 1895 (A.S.). Hen Wood, one in 1901 (A.S.). Wytham Woods. Waterperry Wood, one in 1921. Local, among sallows.
- A. mitterbacheriana** Schiff. Tubney Wood. Boar's Hill and Hen Wood. Bagley Wood. Wytham Woods. Waterperry Wood. Hell Coppice. Rather common in woods.
- A. lactana** Fabr. Tubney Wood. Cothill. Bagley Wood. Headington Wick, 1896 (A.S.). Waterperry Wood. Locally common. On *Populus tremula*.\*
- A. achatana** Fabr. Tubney, 1925. Hen Wood, 1903 (A.S., N.V.S.). Bagley Wood, 1900 and 1902 (W.G.P.-S.). Binsey, 1913. Yarnton, in a hawthorn hedge by the Canal, 1912. Marston, 1903 (A.S. diary).† Hell Coppice, on *Prunus spinosa*.\* Not common.
- Gyponoma aceriana** Dup. Along the Thames between Medley Weir and Godstow. Oxford: in the University Parks. Among poplars.
- G. minutana** Hübn. [Cherbury Camp, one on July 17th, 1920.] Boar's Hill, one on July 15th, 1901 (W.G.P.-S.).
- G. dealbana** Fröl. Very common. On *Quercus Robur*\* and *Salix viminalis*.\*
- G. neglectana** Dup. Hinksey Hill, one on a fence, 1915. By the Thames between Medley Weir and Godstow. North Oxford, on fences. In the University Parks. Among poplars.

- G. oppressana** Treits. Bagley Wood. Godstow Holt. Oxford, two in 1892 (A.S.). Local, on trunks of black poplar.
- Notocelia uddmanniana** Linn. General.
- N. rosaecolana** Doubl. Hen Wood, 1897 (A.S.). South Hinksey. Godstow. Yarnton. Oxford, in gardens and at light. Headington Hill (A.W.P.-C.). Frequent. On *Rosa*.\*
- N. trimaculana** Haw. Yarnton, common in a hedge by the Canal. Oxford. Holton Pits, 1924. Hell Coppice. On *Crataegus*.\*
- N. roborana** Treits. Bagley Wood. North Hinksey. Binsey, 1913. Oxford, in gardens and at light. Headington Hill (A.W.P.-C.). Waterperry Wood. Otmoor. Common among rose.
- N. tetragonana** Steph. Waterperry Wood, not common, but occurs regularly. Oxford district, one on August 4th, 1890 (A.S.).
- Eucosma albersana** Hübn. Cothill, 1912. Boar's Hill, 1888 (A.S.). † Bagley Wood. Waterperry Wood. Hell Coppice, 1921. Local, in woods.
- E. cruciana** Linn. Cothill. Boar's Hill. Bagley Wood. North Hinksey. Waterperry Wood. Hell Coppice. Shabbington Wood. Rather common. On *Salix*.\*
- E. rubiginosana** Herr.-Schäff. Tubney: common in June, 1913, in a plantation among *Pinus sylvestris*; seen again in 1914, but not since.
- E. diniana** Guen. Tubney, one in 1921. Boar's Hill, 1919. Hen Wood, many captured, 1896-1901 (A.S., N.V.S.). Bagley Wood, 1890 (A.S.), 1897 (N.V.S.). Wytham Hill, 1914. Among larch.
- E. ratzeburghiana** Ratz. Headington Hill, one on a fence, July 7th, 1920.
- E. corticana** Hübn. In all woods. Abounds on oak trunks.
- E. trimaculana** Don. Very common. On *Ulmus*.\*
- E. signatana** Dougl. Godstow Holt, several examples captured in 1913 and 1914, among *Prunus spinosa*.
- E. nanana** Treits. Tubney. Bagley Wood. Headington Hill, on fences, etc. Locally common among *Pinus Abies*.
- E. pygmaeana** Hübn. Tubney Wood, 1926. Bagley Wood, 1902-05 (W.M.G.); still common there. Bladon Heath. Locally plentiful among *Pinus Abies*.
- E. fractifasciana** Haw. Common in Holton Pits; first noticed there in 1925.

- E. nigromaculana** Haw. Tubney. Boar's Hill. Chawley brick-yard, 1928. Binsey, 1927. On the south side of Stow Wood, 1924. Frequent among *Senecio Jacobaea*, chiefly on sandy soil.
- E. cana** Haw. Common among thistles.
- E. fulvana** Steph. Kennington. North and South Hinksey. Bullingdon Bog. Holton Pits. Rather common among *Centaurea*, but records are mostly unreliable owing to confusion with the following species.
- E. scopoliana** Haw. Common among *Centaurea*. Ab. **parvulana** Wilk. (cf. Barrett, XI, pp. 201 f.): a few captured in a stone-pit at North Hinksey, July, 1913.
- E. expallidana** Haw. Boar's Hill, six specimens, 1897-1901 (A.S., N.V.S.). North and South Hinksey, on the borders of cultivated fields, frequent. North Oxford, one at light, 1898 (A.S.).
- E. caecimaculana** Hübn. Cothill, one captured on August 17th, 1927, among *Serratula tinctoria*.
- E. foenella** Linn. Tubney, one in 1904 (W.M.G.). Boar's Hill and Foxcombe Hill. Kennington, 1925. North Oxford. Summertown, one in 1907 (J.J.W.). Rather common in waste places and on the edges of fields, among *Artemisia vulgaris*.
- E. brunnichiana** Fröl. Tubney. Boar's Hill, 1896 (N.V.S.). South Hinksey. Binsey, 1928. Yarnton. North Oxford. Often common among *Tussilago Farfara*.
- E. pflugiana** Haw. Common in wet meadows and moist woods. On *Cirsium palustre*.\* Only the ordinary thistle-feeding form has been noticed.
- E. crnicolana** Zell. South Hinksey, one captured in the old Rifle Range, May 15th, 1913. The identification of this specimen, due in the first instance to Mr. W. G. Sheldon, has been confirmed by an examination of the genitalia (*teste* O.W.R.).
- E. trigeminana** Steph. Tubney. Boar's Hill and Foxcombe Hill. Cumnor Hurst. Wytham Hill. Yarnton. Headington Wick. Hell Coppice. Locally plentiful among *Senecio Jacobaea*.
- E. obscurana** Steph. Bagley Wood, three captured on June 7th, 1897 (N.V.S., A.S.); one on June 8th, 1899 (W.G.P.-S.); one on June 2nd, 1901 (N.V.S.).
- E. tripunctana** Fabr. Common.
- E. subocellana** Don. Common among shallows.

- E. penkleriana** Fisch. v. Rösl. Common.
- E. ramella** Linn. Tubney Wood. Cothill. Boar's Hill. Bagley Wood. Shotover, 1902 (A.H.H.). Waterperry Wood. Rather common. On *Betula*.\*
- E. bilunana** Haw. Boar's Hill. New Hinksey, on a fence, 1912. Port Meadow, 1903 (N.V.S.). The University Parks, 1894 (A.S.). Waterperry Wood. Among birch, local.
- E. nisella** Clerck. Common among willows. A form with predominantly grey colouring (= *cinereana* Haw.?—cf. Barrett, XI, p.106) abounds in Bagley Wood and Godstow Holt on the trunks of black poplars.
- E. demarniana** Fisch. v. Rösl. Boar's Hill: above Chilswell, one on May 16th, 1912. Hell Coppice, one on June 12th, 1928.
- E. tetraquetra** Haw. Common. On *Betula*,\* etc.
- E. immundana** Fisch. v. Rösl. Cothill. Boar's Hill. Bagley Wood. Kennington, one in 1907 (W.H.). Wytham Woods, 1912. Local. On *Betula*,\* but more frequent here among alder.
- E. tedella** Clerck. Very abundant among *Pinus Abies*, wherever the tree is planted.
- E. similana** Hübn. Tubney Wood. Cothill. Boar's Hill, many in 1891 (A.S.). Bagley Wood. On *Betula*.\* Fairly common in its localities.
- E. ophthalmicana** Hübn. Cothill. Bagley Wood. Shotover, many captured in 1898 (A.H.H.). Waterperry Wood, one in 1922. Locally rather common; among *Populus tremula*.
- E. solandriana** Linn. Common in woods. On *Betula*,\* etc.
- E. semifuscana** Steph. Boar's Hill, one in 1891 (A.S.). Yarn-ton, among willows. Near Kirtlington, bred in 1927 (O.W.R.). Marston Ferry, in an osier bed. On *Salix viminalis*,\* *S. fragilis*\* (O.W.R.), and probably other species.
- E. sordidana** Hübn. Cothill. Bagley Wood, common in 1897-99 (A.S., N.V.S.), and still frequent there. Among alder.
- Lathronympha hypericana** Hübn. Common wherever its food-plant grows freely. On *Hypericum perforatum*.\*
- Bactra lanceolana** Hübn. Common in marshy places.
- B. furfurana** Haw. Binsey: sometimes common in a meadow by the Thames, among *Eleocharis palustris*. North Oxford, attracted to light, 1912 and 1920. Bullingdon Bog, one in 1925. Otmoor, 1928.



- Polychrosis euphorbiana** Freyer. Bagley Wood, a single example in fresh condition, June 2nd, 1921; flying above *Euphorbia Amygdaloides*.
- Lobesia permixtana** Hübn. Boar's Hill: Powderhill Copse, 1898 (N.V.S.). Bagley Wood. Waterperry Wood. Hell Coppice, 1921. Fairly common in its localities.
- Endothenia sellana** Hübn. [Cherbury Camp, 1920.] Tubney. Bagley Wood. North Hinksey. Yarnton railway embankment. In dry flowery places, not uncommon.
- E. gentianana** Hübn. Appleton Upper Common, 1922. Bagley Wood. Wytham Woods. Prattle Wood, 1928. Otmoor, 1928. Waterperry Wood, 1922. The moth is not often captured, but the larva is seldom missing where its food-plant grows. On *Dipsacus sylvestris*.\*
- E. nigricostana** Haw. Cothill, 1912. Boar's Hill, 1896 (N.V.S.). Yarnton, 1912. Shotover, 1920 (A.H.H.). Near Hell Coppice, 1923. Single specimens only.
- E. carbonana** Doubl. Cothill. Boar's Hill: above Chilswell, one in 1920. Bagley Wood. South Hinksey: in the old Rifle Range. Wytham Woods, one in 1914. Frequent in woods and meadows on the Berkshire side of the Thames, among *Ajuga reptans*.
- E. ericetana** Westw. Hen Wood, one in 1901 (N.V.S.). North Oxford, one attracted to light, 1926. Hell Coppice, several captured since 1925.
- E. antiquana** Hübn. Hen Wood, one in 1894 (A.S.). Binsey, in ditches and by the Thames, 1921. North Oxford, occasionally taken on waste ground. Marston fields, one captured in 1899 by A. Sidgwick, now in the Pogson-Smith collection. Otmoor, one in a wet ditch, September 13th, 1928. Usually found in wet places where *Stachys palustris* grows, but sometimes strays.
- Argyroploce salicella** Linn. Foxcombe Hill. Bagley Wood. Marston fields, from 1890 (A.S.). Local, among willows. On *Salix fragilis*\* (O.W.R., Bagley, 1926).
- A. semifasciana** Haw. Bagley Wood, one in 1901 (W.G.P.-S.). Yarnton, frequent among willows. Marston Ferry, in an osier bed. Waterperry Wood, one in 1927. On *Salix viminalis*.\* etc.
- A. corticana** Hübn. Cothill. Hen Wood, at light, 1901 (A.S.). Boar's Hill: above Chilswell, 1928. Bagley Wood. Among birch, not common.
- A. betuletana** Haw. Tubney Wood. Cothill. Boar's Hill. Bagley Wood. Waterperry Wood. Shabbington Wood. Rather common. On *Betula*.\*

- A. capreana** Hübn. Cothill, 1925. Boar's Hill. Bagley Wood. Occurs sparingly.
- A. variegana** Hübn. Common. On *Crataegus*.\*
- A. ochroleucana** Hübn. Boar's Hill. Yarnton. Marston, 1901-03 (A.S.). Otmoor, 1928. Waterperry Wood. Hell Coppice. Among rose, commoner than these records indicate.
- A. pruniana** Hübn. Common. On *Prunus spinosa*.\*
- A. purpurana** Haw. Hen Wood: three captured at light, 1897 and 1899 (A.S., N.V.S.).
- A. striana** Schiff. Tubney Wood, 1912 (A.H.H.). Boar's Hill and Foxcombe Hill. Hen Wood, 1897 (A.S.). Kennington. North and South Hinksey. Oxford, sometimes comes to light. Marston fields, 1890 (A.S.). Headington, in a quarry, 1905 (N.V.S. diary).† On the south side of Stow Wood. Rather common.
- A. arcuella** Clerck. Tubney Wood. Boar's Hill: Powderhill Copse, 1896 (N.V.S.). Hen Wood, 1897 (A.S.), 1899 (A.H.H.), 1902 (N.V.S.). Bagley Wood. Waterperry Wood. Often abundant among oaks in woods.
- A. rivulana** Scop. Tubney, one in 1904 (W.M.G.). Boar's Hill, 1913. Yarnton, 1914. Bullingdon Bog, 1925. Hell Coppice. Local, not found commonly except in the last-mentioned locality.
- A. lacunana** Dup. Very common. Polyphagous.
- A. cespitana** Hübn. Wytham Woods: in a small area on the Coralline Oolite at the summit, 1914 and 1920.
- A. urticana** Hübn. Common in woods. On *Lonicera*,\* *Betula*,\* *Populus tremula*,\* etc.
- A. branderiana** Linn. Bagley Wood. Waterperry Wood. Locally common. On *Populus tremula*.\*
- A. profundana** Fabr. Tubney Wood. Bagley Wood. Wytham Woods. Marston Copse, one in 1890 (A.S.). Waterperry Wood. Hell Coppice. Shabbington Wood, 1928. Rather common among oaks.
- Hemimene petiverella** Linn. Common.
- H. alpinana** Treits. Boar's Hill. North and South Hinksey. Yarnton railway embankment. Headington Hill, 1917 (A.W.P.-C.). Bullingdon Bog. Shotover. Holton Pits. In waste places and on grassy slopes, common in many spots.

- H. quaestionana** Zell. Tubney, 1921. Foxcombe Hill. Yarnton railway embankment. North Oxford, in my garden. East Oxford, many in a garden, 1907 (A.H.H.). Locally common among *Tanacetum vulgare*, and in gardens on *Pyrethrum* and probably other *Asteraceae*.
- H. sequana** Hübn. Boar's Hill. South Hinksey. Yarnton railway embankment. Headington Hill, 1922 (A.W.P.-C.). Locally common among *Achillea Millefolium*.
- H. plumbagana** Treits. Common.
- H. simpliciana** Haw. Tubney. Foxcombe Hill and Boar's Hill. Locally common among *Artemisia vulgaris*.
- H. acuminatana** Zell. Kennington, 1920. Between Hen Wood and North Hinksey. Yarnton railway embankment. North Oxford, one on my lawn, 1916. Hell Coppice. Locally common, on grassy slopes.
- H. consortana** Wilk. Boar's Hill, 1913. Kennington, 1925. Binsey, 1913. Yarnton railway embankment, several in 1913. Found very sparingly, but probably overlooked.
- H. plumbana** Scop. Very common.
- H. saturnana** Guen. Foxcombe Hill. Yarnton railway embankment. Locally common. On *Tanacetum vulgare*.\*
- Pammene nitidana** Fabr. Cothill. Bagley Wood. Waterperry Wood. Hell Coppice. Locally rather common. On *Quercus Robur*.\*
- P. germarana** Hübn. Bagley Wood, two in 1900 (A.S.) ; still occurs there. Waterperry Wood. Hell Coppice. Usually scarce, but was found in plenty in a ride in Hell Coppice on June 5th, 1921.
- P. oxsenheimeriana** Zell. Bagley Wood, common in a plantation of *Pinus Abies*. First noticed in 1922.
- P. splendidulana** Guen. Tubney Wood. Boar's Hill. Bagley Wood. Wytham Woods. Waterperry Wood. Hell Coppice. Nowhere plentiful, but generally distributed in woods.
- P. fimbriana** Haw. Tubney Wood, bred from an oak-gall, 1921. Cothill. Bagley Wood, locally common.
- P. argyrana** Hübn. Common on oak trunks in all the woods.
- P. gallicolana** Zell. Cothill, one in 1912. Bagley Wood, one in 1902 (W.G.P.-S.); one in 1903 (N.V.S.); one in 1921.
- P. juliana** Curt. Boar's Hill, two captured on June 23rd, 1901 (A.S.). East Oxford, one bred from a larva found in an acorn, over twenty years ago (A.H.H.). †

- P. rhediella** Clerck. Tubney. Cothill. Boar's Hill. Yarnton. North Oxford. Bullingdon Bog, 1910 (A.H.H.). Shotover. Hell Coppice. Common among hawthorn. In my garden seen emerging from pupae on a trunk of *Pyrus Aucuparia*.
- P. spiniana** Dup. Yarnton, plentiful in a hawthorn hedge by the Canal, 1913. Hell Coppice, on *Prunus spinosa*.<sup>\*</sup> Oxford district, six specimens dated 1901 (W.G.P.-S.); four dated 1904 (W.M.G.).
- P. populana** Fabr. Boar's Hill, one on August 31st, 1900 (W.G.P.-S.). Waterperry Wood, one on September 3rd, 1925.
- P. regiana** Zell. Tubney Wood, larvae plentiful. Hen Wood, 1897 (A.S.). Bagley Wood, 1899 (A.S., N.V.S., W.G.P.-S.). North Oxford, on fences. East Oxford, 1903 (A.H.H.). On *Acer Pseudo-platanus*.<sup>\*</sup>
- Laspeyresia roseticolana** Zell. Yarnton railway embankment. Holtton Pits, 1924. Hell Coppice. Among rose.
- L. woerberiana** Schiff. Oxford, frequent among fruit trees in gardens. Headington Hill, on fences. Shotover, larvae mining the bark of *Prunus avium*,<sup>\*</sup> 1922.
- L. ianthinana** Dup. South Hinksey. Binsey. Yarnton. Waterperry Wood. Hell Coppice. Shabbington Wood, 1928. Rather common among hawthorn.
- L. rufillana** Wilk. South Hinksey: in the old Rifle Range, among *Angelica sylvestris*. Bullingdon Bog, one in 1919 (A.H.H.). Hell Coppice, 1927.
- L. aurana** Fabr. Bagley Wood. South Hinksey. Between Binsey and Godstow. Yarnton. Shotover, from 1899 (A.H.H.). Rather common, among *Heracleum Sphondylium*.
- L. pomonella** Linn. Oxford, common in gardens and green-grocers' shops. On *Pyrus Malus*.<sup>\*</sup>
- L. splendana** Hübn. Tubney Wood, one in 1913. Hen Wood, two in 1901 (N.V.S.). Oxford district, eight specimens dated 1900-01 (W.G.P.-S.).
- L. grossana** Haw. Bagley Wood, one captured on June 9th, 1899 (A.S.). Wytham Woods, one captured on June 10th, 1911.
- L. microgrammana** Guen. Kennington: four examples of this inconspicuous species were captured on June 28th and 30th, 1925, all in one spot.
- L. ulicetana** Haw. Abundant among *Ulex*.

- L. servillana** Dup. Tubney Wood. Cothill. Bagley Wood. Wytham Woods. Stanton St. John Wood. Waterperry Wood. Hell Coppice. Generally distributed in woods among willows, but not common. On *Salix cinerea*.\*
- L. perlepidana** Haw. Cothill. South Hinksey. Wytham Woods, 1912. Yarnton railway embankment. Wolvercote: along the Canal. Waterperry Wood, 1927. Hell Coppice. Often plentiful.
- L. internana** Guen. Cothill, one in 1923. Boar's Hill: above Chilswell, plentiful. Headington Hill, one in 1921 (A.W.P.-C.). Very local, among *Ulex europaeus*.
- L. pallifrontana** Zell. Chilswell Hill, one on July 5th, 1903 (W.H.). Cumnor Hill, 1906 (J.C., A.H.H., A.S.); larvae in the same locality about ten years later (J.J.W.).† North Hinksey: many captured in an old stone-pit, 1906 (A.S., N.V.S.); abundant there in 1913. Very local, but occurs in great plenty. On *Astragalus glycyphyllos*.\*\*
- L. compositella** Fabr. Cothill. Boar's Hill. Bagley Wood, 1897 (A.S.), 1920 (A.W.P.-C.). Kennington. North Hinksey. Wytham, 1901 (W.G.P.-S.). Yarnton. Headington Hill (A.W.P.-C.).† Shotover. Hell Coppice. Rather common, in waste places and clover fields.
- L. nigricana** Steph. Cothill. Boar's Hill. North and South Hinksey. Yarnton railway embankment. Bullingdon Bog. In fields and waste places, rather common.
- L. strobilella** Linn. Tubney Wood. Bagley Wood. On *Pinus Abies*\*; bred in plenty from the cones, 1914.
- L. coniferana** Ratz. Tubney, captured several times among firs.

## TINEINA.

## CELECHIADAE.

- Paltodora cytisella** Curt. Tubney Wood, 1927. Bagley Wood, sometimes fairly common in rides among bracken.
- Aristotelia bifractella** Dougl. Tubney Wood, one in 1920. Cothill. Hen Wood, two in 1901 (A.S., N.V.S.). Wytham Woods: on open ground near the summit. Forest Hill: plentiful in Polecat End Lane. On *Pulicaria dysenterica*\* and *Inula Conyza*.\*\*
- A. inopella** Zell. Hen Wood: one captured on July 21st, 1901, in a field among fleabane (N.V.S.).

- A. atrella** Haw. Found in small numbers wherever *Hypericum perforatum* is plentiful.
- A. unicolorella** Dup. Tubney, one captured in 1913, others in 1924. Liable to be confused with the next species.
- A. tenebrella** Hübn. Tubney. Cothill. Boar's Hill. Bladon Heath. Yarnton. Chiefly on sandy soil, among *Rumex Acetosella*.
- A. arundinetella** Staint. Discovered in 1927 in a ditch at Binsey, where it is not scarce, though apparently confined to a single spot. Among *Carex acutiformis*.
- A. suffusella** Dougl. Binsey, a single example captured on August 5th, 1927, flying in a wet ditch.
- A. lutulentella** Zell. Cothill, a very dark example captured on June 10th, 1922. Between Binsey and Godstow, one flying along the tow-path, June 30th, 1914. North Oxford, a very pale example found in my study, probably attracted to light, July 20th, 1922.
- A. ericinella** Dup. Tubney Warren, 1922, among *Calluna vulgaris*.
- A. hermannella** Fabr. East Oxford, one captured in a garden, June 15th, 1902, and another in a house, August 23rd, 1908 (A.H.H.).
- A. stipella** Hübn. var. **naeviferella** Dup. Tubney, Cothill and Dry Sandford, in rough and fallow fields. North Oxford, common on waste ground. On *Chenopodium album*\* and *Atriplex patula*.\*
- Stenolechia gemmella** Linn. Tubney Wood. Boar's Hill, 1894-1901 (A.S.). Bagley Wood. Wytham Woods. Hell Coppice. Rather common in oak woods.
- Parachronistis albiceps** Zell. Bagley Wood, one on an oak trunk, 1922. North Oxford, in my garden. Headington Hill, frequent on fences in rough weather.
- Recurvaria nanella** Hübn. North Oxford, in gardens. One captured in the University Museum, 1907 (W.H.). On *Pyrus communis*\*; many bred in 1902 (H.A.P.).
- R. leucatella** Clerck. Bagley Wood, two examples captured on July 1st, 1897, and July 28th, 1902, respectively (A.S.).
- Exoteleia dodecella** Linn. Tubney Warren, among *Pinus sylvestris*. Boar's Hill, one on a fence, 1920. Hen Wood, one in 1903 (N.V.S.).
- Epithectis mouffetella** Schiff. Cothill. Boar's Hill, one in 1900 (W.G.P.-S.). Bagley Wood, larvae frequent on

- the honeysuckle growing round oak stools. North Oxford, occasional. Waterperry Wood, one in 1921. Hell Coppice, one in 1926. On *Lonicera Peri-Clymenum*.\*
- Telphusa scalella** Scop. Bagley Wood. Waterperry Wood. Local, but abounds on oak trunks in favoured spots.
- T. notatella** Hübn. Cothill. Boar's Hill, one in 1901 (W.G.P.-S.). Yarnton. On *Salix cinerea*\* and a species of osier.\*
- T. proximella** Hübn. Cothill. Boar's Hill. Bagley Wood, 1898 (A.S., N.V.S.), 1902 (W.M.G.). Local, among birch and alder.
- T. fugitivella** Zell. Cothill, 1923. Headington Hill, common on fences during rough weather. Between Summer-town and Water Eaton, among elms, 1924.
- T. vulgella** Hübn. Cothill. Boar's Hill. South Hinksey. Oxford, on fences. Bullingdon Bog. Forest Hill: larva found in Polecat End Lane, 1924. Widely distributed, but usually taken singly. On *Crataegus*.\*
- T. triparella** Zell. Bagley Wood. Waterperry Wood. Among stubby oaks, not common.
- T. luculella** Hübn. Tubney Wood. Cothill. Bagley Wood. Wytham Woods. Waterperry Wood. Hell Coppice. On *Quercus Robur*.\* Often abounds on oak trunks.
- T. sequax** Haw. [Cherbury Camp.] Wytham Hill. South Hinksey. Holton Pits. Confined to calcareous soil, but usually common where it occurs.
- Celechia basaltinella** Zell. Tubney, in thatch and flying round old walls; very local but not scarce. Dry Sandford, one in 1922.
- G. domestica** Haw. Tubney, 1911. Hen Wood, 1903 (N.V.S.): Oxford, common in and around houses.
- G. umbrosella** Zell. Oxford: one in my study, apparently attracted to light, October 5th, 1921; one on a window in the University Museum, July, 1924 (A.H.H.). Perhaps accidentally introduced, the normal habitat of this species being coast sandhills and sandy heaths.
- G. affinis** Haw. Tubney. Cothill. Wytham. The canal bank near Wolvercote, 1907 (W.H.). Oxford, common about walls of gardens and houses.
- G. senectella** Zell. Tubney. Boar's Hill. North and South Hinksey. Wytham Hill. Yarnton. Rather common among *Senecio Jacobaea*.

- C. desertella** Dougl. Tubney: common on and around the Warren; sometimes very abundant in thatch. Boar's Hill, locally common. Chiefly a coast species; here confined to sandy soil.
- C. politella** Staint. Boar's Hill: one captured on the hills above Chilswell, June 5th, 1915.
- C. terrella** Hübn. Common. Light brown forms, captured at Cothill, Cumnor, Wytham Woods, Yarnton and Hell Coppice, are connected by intermediates with the typical form.
- C. diffinis** Haw. Tubney. Boar's Hill and Hen Wood. Cumnor Hurst. Oxford, one in 1905 (W.H.). Locally plentiful in sandy places. Among *Rumex Acetosella*.
- C. mulinella** Zell. Tubney. Boar's Hill. Cumnor Hurst. Among *Ulex europaeus*.
- C. ericetella** Hübn. Tubney Warren. Boar's Hill: in the Youlbury grounds. Bagley Wood, one in 1899 (N.V.S.). Bladon Heath. Among *Calluna vulgaris*.
- C. velocella** Dup. Boar's Hill: common in July, 1915, on a sandy hillside above Chilswell, among *Rumex Acetosella*; not seen there since. Shotover, one example captured, date uncertain (A.H.H.).
- C. rhombella** Schiff. North Oxford: in gardens, among apple trees. Headington Hill: in a garden, frequent (A.W.P.-C.).†
- C. distinctella** Zell. Tubney, two captured in 1920. Boar's Hill: common in 1915 in company with *G. velocella*; not seen there since.
- C. sororculella** Hübn. Cothill. Boar's Hill. Bagley Wood. Yarnton. Frequent among willows. Wolvercote, larvae on *Salix viminalis*.\*
- C. nigra** Haw. Cothill, on trunks of *Populus canescens*, July, 1925.
- C. lentiginosella** Zell. Hell Coppice, sometimes plentiful. On *Genista tinctoria*.\*
- Phthorimaea atriplicella** Fisch. v. Rösl. Oxford, one bred in 1924 from a larva found the previous autumn. On *Chenopodium album*.\*
- P. costella** Westw. Cothill. South Hinksey, one in 1913. Binsey, one in 1923. Oxford: larvae common by the Canal. Headington: plentiful in a hedge near the old village, 1920. Otmoor, one bred in 1928. On *Solanum Dulcamara*.\*





- P. artemisiella** Treits. On the south side of Stow Wood. Holton Pits, plentiful among *Thymus*.
- P. acuminatella** Sirc. Cothill. Kennington. South Hinksey. Wytham Woods. Yarnton. On the north-west side of Holton Wood. Polecat End Lane. Hell Coppice. Inhabits rough meadows and the edges of cultivated fields. The moth is found sparingly, but larvae are common. On *Cirsium arvense*\* and *C. lanceolatum*.\*
- P. maculea** Haw. Bagley Wood, one in 1913. Oxford district, one bred in 1923; precise locality uncertain. On *Stellaria Holostea*.\*
- P. fraternella** Dougl. Cothill, one captured on August 5th, 1913.
- P. tricolorella** Haw. Shotover, larvae common in 1922. On *Stellaria Holostea*.\*
- P. marmorea** Haw. Tubney: sometimes common on the Warren, around the old sand-pit, and in thatch; first noticed there in 1919. Foxcombe Hill: one captured on a sandy bank, July 20th, 1913. Sandy places by the sea are the normal habitat of this species; its occurrence so far inland is very remarkable.
- Sophronia semicostella** Hübn. Tubney. Boar's Hill: in the Youlbury grounds and above Chilswell. On the south side of Stow Wood. Hell Coppice. Commonest on sandy soil.
- Stomopteryx anthyllidella** Hübn. South Hinksey. Wytham Hill, 1915. Bullingdon Bog. Near Forest Hill: in a meadow by Holton Brook, 1922. On *Anthyllis Vulneraria*\*\*.
- S. vorticella** Scop. Boar's Hill. Cumnor Hurst, one in 1928. Bagley Wood, larvae locally common. Kennington. Near Marston Ferry, one in 1900 (W.H.). Waterperry Wood, 1922. Hell Coppice. On *Lotus uliginosus*.\*
- S. taeniolella** Zell. [Cherbury Camp, 1920.] Hen Wood, 1901 (A.S., N.V.S.). Holton Pits, 1925. Other records uncertain, owing to confusion with the preceding species.
- Acanthophila alacella** Dup. Bagley Wood, two found on oak trunks, July, 1920. Waterperry Wood, on oak trunks, 1921, 1922 and 1925. Hell Coppice, one captured on the wing, 1925.
- Anacamptis populella** Clerck. Cothill. Boar's Hill. Bagley Wood. Waterperry Wood. Rather common. On *Populus tremula*\* and *Salix cinerea*.\*

- Acompsia cinerella** Clerck. Tubney. Cothill. Hen Wood, many in 1901 (A.S., N.V.S.). Bagley Wood. South Hinksey. Rather common on the Berkshire side of the Thames.
- Anarsia spartiella** Schranck. Boar's Hill: in the Youlbury grounds and above Chilswell. Cumnor Hurst. Among *Ulex europaeus*.\*
- A. genistae** Staint. Hell Coppice, one captured among *Genista tinctoria*, July 1st, 1925. Possibly conspecific with *A. spartiella* (cf. Meyrick's Handbook, p. 644), but larger and darker.
- Chelaria conscriptella** Hübner. Tubney Wood. Boar's Hill. Bagley Wood. [Glympton.] Waterperry Wood. Rather common in woods.
- C. gibbosella** Zell. Tubney Wood. Cothill, one in 1927. Bagley Wood. Wytham Woods. Stanton St. John Wood, one in 1920. Waterperry Wood. Hell Coppice, one in 1928. Frequent on oak trunks in woods.
- Dichomeris marginella** Fabr. North Oxford, one captured at light, July 30th, 1899 (N.V.S.); no doubt artificially introduced, as its food-plant (juniper) no longer grows naturally in or near Oxford.
- Brachmia gerronella** Zell. Cothill, 1922. Boar's Hill: Tommy's Heath, 1922 (O.W.R.). Cumnor Hurst, 1928. Bagley Wood, 1926. Headington Hill, on a fence, 1925. A single example in each instance.
- B. rufescens** Haw. Tubney. Cothill. North Hinksey. Yarnton. Oxford. Headington Hill. Otmoor. Rather common. On *Brachypodium sylvaticum*\* and other grasses.

#### COSMOPTERYGIDAE.

- Cosmopteryx druryella** Zell. Waterperry Wood, in grassy rides, 1921 and 1925. Very local, but rather common in the favoured spots. Flies freely in evening sunshine.
- Limnoecia epilobiella** Roem. Cothill, larvae seen on *Circaea lutetiana*,\*\*1925. Bladon Heath, one on April 30th, 1921 (O.W.R.).† Stanton St. John Wood, occurs regularly in thatch; first noticed in 1924.
- Chrysoclista rhamniella** Zell. Cothill, larvae found commonly in 1923, all on one tree. On *Rhamnus catharticus*.\*
- C. atra** Haw. Boar's Hill. North Hinksey, one in 1920. Yarnton, one in 1913. Headington Hill, sometimes common on fences.

- C. vinolentella** Herr.-Schäff. North Oxford: three examples captured among fruit trees in my garden, 1915 and 1920.
- C. aurifrontella** Hübn. Occurs throughout the district, and even in the centre of Oxford; chiefly in hedges, and among hawthorns in woods.
- Mompha terminella** Westw. Bagley Wood. The moth is seldom observed, but the larvae are common. First noticed in 1924. On *Circaea lutetiana*.\*
- M. raschkiella** Zell. Cothill, bred from larvae, 1928. Bagley Wood, common. Wytham Woods, one mine seen in 1928. On *Epilobium angustifolium*.\*
- M. conturbatella** Hübn. Cothill, one in 1928. Bagley Wood, common. On *Epilobium angustifolium*.\* This beautiful species, like the preceding, is steadily extending its range.
- M. propinquella** Staint. Cothill, larvae rather common in one spot, 1924. Bagley Wood. North Hinksey, one seen in 1920. Hell Coppice, one in 1925. On *Epilobium hirsutum*.\*
- M. lacteella** Steph. Cothill. Bagley Wood. Wytham Woods. Yarnton. Waterperry Wood. Hell Coppice. Not uncommon in woods.
- M. decorella** Steph. Tubney. Chawley, 1920. Bagley Wood. Stanton St. John Wood. Sometimes common in thatch, especially in the last-mentioned locality.
- M. subbistrigella** Haw. Tubney. Bagley Wood, plentiful. Little Wittenham. Stanton St. John Wood. Shabbington Wood. On *Epilobium montanum*.\* Often common in thatch.
- M. fulvescens** Haw. Common. On *Epilobium hirsutum*.\*
- M. ochraeella** Curt. Cothill, one bred in 1924; one captured in 1928 (A.H.H.). Binsey: along the Upper River, sometimes in numbers. Yarnton, one in 1912. East Oxford, one in 1911 (A.H.H.). On *Epilobium hirsutum*.\*
- M. miscella** Schiff. Tubney, larvae seen. Wytham Woods, larvae seen. Holton Pits, plentiful. On *Helianthemum Chamaecistus*.\*\*
- Batrachedra praeangusta** Haw. Tubney. Cothill. Boar's Hill. Near Medley Weir. Yarnton. Oxford: in the University Parks. Among willows and poplars; often common on the trunks.
- B. pinicolella** Dup. Hen Wood, at light, 1901 (N.V.S.). Bagley Wood, common in fir plantations. On *Pinus Abies*.\*

## OECOPHORIDAE.

- Oecophora geoffrella** Linn. Cothill. Between Bessels Leigh and Hen Wood, 1914. Boar's Hill and Hen Wood. Local, sometimes found commonly.
- Dasycera sulphurella** Fabr. Very common. Larvae in dead wood (posts, fallen branches, etc.)\* and under the bark of live stumps.\*
- Schiffermuelleria augustella** Hübn. Oxford district, one captured in late May, 1893 (A.S., cf. 1901 list); there is no indication of the locality in the captor's diary.
- S. tripuncta** Haw. Hell Coppice, one captured on June 5th, 1921; disturbed from bushes.
- Chirocampa lunaris** Haw. Cothill, 1922. Boar's Hill. Kennington, 1925. Binsey, 1928. East Oxford, 1902 (A.H.H.). Headington Hill, on fences. Rather common.
- C. lambdella** Don. Headington Hill: in a garden, on bushes of *Ulex* imported from Surrey, about 1919-22 (A.W.P.-C.).† Evidently an introduced species only.
- Endrosis lactella** Schiff. Common in houses. Headington Hill, bred from birds' nests found by A. H. Hamm, 1926.
- Borkhausenia fuscescens** Haw. Common. Sometimes abounds in thatch at Tubney. Bred from birds' nests found by A. H. Hamm at Headington, 1925 and 1928.
- B. minutella** Linn. Tubney, in thatch. Boar's Hill: above Chilswell, one in 1897 (N.V.S.). Binsey, one in 1928.
- B. tinctella** Hübn. Tubney Wood. Cothill. Boar's Hill: Powderhill Copse, 1896 (N.V.S.). Bagley Wood. Kennington, 1925. Wytham Woods. Waterperry Wood. Rather common in woods.
- B. unitella** Hübn. Tubney Wood. Bagley Wood. Godstow Holt, 1914. Oxford, on fences and in gardens. Waterperry Wood. Hell Coppice. Rather common.
- B. flavifrontella** Hübn. Bagley Wood, single specimens captured in 1921 and 1925.
- B. pseudospretella** Staint. Very common in houses and a troublesome pest. Bred from birds' nests found by A. H. Hamm at Oxford and Headington, 1926.
- Chimabache fagella** Fabr. Plentiful in all woods. The melanic form (ab. **dormoyella** Dup.) is common. On *Quercus Robur*,\* *Salix cinerea*,\* etc.

- C. phryganella** Hübn. Common, chiefly in oak woods.
- Carcina quercana** Fabr. Common in woods. North Oxford, in gardens. On *Quercus Robur*\* and *Pyrus Malus*.\*
- Depressaria discipunctella** Herr.-Schäff. Tubney, one obtained from thatch, September 16th, 1924.
- D. chaerophylli** Zell. Tubney, several obtained from thatch since 1920.
- D. weirella** Staint. South Hinksey: one in the Happy Valley, 1913. Near Yarnton: one disturbed from a hedge by the Canal, 1913. Wolvercote, one bred, 1926. On *Anthriscus sylvestris*.\*
- D. heracliana** De Geer. Common. On *Peucedanum sativum*.\*
- D. pulcherrimella** Staint. Bladon Heath, one captured on May 9th, 1912 (the date suggests hibernation).
- D. badiella** Hübn. Tubney, one in thatch, 1919. Headington Wick: on open ground above the copse, 1919.
- D. pimpinellae** Zell. Tubney, one obtained from thatch on September 18th, 1924, another on August 30th, 1925.
- D. ultimella** Staint. Tubney, one in 1920. Wytham, 1920. Headington Wick, 1920. Stanton St. John Wood. Local, found only in thatch.
- D. costosa** Haw. Common among *Ulex*.
- D. umbellana** Steph. Tubney Wood. Boar's Hill, 1900-03 (N.V.S.). Shotover, 1895 (A.S. diary).† Local, among *Ulex*.
- D. liturella** Schiff. Hen Wood, 1899 (N.V.S.). Marston, 1899 (N.V.S.). Oxford district, four specimens, 1893-99 (A.S.); one specimen, 1900 (W.G.P.-S.); two bred in 1923, precise locality uncertain. On *Centaurea*.\*
- D. assimilella** Treits. Cumnor Hurst, larvae plentiful. On *Cytisus scoparius*.\*
- D. atomella** Schiff. Hell Coppice, a few examples captured or bred, 1920-22. On *Genista tinctoria*.\*
- D. subpropinquella** Staint. Common, especially in ricks and thatch. Ab. **rhodochrella** Herr.-Schäff. is frequent.
- D. arenella** Schiff. Common. On *Centaurea Scabiosa*,\* etc.
- D. propinquella** Treits. Tubney. Boar's Hill. Between Wytham Woods and Botley. Holton, 1927. Stanton St. John Wood. Between Shabbington and Oakley Woods, 1920. In thatch and ricks, rather local, but sometimes plentiful. An example of the form without a dark discal spot was captured in Stanton St. John Wood on October 16th, 1924.

- D. angelicella** Hübn. Cothill. South Hinksey: in the old Rifle Range. Godstow Holt. Locally common. On *Angelica sylvestris*.\*
- D. ciliella** Staint. Tubney, common in thatch. Cothill, larvae found in 1927. Stanton St. John Wood, one in 1924. On *Angelica sylvestris*.\* The bred specimens are a striking unicolorous dark brown form.
- D. applana** Fabr. Very common. On *Anthriscus sylvestris*.\* A dark, nearly unicolorous form occurs.
- D. purpurea** Haw. Common in thatch and frequent in hedges.
- D. alstroemeriana** Clerck. Tubney. Boar's Hill, 1893 (A.S.), 1897 (N.V.S.). Wytham Woods, 1919. Godstow, 1899 (N.V.S. diary).† Wood Eaton, 1902 (N.V.S. diary).† Headington Wick, 1920. Beckley, 1913. Stanton St. John Wood. Hell Coppice, 1928. Not common; mostly single specimens, disturbed from thatch or ricks, or found on ivy bloom.
- D. ocellana** Fabr. Tubney. Cothill. Bessels Leigh, 1920. Bagley Wood, 1921. Scarce except at Tubney, where it is common in thatch.
- D. yeatiana** Fabr. Hen Wood, one in 1903 (N.V.S.). Beckley, one in a rick, 1913. Stanton St. John Wood, one in thatch, 1924. Oxford district, one in 1907 (W.G.P.-S.). Scarce in this district.
- D. hypericella** Hübn. Foxcombe Hill, 1919. Wytham Woods. Yarnton, 1915. Hell Coppice. The imago is seldom observed, but the larvae are locally common. On *Hypericum perforatum*.\*
- D. conterminella** Zell. Wolvercote, larvae plentiful in 1926. Oxford, 1890 (A.S.). Marston Ferry, larvae in 1925. On *Salix viminalis*\* and *S. triandra*.\*
- Epigrapha steinkellneriana** Schiff. Oxford district, one specimen dated May, 1893 (A.S.); not mentioned in the captor's diary.

#### ORNEODIDAE.

- Orneodes hexadactyla** Linn. North Oxford, one at light, July 28th, 1908 (A.S. diary).† East Oxford: one in an out-house, about fifteen years ago (A.H.H.). Oxford district, one in July, 1895 (A.S.). Surprisingly rare; I have never seen it in the district.

## AECERIADAE.

- Aegeria ichneumoniformis** Fabr. Headington: in a stone-pit above Bullingdon Bog, August 4th, 1919 (A.H.H.), † July, 1904 (J.J.W.).
- A. formiciformis** Esp. Godstow, one captured in 1924 (O.W.R.). † Yarnton, one swept from herbage, about 1912 (J.J.W.); bred, 1922. Marston Ferry, in an osier bed (A.H.H.). † On *Salix viminalis*.\*
- A. culiciformis** Linn. Tubney Wood, larvae, 1922. Headington: near Bayswater Mill, one captured on May 30th, 1914 (an unexpected locality, where there is alder, but no birch). † Waterperry Wood, larvae, 1922. Larva in stumps of *Betula alba*.\*
- A. myopiformis** Borkh. North Oxford: in my garden, 1921-22. East Oxford, in gardens, 1900, 1920 (A.H.H.). † On *Pyrus Malus*.\*\*
- A. vespiformis** Linn. Tubney Wood (Berkshire list). † In a lane between Tubney and Cothill, one captured about 1915 (J.J.W.). Hen Wood, one captured in 1901 (A.H.H.). † Boar's Hill: Red Copse, larvae plentiful in 1915. Bagley Wood, 1899 (A.H.H.) †; sometimes common there in the larval stage. Larva in stumps of *Quercus Robur*.\*
- A. tipuliformis** Clerck. North Oxford, common in gardens. East Oxford, in gardens (A.H.H.).
- A. flaviventris** Staud. Wytham Woods. Yarnton. Headington Quarry (W.F.). † Hell Coppice. Shabbington Wood. Larva in stems and twigs of *Salix cinerea*.\* Widely distributed in the district, and common in some spots, but not discovered till 1928; cf. Ent.Mo.Mag., LXIV, 1928, p.186.
- A. andreniformis** Lasp. Tubney Wood. Bagley Wood. Sandford-on-Thames: a specimen captured in a house during the period 1914-18 was brought to the University Museum for identification (*teste* A.H.H.). † Wytham Woods. Larva in stems of *Viburnum Lantana*\*\* and *V. Opulus*\*\* ; the burrows are common. Mr. Hamm has in his possession an empty burrow of this species found in Bagley Wood as far back as July, 1898, when its identity was still unknown. †
- Trochilium apiforme** Clerck. Cothill, 1912 (R. J. Champion). Bagley Wood (W.H., A.S., A.H.H.). Godstow Holt and neighbouring meadows. North Oxford. East Oxford (A.H.H.). † Cherwell fields, near Oxford, 1896 (A.S. diary). † The burrows of the larvae may be found plenti-

fully in woods, meadows, gardens, etc., in and around Oxford, wherever poplars grow or are planted. On black poplar\* and *Populus canescens*\*\* ; but never on *P. italica* (teste A.H.H.).

- T. crabroniforme** Lew. Bagley Wood, one bred in 1899 (A.H.H.). † Open Brasenose, burrows seen (A.H.H.). † On sallow.\*

### HELIOZELIDAE.

**Heliozela sericiella** Haw. Common in woods and copses. On *Quercus Robur*.\*\*

**H. resplendella** Staint. Cothill, captured and bred ; the mines are not scarce. On *Alnus glutinosa*.\*

**H. betulae** Staint. Cothill, mines found, 1926-28. Boar's Hill : above Chilswell, a mine found in 1926. Waterperry Wood, one mine, 1927. Hell Coppice, one captured on July 2nd, 1922. Erroneously recorded in 1926 (Nat.Hist.Ox., p.233) from the University Parks. On *Betula alba*\*\* and *B. pubescens*\*\*.

**Antispila pfeifferella** Hübn. Bagley Wood, South Hinksey : one in the old Rifle Range, 1912. Wytham Woods, mines found, 1928. Between Kirtlington and Weston-on-the-Green, mines found, 1928. Waterperry Wood. Hell Coppice. Widely distributed, but occurs sparingly. On *Cornus sanguinea*.\*\*

### HELIODINIDAE.

**Stathmopoda pedella** Linn. Bagley Wood, three captured in June, 1922. Cothill, one in June, 1922. Shotover, one on June 29th, 1918 (A.H.H.). Among alders.

**Pancalia leuwenhoekella** Linn. Tubney Wood. Cothill, 1912. Bagley Wood. Wytham Woods. Marston fields, 1891 (A.S. diary). † Headington Wick Copse, 1912. Holton Pits. Hell Coppice. Locally common, sometimes abundant.

**Schreckensteinia festaliella** Hübn. Cothill, one in 1924. Boar's Hill : above Chilswell. Bagley Wood, fairly common.

### GLYPHIPTERYCIDAE.

**Simaethis fabriciana** Linn. Very common, among nettles.

**Choreutis myllerana** Fabr. Bagley Wood, one in 1923. God-



stow Holt, 1915. Near the Weirs, between New Hinksey and Iffley, 1898 (A.H.H.). Between Yarnton and Wolvercote: common on the Canal bank. By the Cherwell near Marston Ferry, 1899-1900 (A.S., W.H.). Holton Brook near Forest Hill, one in 1919. Locally common, among *Scutellaria galericulata*.

**Glyptipteryx fuscoviridella** Haw. Common.

**G. thrasonella** Scop. Common in marshy places among *Juncus*.

**G. fischeriella** Zell. Very common. On *Dactylis glomerata*.\*\*

**G. schoenicolella** Staint. Cothill, plentiful in marshy spots among its food-plant. On *Schoenus nigricans*.\* Cf. Ent.Mo.Mag., LXIV, 1928, p.252.

**G. equitella** Scop. North Oxford, on walls in my garden, 1915-16. Headington Hill, plentiful in a garden among stonecrop (A.W.P.-C.).†

#### ELACHISTIDAE.

**Perittia obscuripunctella** Staint. Boar's Hill: above Chils-well. Bagley Wood. Shotover. Not common. On *Lonicera Peri-Clymenum*.\*\*

**Stephensia brunnihiella** Linn. Bagley Wood. North Hinksey, in an old stone-pit. Locally common. On *Clinopodium vulgare*.\*

**Elachista cinereopunctella** Haw. Waterperry Wood, 1921 and 1923. Hell Coppice, 1921. A single example in each instance.

**E. magnificella** Tengst. Boar's Hill: Red Copse, rather common on a large patch of its food-plant. On *Juncooides sylvaticum*.\*

**E. gleichenella** Fabr. Boar's Hill: Red Copse, one bred, 1924. Waterperry Wood, 1922. Hell Coppice, sometimes plentiful. On *Juncooides sylvaticum*,\* but this is not its normal food-plant.

**E. albifrontella** Hübn. Common, often abundant. On *Deschampsia caespitosa*,\* *Brachypodium sylvaticum*,\* and several undetermined grasses.

**E. luticomella** Zell. Tubney Wood. Hitch Copse. Cothill. Kennington: on the edge of Bagley Wood. North Hinksey, 1906 (N.V.S.). Water Eaton: in a grass-bordered lane. Hell Coppice. Common in many places. On *Dactylis glomerata*.\*

- E. atricomella** Staint. Cothill. Bagley Wood. Cumnor Hill, 1906 (N.V.S.). Wytham Woods. Yarnton railway embankment. Headington Hill, on fences. Hell Coppice. Widely distributed, but only captured one or two at a time.
- E. alpinella** Staint. Cothill. Bagley Wood, one in 1925. South Hinksey: in the old Rifle Range. Wytham Woods, larvae seen, 1928. Weston-on-the-Green, 1928. Locally plentiful. On *Carex acutiformis*.\*
- E. poae** Staint. Binsey: one pupa found in a ditch by the tow-path, 1925. Marston Ferry: larvae and pupae found commonly on the banks of the Cherwell and in the adjoining ditches, 1925. On *Glyceria aquatica*.\*
- E. perplexella** Staint. Cothill. Bagley Wood, locally plentiful. Pixey Mead, one in 1923 (O.W.R.). [Finstock, 1925.] Yarnton, one in 1922. Waterperry Wood. Hell Coppice. On *Deschampsia caespitosa*.\*
- E. subnigrella** Frey. Wolvercote: plentiful on a disused railway line. Holton Pits. On *Bromus erectus*.\*
- E. stabilella** Frey. Boar's Hill, one in 1922. Kennington, 1925. Hell Coppice, plentiful in August, 1923.
- E. nigrella** Haw. Common.
- E. bedellella** Sirc. Holton Pits, one on June 4th, 1925.
- E. obscurella** Staint. Common.
- E. taeniatella** Staint. Cothill. Bagley Wood. Wytham Woods, one in 1915. Yarnton railway embankment. Local. On *Brachypodium sylvaticum*.\*
- E. zonariella** Tengst. Bagley Wood, 1919. Yarnton railway embankment, 1915. Headington Hill, on a fence, 1925. Marston, 1902 (W.M.G.). Hell Coppice, 1925. Oxford district, 1901 (W.G.P.-S.). Captured singly in each instance.
- E. megerlella** Staint. Cothill, one in 1922. Boar's Hill: above Chilswell, June, 1897 (A.S., N.V.S.). Headington Hill, one on a fence, 1925. Headington Wick, one in 1896 (A.S.). Oxford district, one in 1900 (W.G.P.-S.).
- E. paludum** Frey. Cothill, larvae not scarce, but very local. On *Carex paniculata*.\*
- E. biatomella** Staint. Near Forest Hill: in a meadow by Holton Brook, 1922. Hell Coppice, frequent. Certainly occurs on the Berkshire side of the river also.
- E. rhynchosporaella** Staint. Bullingdon Bog, four specimens captured on July 2nd, 1900, among *Eriophorum* (A.H.H.).

- E. cerussella** Hübn. Kennington, 1925. Binsey. Godstow Holt, larvae. Yarnton. Oxford: by the Canal, and in the University Parks. Otmoor, larvae found in 1928. Locally common. On *Phragmites Phragmites*.\*\*
- E. subocellea** Steph. Cothill, 1927. Wytham Hill. Yarnton railway embankment. Holton Pits, 1924. Not common. The less distinctly marked examples, formerly treated as a separate species under the name *E. disertella* Herr.-Schäff., are now regarded by Mr. Meyrick (Handbook, p. 720) as conspecific with *E. subocellea*. Both forms occur in this district.
- E. triatomea** Haw. Cothill. Cumnor Hurst, 1924. Yarnton railway embankment. Bullingdon Bog. On the south side of Stow Wood, 1924. Holton Pits, 1924. Hell Coppice. In grassy places, widely distributed; commonest in wet meadows.
- E. rufocinerea** Haw. Common.
- E. cygnipennella** Hübn. Common. On *Dactylis glomerata*\* and undetermined grasses.
- E. subalbidella** Schläg. Cothill, on marshy ground, one captured in 1916, several in 1927.

### SCYTHRIDAE.

- Scythis fletcherella** Durr. Wytham Woods, one in 1914. Holton Pits. Fairly common.
- S. senescens** Staint. Wytham Woods, two in 1914. Holton Pits, one in 1924. This and the preceding species are confined to spots with calcareous soil and a down-like flora.
- S. chenopodiella** Hübn. East Oxford, taken commonly in 1898 and 1899 (A.H.H.).

### HYPONOMEUTIDAE.

- Ocnerosstoma piniariella** Zell. Tubney Warren, common. Bagley Wood, 1902 (W.G.P.-S.). Bladon Heath, seen in 1915. On *Pinus sylvestris*.\*
- Cedestis farinatella** Dup. Tubney Warren. Bagley Wood. Locally plentiful. On *Pinus sylvestris*\* and *P. nigra*.\*
- C. gysseleliella** Dup. Tubney Warren, fairly common. Boar's Hill: one in the Youlbury grounds, 1928. Bagley Wood, one in 1925. Among *Pinus sylvestris*.

- Argyresthia atmoriella** Banks. Tubney Warren. Cothill. Bagley Wood. Locally plentiful. On *Larix*.\* Reported in 1907, under the name *A. laevigatella* Herr-Schäff., as a pest on larch (including Japanese larch) in Bagley Wood [and at Sarsden, Oxfordshire]; examples bred at that time by G. H. Grosvenor are in the Hope Department. Cf. W. Somerville, in Quarterly Journal for Forestry, I, 1907, p. 204; R. S. MacDougall, in Transactions of the Scottish Arboricultural Society, XXI, p. 195; and other writers in Quarterly Journal for Forestry, V, 1911, pp. 274ff. A much earlier specimen, captured in Bagley Wood on June 14th, 1902, is in the collection of N. V. Sidgwick.
- A. glabratella** Zell. Tubney Wood, since 1925. Bagley Wood, since 1921. Wytham Woods, since 1913. Locally common. On *Pinus Abies*.\*
- A. dilectella** Zell. North Oxford, occasionally comes to light. Headington Hill, sometimes abundant on fences beneath or near conifers.
- A. andereggiella** Dup. Bagley Wood, many specimens dated 1897-1902 in the Sidgwick, Pogson-Smith and Geldart collections; it still occurs there, among old crab-apple trees.
- A. brockeella** Hübn. Common. On *Betula*.\* A unicolorous golden form occurs.
- A. goedartella** Linn. Common, often abundant. On *Betula*\*; larvae in the catkins (Cothill, Wytham Woods), and found in plenty in a rotten birch stump (Boar's Hill, 1919). Common also among alder at Cothill. Varies greatly in its markings, the extreme forms being unicolorous white and unicolorous golden respectively.
- A. pygmaeella** Hübn. Cothill. Bagley Wood. South Hinksey: in the old Rifle Range. Yarnton. Rather common among willows. On *Salix cinerea*\* and *S. viminalis*\* (Yarnton, 1922).
- A. cornella** Fabr. Tubney. Boar's Hill, 1890 (A.S.). Kennington. North and South Hinksey. Oxford, in gardens. Headington Hill, on fences. Rather common. On *Pyrus Malus*\* (H.A.P., 1902).
- A. retinella** Zell. Common among birch.
- A. glaucinella** Zell. Water Eaton, one on an oak trunk, July 2nd, 1924.
- A. mendica** Haw. Common among *Prunus spinosa*.

- A. semifusca** Haw. Tubney Wood, 1919. Bagley Wood, 1919. North Hinksey, 1913. Yarnton, 1924. Headington Hill, on fences, 1920. Marston, 1898 (A.S.). Stanton St. John, 1924. Widely distributed, but always taken singly.
- A. conjugella** Zell. Headington Hill: occurs regularly in a garden among *Pyrus Aucuparia* (A.W.P.-C.). †
- A. ephippella** Fabr. Boar's Hill. Godstow, 1913. Oxford, in my garden. Headington Hill, 1917 (A.W.P.-C.).
- A. nitidella** Fabr. Common among hawthorn. Ab. **ossea** Haw. is frequent.
- A. albistria** Haw. Common. On *Prunus spinosa*.\*
- A. semitestacella** Curt. Bagley Wood, many captured in 1900 and 1903 (A.S., N.V.S., W.M.G.). Wytham Woods. Waterperry Wood, 1920. Among beech.
- Zelleria hepariella** Staint. Bagley Wood, two examples only, disturbed from ash saplings, 1921 and 1923. Oxford, one captured at light, July 30th, 1899 (N.V.S.).
- Swammerdamia combinella** Hübn. Boar's Hill, 1895 and 1897 (A.S., N.V.S.). Yarnton, one in 1912. Oxford district, one in 1906 (W.M.G.). Rather scarce in this district.
- S. heroldella** Hübn. Cothill. Boar's Hill. Waterperry Wood. Hell Coppice. Rather common. On *Betula*.\*
- S. lutarea** Haw. Common. On *Crataegus*.\*
- S. caesiella** Hübn. Kennington. Yarnton. Hell Coppice. Locally plentiful. On *Prunus spinosa*.\*
- S. pyrella** Vill. Common, especially in gardens. On *Pyrus Malus*\* and *P. communis*.\*
- Prays curtisellus** Don. Common. On *Fraxinus excelsior*.\* The unicolorous black form (ab. **rustica** Haw.) is almost as frequent as the type.
- Hyponomeuta plumbella** Schiff. Tubney Wood. Cothill. Hen Wood, 1897 and 1899 (A.S., N.V.S.). Bagley Wood. Marston, 1900 (A.S. diary). † Local, among *Euonymus europaeus*.
- H. padella** Linn. Abundant. On *Prunus spinosa*\* and *Crataegus*\*\*.
- H. malinella** Zell. North Oxford, in my garden. Near Shabington Wood, bred from larvae in 1924. On *Pyrus Malus*.\*

- H. cognatella** Hüb. Abundant among its native food-plant, chiefly on the Berkshire side of the Thames. In Oxford it is a pest in gardens and shrubberies. On *Euonymus europaeus*\* and *E. japonicus*.\*
- Scythropia crataegella** Linn. Bagley Wood. Waterperry Wood. Shabbington Wood. Locally plentiful. On *Prunus spinosa*\* and *Crataegus*.\*
- Ethmia decemguttella** Hüb. Tubney, larvae sometimes common. Hen Wood, one at light, 1895 (A.S.); one at light, 1899 (N.V.S.). Headington Wick Copse, larvae in 1919. On *Lithospermum officinale*.\*

### COLEOPHORIDAE.

- Metriotes modestella** Dup. Bagley Wood, one in 1924. Shot over, 1924 (O.W.R.).† Forest Hill: common in Polecat End Lane. Among *Stellaria Holostea*.
- Coleophora spissicornis** Haw. [Cherbury Camp, 1920.] Hen Wood, 1901 (A.S., N.V.S.); recorded in error as *C. deauratella* (1901 list and Berkshire list). Kennington, 1925. Holton Pits, 1925. Otmoor, 1928. Taken singly in each instance.
- C. deauratella** Zell. Holton Pits; one in 1925. Hell Coppice, single examples in 1921 and 1922.
- C. frischella** Linn. Kennington, one captured on July 8th, 1925, in freshly emerged condition, among *Melilotus officinalis*.
- C. albitarsella** Zell. Tubney Wood, larval cases found on tree trunks. Cothill. Boar's Hill, 1915. Bagley Wood. North and South Hinksey. Forest Hill: on the north-west side of Holton Wood, larvae found in 1922. On *Nepeta hederacea*\* and *Clinopodium vulgare*.\*
- C. alcyonipennella** Koll. Headington Hill, one in 1920 (A.W.P.-C.). Hell Coppice, not uncommon. On *Centaurea nigra*\* and exceptionally *Cirsium lanceolatum*.\*
- C. potentillae** Staint. Forest Hill: near Holton Wood and in Polecat End Lane. Waterperry Wood. Hell Coppice. The larvae are usually abundant, and the moth is occasionally found on the wing. On *Agrimonia Eupatoria*\*, *Potentilla erecta*\*, *P. reptans*\*\* *Rubus caesius*\*, *R. fruticosus*\*, *Spiraea Filipendula*\*\* *S. Ulmaria*\*\* *Prunus spinosa*\*, *Corylus*\*\* and *Crataegus*\*\* Cf. Ent. Mo. Mag., LXIV, 1928, p. 77.

- C. paripennella** Zell. Shotover. Waterperry Wood. Hell Coppice. Fairly common in the larval stage in its localities, but not noticed on the Berkshire side of the Thames. On *Pyrus Malus*,\* *Prunus spinosa*,\* *Crataegus*,\* *Corylus*,\* *Ulmus*\* and *Betula alba*\*\*.
- C. fuscocuprella** Herr.-Schäff. Tubney Wood, larvae fairly common in one small area; first noticed in 1926. Hell Coppice, one larva found in 1927. On *Corylus Avellana*.\*
- C. nigricella** Steph. Common. On *Crataegus*,\* *Pyrus Malus*,\* *Prunus spinosa*,\* *P. insititia*\*\* and *P. avium*\*\* (Shotover). In 1924 a larva was found on *Cotoneaster frigida*\*\* in the University Parks.
- C. siccifolia** Staint. Cothill, one larva found on September 16th, 1924. On *Betula alba*\*\*.
- C. gryphipennella** Bouché. Common. On *Rosa canina*,\* *R. arvensis*\* and cultivated roses.\*\*
- C. orbitella** Zell. Cothill. Boar's Hill: above Chilswell. Bagley Wood, one larva in 1924. Wytham Woods. Oxford: in the University Parks. Waterperry Wood. Widely distributed, sometimes common in the larval stage. On *Betula*.\*
- C. binderella** Koll. Cothill. Bagley Wood. Waterperry Wood. Hell Coppice. Locally plentiful. On *Alnus glutinosa*\* (Cothill) and *Corylus Avellana*.\* Cf. Ent. Mo.Mag., LXIII, 1927, pp. 99 and 183.
- C. viminetella** Zell. Tubney Wood and Warren. Cothill. Bagley Wood. Kennington, larvae on leafy willow stumps used as field-posts (O.W.R.).† Yarnton. Wolvercote. Marston Ferry. Waterperry Wood. Hell Coppice. Rather common. On *Salix cinerea*,\* *S. Caprea*,\* *S. fragilis*\* and *S. triandra*\*\* ; exceptionally on *Betula*\* (Cothill).
- C. fuscadinella** Zell. General and abundant. On *Ulmus*,\* *Alnus glutinosa*,\* *Betula*,\* *Corylus*\* and *Carpinus*\*\*.
- C. lutipennella** Zell. Plentiful in woods. On *Quercus Robur*.\*
- C. limosipennella** Dup. Tubney Wood. Cothill. Bagley Wood. Waterperry Wood. Hell Coppice. Local, but sometimes plentiful. On *Ulmus*\*\* (Hell Coppice) and more commonly on *Betula alba*.\* Cf. Ent.Mo.Mag., LXIII, 1927, p.182.
- C. badiipennella** Dup. Bagley Wood. Kennington, one in 1925. Headington Hill, frequent on fences beneath elms in rough weather. Headington: one in a stone-pit above

- Bullingdon Bog, 1925. Hell Coppice. On *Ulmus\** (Bagley) and *Prunus spinosa\** (Hell Coppice). Cf. Ent. Mo. Mag., LXIII, 1927, p. 183.
- C. solitariella** Zell. Tubney. Shotover, blotches made by the larva seen in 1924. On *Stellaria Holostea.\**
- C. laricella** Hüb. Tubney. Cothill. Hen Wood, 1896 (N.V.S.). Bagley Wood. Wytham Woods. Headington Hill, 1918 (A.W.P.-C.). On *Larix\**; a pest in plantations.
- C. juncicolella** Staint. Boar's Hill: in the Youlbury grounds. Bladon Heath, locally common. On *Calluna vulgaris.\*\**
- C. lixella** Zell. Holton Pits, one captured on June 22nd, 1924 (O.W.R.); a larva found in the same spot on May 5th, 1925. On *Briza media.\*\**
- C. albidella** Herr.-Schäff. Tubney Warren, one larva in 1926. Cothill. Boar's Hill, 1915. Bagley Wood, one bred in 1927 (O.W.R.).† Waterperry Wood. Oxford district, ten specimens dated 1898-1902 (W.G.P.-S.). Found in plenty in the larval stage. On *Salix cinerea\** and exceptionally *Betula\** (O.W.R.). Cf. Ent. Mo. Mag., LXIV, 1928, p. 32.
- C. anatipennella** Hüb. Cothill. Boar's Hill. Kennington. Hinksey Hill, one on a fence, 1922. South Hinksey: in the Happy Valley. East Oxford, one at light, 1898 (A.H.H.); one bred from a case found on garden apple, 1900 (A.H.H.). Hell Coppice. The larvae are locally plentiful. On *Prunus spinosa,\* P. insititia,\*\* Crataegus\** and *Pyrus Malus.\**
- C. ardeipennella** Scott. Bagley Wood, one captured in 1920; larval cases found in 1920 and 1928. On *Quercus Robur.\*\**
- C. betulella** Hein. Cothill. Boar's Hill: above Chilswell. Hen Wood, plentiful in 1899 and 1901 (A.S., N.V.S.). Bagley Wood (O.W.R.). Oxford: in the University Parks. Hell Coppice, one larva in 1928. At present it is found very sparingly, and chiefly in the larval stage. On *Betula.\**
- C. palliatella** Zinck. Tubney Wood. Bagley Wood and Kennington. Waterperry Wood. Hell Coppice. Fairly common in woods. On *Quercus Robur.\**
- C. discordella** Zell. South Hinksey, one captured in 1912. Hell Coppice, two larvae in 1927. On *Lotus uliginosus.\*\**





- C. albicosta** Haw. Tubney. Boar's Hill. Cumnor Hurst. Shotover, 1924 (O.W.R.).† Locally common, among *Ulex europaeus*.
- C. lineolea** Haw. Cothill, one in 1912. South Hinksey, one in 1915. Hell Coppice, two in 1925.
- C. crocogramma** Zell. Foxcombe Hill, one in 1915. At the top of Hinksey Hill, larvae found by the roadside, 1924. Along the Canal from Yarnton to Oxford. North and East Oxford, on waste ground and land awaiting the builder. Waterperry Wood. The larvae are often plentiful. On *Ballota nigra*,\* *Stachys sylvatica*,\* *S. officinalis*,\* and exceptionally *Lamium album*\*\* (teste A.H.H.).
- C. troglodytella** Dup. Tubney, one in 1913. Cothill, locally common. Boar's Hill, one in 1915. South Hinksey, one in 1915. Headington Hill, one in 1917 (A.W.P.-C.). On *Eupatorium cannabinum*\* (Cothill).
- C. therinella** Tengst. Tubney. Boar's Hill, one larval case found on a fence, 1923. Kennington. Wytham Woods, one captured in 1925. Along the north-west side of Holton Wood. Hell Coppice. On waste ground and the edges of fields. Larvae common in 1925. On *Cirsium arvense*.\*
- C. argentula** Zell. Tubney, one larva on January 25th, 1925. Cumnor, in a stone-pit, fairly common. On *Achillea Millefolium*.\*
- C. laripennella** Zell. Tubney. Cothill, larvae plentiful on a fallow piece of field, 1927. Foxcombe Hill and Boar's Hill. Hen Wood, 1899 and 1903 (N.V.S.). Kennington, 1920. North Hinksey, 1913. North Oxford, on waste ground. Rather common. On *Atriplex patula*\* and *Chenopodium album*\*\*.
- C. murinipennella** Dup. Cothill. In a meadow below Hen Wood, 1925. Bagley Wood. South Hinksey, 1914. Wolvercote, 1928. In a meadow between Bayswater Mill and Forest Hill, common in 1927. Holton Pits, 1927. Waterperry Wood, one in 1927. Hell Coppice. Frequent in meadows, though absent from many likely spots; scarce in woods. Among *Juncoides campestre*. Cf. Ent.Mo.Mag., LXV, 1929, p.3.
- C. tamesis** Waters. Binsey: common in a ditch and meadow by the Thames; first found in 1914, but not recognized as a distinct species till 1925. Otmoor, 1928. Quite recently described as new, and not at present known to occur elsewhere. Cf. Ent.Mo.Mag., LXV, 1929, p. 1.

- C. galactaula** Meyr. Tubney Warren, 1926. Cothill, larvae frequent on alder stems. South Hinksey. Binsey. Headington Hill, one on a fence, 1922. Waterperry Wood. Hell Coppice. Rather common. On *Juncus articulatus*\* and exceptionally *J. conglomeratus*\*\* Cf. Entom., LXI, 1928, p.91.
- C. glaucicolella** Wood. Cothill. Boar's Hill. Bagley Wood, 1924 (O.W.R.).† Kennington: abundant in low-lying meadows. South Hinksey. Near Kirtlington, 1927 (O.W.R.).† Oxford. Bullingdon Bog. Shotover. Otmoor. Hell Coppice. Probably everywhere, but cannot be distinguished from the next species except by the genitalia; specimens from the localities mentioned have been identified by Mr. Richards. On *Juncus inflexus*\*, *J. articulatus*\* and other species. Cf. Ent. Mo. Mag., LXIV, 1928, p. 47.
- C. caespitiella** Zell. Boar's Hill: Tommy's Heath, bred in 1924 (O.W.R.).† Bagley Wood (O.W.R.).† Kennington. Waterperry Wood. Hell Coppice. Abounds everywhere among rushes, but owing to the danger of confusion with *C. glaucicolella* only the verified localities are here given (*teste* O.W.R.). On *Juncus conglomeratus*\*, *J. effusus*\*, *J. inflexus*\* and *J. articulatus*\*. Many larval cases found on *J. articulatus* at Hell Coppice in the autumn of 1924 were unusually dark, but produced typical imagines. Cf. Ent.Mo.Mag., LXIV, 1928, p.47.
- C. agrammella** Wood. Boar's Hill, one in 1915. Bagley Wood, scarce. Northleigh Heath, 1919. Stanton St. John Wood, larvae common in 1924. Hell Coppice. On *Juncus conglomeratus*\* and *J. effusus*\*. Imagines captured in the open have been identified by the genitalia (*teste* O.W.R.). Cf. Ent.Mo.Mag., LXIII, 1927, p. 101.

### GRACILARIADAE.

- Lithocolletis roboris** Zell. Bagley Wood, four captured in one spot, May 31st, 1921; one bred from the same locality, 1923. On *Quercus Robur*.\*
- L. cramerella** Fabr. Common. On *Quercus Robur*.\* A striking variety, unicolorous white except for the dark apical hook, was bred in 1924 from Hitch Copse.
- L. heegeriella** Zell. Bagley Wood, scarce. Waterperry Wood and Hell Coppice, locally common. On *Quercus Robur*.\*

- L. messaniella** Zell. Common. On *Quercus Ilex*\* (abundant in Oxford), *Q. Turneri*\* (Bagley Wood), *Castanea sativa*\* (Tubney Wood, Wytham Woods and Shotover) and *Carpinus Betulus*\* (Wytham Woods and Village, and in the University Parks and neighbouring gardens, Oxford).
- L. quercifoliella** Zell. Very common. On *Quercus Robur*\*.
- L. alnifoliella** Dup. Tubney Wood. Hitch Copse. Cothill. Bagley Wood. Plentiful. On *Alnus glutinosa*\*.
- L. ulicicolella** Staint. Tubney Wood. Cumnor Hurst. Locally common, among *Ulex europaeus*.
- L. carpinicolella** Staint. Wytham Woods. Oxford: in the University Parks. Prattle Wood, 1928. Local. On *Carpinus Betulus*\*.
- L. coryli** Nic. Common. On *Corylus Avellana*\*.
- L. faginella** Zell. Common. On *Fagus sylvatica*\*.
- L. spinicolella** Zell. Common. On *Prunus spinosa*\*.
- L. cerasicolella** Herr.-Schäff. Tubney Wood, mines found in 1928. Boar's Hill: one mine in the Youlbury grounds, 1928. Bagley Wood, one captured in 1922. Wytham Woods. Shotover, larvae sometimes common. On *Prunus avium*\*. The first two of the above records require confirmation.
- L. sorbi** Frey. Shotover: on trees planted in the University Enclosure, a few bred in 1924-25. On *Pyrus Aucuparia*\*.
- L. mespilella** Hüb. Oxford: a few bred in 1924 and 1926 from mines found in the University Parks. On *Pyrus Aucuparia*\*.
- L. concomitella** Banks. Common. On *Pyrus Malus*\*, both wild and in gardens.
- L. blancardella** Fabr. Bagley Wood. North Oxford: in my garden. Shotover. Shabbington Wood. Many bred in 1924-25. On *Pyrus Malus*\*.
- L. oxyacanthae** Frey. Common. On *Crataegus*\*, including the North American *C. punctata*\* planted in the University Parks.
- L. lantanella** Schranck. Tubney Wood. Cothill. Bagley Wood. Wytham Woods, mines seen in 1928. Locally common, but noticed on the Berkshire side only. On *Viburnum Lantana*\* and exceptionally *V. Opulus*\*\*.
- L. salicicolella** Sirc. Common. On *Salix cinerea*\* and *S. Caprea*\*.

- L. viminetorum** Staint. Marston Ferry, ten examples bred in 1924. On *Salix viminalis*.\*
- L. cavella** Zell. Tubney, one bred in 1924, determined by the genitalia (*teste* W. Petersen); another in 1929. On *Betula alba*.\*
- L. spinolella** Dup. Tubney Wood. Cothill. Boar's Hill. Bagley Wood. Wytham Woods. Bladon Heath, 1927. Waterperry Wood. Hell Coppice, 1921. Locally plentiful. On *Salix Caprea*\* and *S. cinerea*.\*
- L. ulmifoliella** Hübn. Common. On *Betula*.\*
- L. strigulatella** Zell. Cothill, bred in plenty in January, 1929, from leaves collected in October, 1928. Not previously found in this country. On *Alnus incana*.\* Evidently introduced with the tree, but likely to remain.
- L. lautella** Zell. Waterperry Wood. Hell Coppice. Very local, and not noticed on the Berkshire side. On *Quercus Robur*.\*
- L. schreberella** Fabr. Common, although the imago is not often observed. On *Ulmus*.\* An example with the ground colour bronzy-fuscous instead of golden was captured on a fence at Headington Hill, July 27th, 1925.
- L. trifasciella** Haw. Common. On *Lonicera Peri-Clymenum*.\*
- L. emberizipennella** Bouché. Boar's Hill: one captured in Powderhill Copse on May 25th, 1915. 'Occurs at Oxford' (Nat. Hist. Tin., II, p. 308).
- L. tristrigella** Haw. Cothill, in elm hedges. Bagley Wood. Godstow Holt, one in 1922. Headington Hill, on fences. Shotover. Locally common. On *Ulmus*.\*
- L. stettinensis** Nic. Cothill, locally common. Bagley Wood. On *Alnus glutinosa*.\*
- L. froelichiella** Zell. Hitch Copse, 1919. Cothill, locally common. Bagley Wood. On *Alnus glutinosa*.\*
- L. Nicelli** Staint. Common. On *Corylus Avellana*.\*
- L. kleemannella** Fabr. Cothill, frequent. Bagley Wood. On *Alnus glutinosa*.\*
- L. viminiella** Staint. Tubney. Cothill. North Hinksey, 1915. Godstow. Yarnton. Oxford: in the University Parks. Marston Ferry. Locally plentiful. On *Salix cinerea*,\* *S. viminalis*,\* *S. fragilis*,\* *S. triandra*,\* and a dark-leaved species planted in the University Parks (1923).\*
- L. corylifoliella** Haw. Common. On *Crataegus*,\* *Pyrus Malus*,\* *P. Aucuparia*,\*\* *P. communis*,\* *P. torminalis*\* and *Prunus avium*.\* In the University Parks a mine of this species was found in 1924 in a leaf of *Cotoneaster frigida*.\*\*

- L. comparella** Zell. Cothill. Hinksey Hill, 1923. Oxford: in the University Parks. Iffley, 1923 (A.H.H.). Locally common. On *Populus canescens*\*; in the University Parks also on *P. Tacamahacca*.\*
- L. hortella** Fabr. Tubney Wood. Hitch Copse. Powderhill Copse near Hen Wood, 1902 (A.S., N.V.S.). Bagley Wood, 1902 (A.S., N.V.S., W.M.G.). Locally plentiful; found on the Berkshire side only. On *Quercus Robur*.\*
- L. sylvella** Haw. Cothill, 1924. Bagley Wood. Hinksey Hill, larvae by the road-side. South Hinksey: one captured in the old Rifle Range, 1915. Wytham Woods, 1924. Between Kirtlington and Weston-on-the-Green, larvae seen in 1928. In Brasenose Lane under Shotover. Widely distributed, but common only in the last-mentioned locality. On *Acer campestre*.\*
- L. geniculella** Rag. Tubney Wood, sometimes plentiful. Cothill. Hen Wood, larvae in 1928. Bagley Wood, locally common. Wytham Woods. Bladon Heath, mines seen in 1927. On *Acer Pseudo-platanus*.\* This species was not recognized as British till 1925, when many examples were bred from Tubney larvae. It appears to be on the increase. Cf. Ent. Mo. Mag., LXI, 1925, p. 193, and LXIV, 1928, p. 12.
- Phylloenistis saligna** Zell. Tubney. Cothill, mines and cocoons, 1928. Bagley Wood, 1919. Godstow Holt, 1925. Between Kirtlington and Weston-on-the-Green, 1928. Stanton St. John Wood. Frequent in thatch, and flies among willows. On *Salix fragilis*\*\* (Cothill).
- P. suffusella** Zell. Very common. On *Populus deltoidea*\*, *P. italica*\* and *P. Tacamahacca*\*\* Imagines of the summer brood usually have the basal half of the forewings pure white, or with a faint dorsal spot only.
- Acrocercops omisella** Staint. Cothill. Foxcombe Hill, 1915. North Oxford, on waste ground and land awaiting the builder. Shotover, larvae seen in 1924. Rather common, though the moth is seldom observed. On *Artemisia vulgaris*.\*
- A. brongniardella** Fabr. Tubney. Boar's Hill, one in 1920. Bagley Wood, larvae plentiful. Headington Hill, on a fence, 1925. Stanton St. John Wood. Often abounds in thatch. On *Quercus Robur*.\*
- Parectopa ononidis** Zell. Hell Coppice, eight examples captured since 1922; all in one meadow, flying in afternoon or evening sunshine.

- Ornix guttea** Haw. Tubney and Cothill, traces of the larva seen. Boar's Hill, 1897 (A.S.). Bagley Wood. South Hinksey. Oxford, in gardens. Weston-on-the-Green, larval habitations seen, 1928. Shotover. Hell Coppice. Rather common. On *Pyrus Malus*.\*
- O. anglicella** Staint. Common. On *Crataegus*.\*
- O. avellanella** Staint. Common. On *Corylus Avellana*.\*
- O. torquillella** Zell. Common. On *Prunus spinosa*\* and *P. insititia*.\*\*
- O. scoticella** Staint. North Oxford: in my garden. The University Parks. Waterperry Wood. Shabbington Wood. On *Pyrus Aucuparia*\* and *P. torminalis*\*; in the University Parks it is plentiful also on *Cotoneaster frigida*.\*
- O. betulae** Staint. Cothill. Boar's Hill: above Chilswell. Wytham Woods, larvae seen in 1928. Headington Hill, 1921 (A.W.P.-C.). Waterperry Wood. Hell Coppice. Rather common. On *Betula*.\*
- Cracilaria auroguttella** Steph. General among its food-plant, sometimes plentiful. On *Hypericum perforatum*.\*
- C. phasianipennella** Hübn. Cothill, one on October 15th, 1922; another on September 27th, 1924; both disturbed from dense herbage in meadows.
- C. syringella** Fabr. Common, especially in Oxford gardens. On *Ligustrum vulgare*\*, *Fraxinus excelsior*\* and *Syringa vulgaris*.\*
- C. cuculipennella** Hübn. Tubney Wood. Cothill. Bagley Wood. Wytham Woods. Bladon Heath. Stanton St. John Wood. Holton Wood. Hell Coppice. Rather common in woods. Frequent in thatch.
- C. sulphurella** Haw. Bladon Heath, two examples captured in 1912 and 1913.
- C. tringipennella** Zell. Common on rough open ground. On *Plantago lanceolata*.\*
- C. elongella** Linn. Cothill. Hen Wood. Bagley Wood. Bladon Heath. Waterperry Wood. Hell Coppice. Rather common. On *Alnus glutinosa*\* and *Betula*.\*
- C. alchimiella** Scop. Common. On *Quercus Robur*.\*
- C. stigmatella** Fabr. Tubney. Cothill. Bagley Wood. Wytham Woods. Godstow, 1913. Headington Hill, 1918 (A.W.P.-C.). Stanton St. John Wood. Rather common. On *Populus tremula*\* and *Salix cinerea*.\*

## EPERMIADAE.

- Cataplectica fulviguttella** Zell. Cothill. Bagley Wood. North and South Hinksey. Yarnton. Among *Umbelliferae*, sometimes plentiful.
- Epermenia illigerella** Hübn. Tubney, 1911. Cothill. South Hinksey: in the old Rifle Range. Bullingdon Bog. In marshy meadows, local.
- E. chaerophyllella** Göze. Common. On *Heracleum Sphondylium*\* (O.W.R., Kirtlington, 1927), † *Anthriscus sylvestris*\* and *Angelica sylvestris*.\*

## PLUTELLIDAE.

- Orthotaelia sparganella** Thunb. Binsey: in a ditch by the Thames. Marston Fields, 1899 (A.S., N.V.S., W.G.P.-S., W.M.G.). Very local, but occurs in plenty.
- Cerostoma caudella** Linn. Tubney. Cothill, one in 1915 (J.J.W.). Bagley Wood, one in 1902 (N.V.S.). Finstock, 1919. Wood Eaton, one at ivy bloom, 1902 (N.V.S.). Oxford district, two specimens dated 1902 and 1903 (W.M.G.). Local and rather scarce. Found in thatch and among *Euonymus europaeus*.
- C. xylostella** Linn. Common. On *Lonicera Peri-Clymenum*.\*
- C. scabrella** Linn. Boar's Hill. Bagley Wood. Wytham Woods, on old hawthorns. North Oxford, in hedges, 1928. Headington Hill, 1917 (A.W.P.-C.). Weston-on-the-Green, one in 1928. Hell Coppice, 1928. Widely distributed, but not common.
- C. horridella** Treits. Bagley Wood, a dozen bred, 1899-1902 (N.V.S., A.S., W.G.P.-S.). Hell Coppice, one in 1920, another in 1928. On *Prunus spinosa*.\*
- C. lucella** Fabr. Hen Wood, one at sugar, 1901 (N.V.S.). Bagley Wood, many specimens dated 1897-1901 (A.S., N.V.S., W.G.P.-S.); it still occurs there. Waterperry Wood. Local, among oak.
- C. alpella** Schiff. Tubney Wood, one in 1919. Bagley Wood. Wytham Woods, one in 1913. Waterperry Wood. Frequent. On *Quercus Robur*.\*
- C. sylvella** Linn. Tubney Wood. Bagley Wood. Wytham Woods. Waterperry Wood. Hell Coppice. Rather common in oak woods.
- C. costella** Fabr. Common. On *Quercus Robur*.\*
- C. radiatella** Don. Common. On *Quercus Robur*.\*

- C. sequella** Clerck. Tubney Wood, on sycamore trunks. Hen Wood, one in 1902 (W.M.G.). Bagley Wood. Wytham Woods, one in 1919. [Finstock.] Between Kirtlington and Weston-on-the-Green, one in 1928. Frequent, usually found on tree trunks.
- C. vittella** Linn. General among elm.
- Plutella porrectella** Linn. South Hinksey: one in the old Rifle Range, 1920. North Oxford, frequent in gardens. Marston fields, 1897 (A.S. and N.V.S. diaries).† Bullingdon Bog, one in 1921 (A.H.H.).
- P. maculipennis** Curt. Common.
- Acrolepia pygmaeana** Haw. Tubney. Cothill, larvae and mines found. Kennington, larvae found in 1924. Oxford, 1894 (A.S.); larvae in the University Parks. Headington Hill, one on a fence, February 6th, 1915 (H. Britten); one bred in 1917 from a larva found by H. Britten (A.W.P.-C.). Locally common; sometimes beaten from thatch. On *Solanum Dulcamara*.\*

#### LYONETIADAE.

- Opostega salaciella** Treits. Kennington, one captured on July 8th, 1925.
- O. crepusculella** Zell. Bagley, one in 1920, among *Teucrium Scorodonia*. North Oxford, one in my study, attracted to light, 1920. Forest Hill: one in Polecat End Lane, 1925.
- Leucoptera laburnella** Staint. Tubney Wood, one in 1925. North Hinksey, 1913. Oxford and suburbs, abundant in gardens. On *Laburnum anagyroides*.\*
- L. spartifoliella** Hübn. Cumnor Hurst, common among *Cytisus scoparius*.
- L. waillesella** Staint. Hell Coppice, sometimes plentiful. On *Genista tinctoria*.\*
- L. scitella** Zell. Tubney Wood, mines found in 1925. Cothill. Bagley Wood. South Hinksey: above the old Rifle Range. Wytham Woods, 1928. Near Enslow Bridge and near Yarnton: in hedges by the Canal. Shotover. Otmoor, 1928. Widely distributed, but not very common. On *Pyrus Malus*,\* *P. Aucuparia*\*\* (Tubney) and *Crataegus*.\*
- Lyonetia clerkella** Linn. Common. On *Pyrus Malus*,\* *P. communis*,\*\* *P. Aucuparia*\* (in the University Parks), *Crataegus*,\* including *C. punctata*\*\* (in the University



Parks), *Cotoneaster frigida*\* (do.), *Prunus spinosa*\*\* *P. insititia*\*, *P. avium*\*\* (Wytham Woods and Shotover) and *Betula*\*\* The unicolorous dark form (ab. **aereella** Treits.) is at least as common as the typical form.

**Bedellia somnulentella** Zell. Bagley Wood, one captured on September 27th, 1919.

**Tischeria complanella** Hübn. Common. On *Quercus Robur*\*; in Wytham Woods also on *Q. Cerris*\*\*

**T. dodonaea** Heyd. Tubney Wood. Cothill. Powderhill Copse. Bagley Wood. Wytham Woods. Waterperry Wood. Nearly as common as the preceding species. On *Quercus Robur*\*; in Wytham Woods also on *Q. Cerris*.\*

**T. marginea** Haw. Common. On *Rubus fruticosus*\* and *R. idaeus*.\*

**T. angusticolella** Dup. Waterperry Wood. Hell Coppice. Very local, but the larvae are found in plenty. On *Rosa canina*.\*

**Bucculatrix cristatella** Zell. Cumnor Hurst, one in 1916. Holton Pits, one in 1925. Near Forest Hill: in a meadow by Holton Brook, 1921. Hell Coppice, frequent.

**B. nigricomella** Zell. Bagley Wood and Kennington. Yarn-ton railway embankment, larvae plentiful. By the Canal near Wolvercote, 1899 (A.H.H.). Waterperry Wood. Hell Coppice. Rather common. On *Chrysanthemum Leucanthemum*.\*

**B. frangulella** Göze. Cothill, specially plentiful in the larval stage. Between Kirtlington and Weston-on-the-Green, mines seen in 1928. On *Rhamnus catharticus*.\*

**B. boyerella** Dup. Tubney, one in 1913. Oxford: in the University Parks, one in 1925. Headington Hill, frequent on fences. Shotover, mines found, 1924. Hell Coppice. On *Ulmus*\*\*

**B. cidarella** Zell. Cothill, very local but occasionally plentiful. On *Alnus glutinosa*\*\*

**B. ulmella** Zell. Tubney Wood, a cocoon found in 1922 and mines in 1927. Boar's Hill: Red Copse, one in 1915. Waterperry Wood, occasional. On *Quercus Robur*\*\*

**B. crataegi** Zell. Tubney, one in 1921. Cothill, 1923. Waterperry Wood. Hell Coppice, sometimes common. Shab-bington Wood, 1923. On *Crataegus*.\*

**B. demaryella** Staint. Waterperry Wood, larvae and mines found sparingly. On *Betula alba*\*\*

**Oinophila v-flava** Haw. Oxford: in New College wine-cellar about 1910, when its ravages necessitated the re-bottling of the College port (*teste* N.V.S.). In the cellars of the 'Mitre' I have seen corks of champagne-bottles mined by the larvae.

### TINEIDAE.

- Trichophaga tapetiella** Linn. Tubney, in thatch, 1924. Cot-hill, in an outhouse, 1927. Oxford district, one in 1904 (W.M.G.).
- Monopis rusticella** Hübn. Common, though the next species is often mistaken for it. Tubney, sometimes plentiful in thatch. Oxford, in and near houses. Bred in plenty from the nests of various birds, found at Oxford and Headington by A. H. Hamm, 1925-28.
- M. weaverella** Scott. Cothill. Bagley Wood. Waterperry Wood. Hell Coppice. Many 'Oxford district' specimens in the Sidgwick, Pogson-Smith and Geldart collections. Frequently captured in woods.
- Tineola bisellifella** Hübn. Oxford and suburbs, common in houses.
- Tinea fulvimitrella** Sodof. Bagley Wood, one in 1904 (W.M.G.); locally common on oak trunks in 1921. Waterperry Wood, one on an oak trunk, 1921.
- T. arcella** Fabr. Tubney, 1927. Hen Wood, 1901 (A.S.). Bagley Wood and Kennington. Oxford, one in 1926.
- T. corticella** Curt. Bagley Wood, locally common. Waterperry Wood, one seen in 1922. Found on oak trunks.
- T. parasitella** Hübn. Tubney Wood. Bagley Wood. Wytham Woods. Locally common. Found on tree trunks.
- T. granella** Linn. Oxford: a few in the Castle Mill, 1915. Oxford district, one in 1902 (W.M.G.).
- T. cloacella** Haw. Common.
- T. misella** Zell. Tubney, two obtained from thatch, 1923. North Oxford: one found in my house, 1915.
- T. fuscipunctella** Haw. Oxford, frequent in houses.
- T. flavescentella** Haw. Oxford: many bred in 1926 from the remains of a dead pigeon found in the University Parks.
- T. pellionella** Linn. Common in houses. Bred from a hedge-sparrow's nest found at Headington by A. H. Hamm, 1926.

- T. pallescentella** Staint. Oxford, common in houses; found in the University Museum and in the cellars of the 'Mitre.'
- T. lapella** Hübn. Common. Bred in plenty from various birds' nests found at Oxford and Headington by A. H. Hamm.
- T. semifulvella** Haw. Cothill, 1922. Hen Wood, 1896-99 (A.S., N.V.S.). Bagley Wood. Bladon Heath, 1912. Oxford and Headington Hill, on fences. Fairly common.
- Ochsenheimeria birdella** Curt. Tubney, three captured in 1906 (A.H.H.). North Hinksey, seen in 1913. Bullingdon Bog, one in 1908 (A.H.H.). Usually found on the ground among grass.
- O. vacuella** Fisch. v. Rösl. Lye Hill, near Cowley, two examples found under loose bark, July 20th, 1918 (A.H.H.).
- Talaeporia pseudobombycella** Hübn. Tubney Wood, larvae and empty cases on tree trunks and stone walls. Cothill, larvae locally plentiful; bred in numbers in 1923. Bagley Wood, cases on tree trunks.
- Solenobia lichenella** Linn. Tubney, larvae not uncommon on a stone wall; many examples bred in 1924 were all females. Regarded by Mr. Meyrick (Handbook, p. 835) as the parthenogenetic form of *S. inconspicuella* Staint.
- Luffia ferchaultella** Steph. Tubney Wood, on oak trunks. Cothill, on trunks of *Populus canescens* and alder. Bagley Wood, on trunks of oak, *Pyrus communis* and *Pinus Abies*. Kennington, on field posts. Dorchester, on an old lichen-covered tombstone and on the church wall, 1922. Yarnton, on an open fence. Oxford: in the University Parks, on trunks of *Populus italica*. Often very abundant. Only females have been bred. Perhaps a parthenogenetic form of *L. lapidella* Göze (Meyrick's Handbook, p. 836).
- L. sepium** Spey. Bagley Wood, a larva found on February 25th, 1923, and a case in 1926; both on oak trunks. Kennington, nine specimens bred in 1925 from larvae found on field posts (O.W.R.). Oxford: a larva found in a room at Exeter College, November 16th, 1923; probably introduced with fire-wood.
- Narycia melanella** Haw. Tubney. Bagley Wood and Hinksey Hill. Wytham Woods. Oxford: on the south side of the University Parks; one captured on Magdalen Bridge, 1907 (A.H.H.). Headington Hill, on fences. The larvae are frequently met with on tree trunks, fences and stone walls.

- N. marginepunctella** Steph. Yarnton, one full-fed larva found on a post, July 13th, 1922, but not reared.

### LAMPRONIADAЕ.

- Phylloporia bistrigella** Haw. Cothill. Bagley Wood. Waterperry Wood. Local. On *Betula*.\*\*
- Incurvaria pectinea** Haw. Boar's Hill: in or near Powderhill Copse, two specimens captured in 1897 and 1898 (N.V.S.). Bagley Wood, one captured in 1896 (N.V.S.).
- I. muscalella** Fabr. Common.
- Lampronia capitella** Clerck. Oxford, one captured on May 31st, 1892 (A.S.); probably in his garden in North Oxford.
- L. oehlmanniella** Treits. Cothill, one in 1920. Boar's Hill: above Chilswell, 1896 and 1898 (N.V.S.). Bagley Wood, 1898 (N.V.S.), 1905 (W.M.G.). Wytham Woods, one in 1896 (N.V.S.). Waterperry Wood. Hell Coppice, 1928. In woods, locally common.
- L. praelatella** Schiff. Cothill. Bagley Wood. Waterperry Wood. Hell Coppice. Shabington Wood. In woods, local, sometimes plentiful.
- L. luzella** Hübn. Waterperry Wood. Hell Coppice. Local and found in small numbers.
- L. rubiella** Bjerk. Cothill, 1922. Godstow Holt, 1921. Cowley, among raspberry in a garden, 1924 (O.W.R.).† Hell Coppice, 1922 and 1923. A single example in each instance.
- L. quadripunctella** Steph. Boar's Hill: in or near Powderhill Copse, one captured on June 5th, 1896 (N.V.S.). Bagley Wood, one in 1901 (W.G.P.-S.); one in 1902 (W.M.G.).

### ADELIDAE.

- Nemotois minimella** Zell. South Hinksey: in the old Rifle Range. Hell Coppice. Locally common. On *Scabiosa Succisa*.\*
- N. cupriacella** Hübn. Bagley Wood, one captured on July 10th, 1900 (A.S.). Waterperry Wood, one in 1921. Hell Coppice, sometimes plentiful. On *Scabiosa Succisa*.\* The specimens, captured and bred, are all females.
- N. degeerella** Linn. Common in woods, sometimes plentiful.

- Adela viridella** Scop. Very common. Among oak and hawthorn.
- A. croesella** Scop. Cothill, one in 1922. Bagley Wood, one in 1902 (N.V.S.). Wytham Hill, several in 1915. Shotover Plain, 1923 (O.W.R.). † Hell Coppice, one in 1921. Usually among privet.
- A. rufimitrella** Scop. Common in meadows and marshy places among *Cardamine pratensis*.
- A. fibulella** Schiff. Tubney Wood. Boar's Hill or Hen Wood, 1903 (N.V.S.). Bagley Wood. South Hinksey: in the old Rifle Range, 1915. Local, among *Veronica Chamaedrys*.
- Nemophora swammerdammella** Linn. Common.
- N. schwarziella** Zell. Cothill. Hen Wood. Wytham Woods. Bladon Heath. Marston, 1897 (N.V.S.). Shotover. Waterperry Wood. Rather common.
- N. metaxella** Hübn. Cothill. Bagley Wood. Binsey, 1922. Wytham, 1904 (W.G.P.-S.). Yarnton. Waterperry Wood. Hell Coppice, 1923. Locally common in damp woods and copses.

## NEPTICULINA.

## NEPTICULIDAE.

- Nepticula pomella** Vaughan. Cothill. Boar's Hill. Bagley Wood. North Oxford, in gardens. Shotover. Forest Hill, 1922. Shabbington Wood. On *Pyrus Malus*\*; specially plentiful on cultivated apple.
- N. pygmaeella** Haw. Common, larvae often plentiful. On *Crataegus*.\*
- N. atricapitella** Haw. Common. On *Quercus Robur*.\*
- N. ruficapitella** Haw. Common. On *Quercus Robur*.\* Inseparable in its early stages from the preceding species, but the genitalia prove it to be distinct (*teste* W. Petersen).
- N. basiguttella** Hein. Tubney Wood. Cothill, one mine in 1928. Wytham Woods, 1928. Bagley Wood. Waterperry Wood. Hell Coppice. Locally common. On *Quercus Robur*.\*
- N. anomalella** Göze. Bagley Wood, bred in 1923. North Oxford, one bred from my garden, 1923. Hell Coppice, bred in 1924. Quite scarce in this district. On *Rosa canina*\* and cultivated rose.\*

- N. Fletcheri** Tutt. Bagley Wood. South Hinksey, one in 1915. Forest Hill. Stanton St. John. Waterperry Wood. Hell Coppice. Locally plentiful. On *Rosa arvensis*\* and *R. canina*.\* The genitalia prove it to be distinct from *N. anomalella* (teste W. Petersen).
- N. viscerella** Staint. Cothill. North Hinksey. Wytham. Oxford: in the University Parks. Shotover. Waterperry Wood. Hell Coppice. The larvae are locally plentiful. On *Ulmus*.\*
- N. aucupariae** Frey. Oxford: in the University Parks. On *Pyrus Aucuparia*\*\* and once (October 26th, 1923) on *Cotoneaster frigida*\*\*.
- N. minusculella** Herr.-Schäff. North Oxford: larvae fairly common in my garden, 1922-25. On *Pyrus communis*.\*
- N. oxyacanthella** Staint. Common. On *Crataegus*,\* including *C. punctata*\* (in the University Parks), *Pyrus Malus*,\* *P. communis*\* (in my garden) and *Cotoneaster frigida*\* (in the University Parks).
- N. regiella** Herr.-Schäff. Cothill. Bagley Wood. Wolvercote. Oxford: in the University Parks; one captured in the University Museum, 1924. Marston Ferry. Waterperry Wood. Hell Coppice. Rather common. On *Crataegus*.\*
- N. aeneofasciella** Herr.-Schäff. Common. Often abundant in the larval stage. On *Agrimonia Eupatoria*,\* *Potentilla erecta*\* (Bagley Wood, Shotover, Hell Coppice), *P. reptans*\* (Bagley Wood, Wytham Woods) and *Fragaria vesca*\* (Bagley Wood and near Forest Hill).
- N. splendidissimella** Herr.-Schäff. Cothill. Yarnton railway embankment. Local. On *Rubus caesius*\* and *R. idaeus*.\*
- N. aurella** Staint. Very common. On *Rubus fruticosus*,\* *R. idaeus*\* (Cothill, 1922), *R. caesius*,\* *Geum urbanum*\* and *Agrimonia Eupatoria*.\* Examples bred from the three latter food-plants frequently have black heads, and have been assigned to *N. fragariella* Heyd. or *N. gei* Wocke; but their distinctness has yet to be demonstrated.
- N. dulcella** Hein. Mines agreeing with those of *dulcella* have been found repeatedly since 1923 in Bagley Wood, but always empty of larvae. On *Fragaria vesca*\*\* Mr. Meyrick, however (Handbook, p. 854), regards *dulcella* as conspecific with *N. aurella*.
- N. poterii** Staint. Cothill, larvae sometimes plentiful on *Spiraea Ulmaria*\* and *Potentilla erecta*.\* South Hinksey, larvae on *Spiraea Ulmaria*\*\* Yarnton, one mine

- found on *Spiraea Ulmaria*, 1922. The names *N. ulmariae* Wocke and *N. serella* Staint. have been given to imagines bred from *Spiraea Ulmaria* and *Potentilla erecta* respectively; but evidence that they are specifically distinct from *N. poterii* is not yet forthcoming. Cf. Ent. Mo. Mag., LX, 1924, p. 99.
- N. graciosella** Staint. Cothill. Yarnton: by the Canal, 1928. Weston-on-the-Green, mines found, 1928. Hell Coppice. The larvae are locally common. On *Crataegus*.\*\*
- N. ulmivora** Fologne. Bagley Wood. North Hinksey. Wytham. Shotover. Waterperry Wood. Hell Coppice. Widely distributed, and fairly common in its localities. On *Ulmus*.\*
- N. marginicolella** Staint. Very common in the larval stage. The imago is sometimes found on fences. On *Ulmus*.\*
- N. alnetella** Staint. Cothill, fairly common. Bagley Wood, one bred in 1925. On *Alnus glutinosa*.\*
- N. continuella** Staint. Cothill, the mines are frequently found, though usually empty. Waterperry Wood, mines found. On *Betula pubescens*.\*
- N. centifoliella** Zell. Cothill. Foxcombe Hill. Godstow. Oxford, abounds in gardens. Forest Hill. Stanton St. John. Hell Coppice. On *Rosa canina*,\* *R. arvensis*\* and many kinds of cultivated rose.\* Black-headed examples have been bred from Stanton St. John and Hell Coppice. Two empty mines, most probably of this species, were found on *Poterium Sanguisorba* near Stanton St. John, October 1st, 1924.
- N. microtheriella** Staint. Common, often plentiful. On *Corylus Avellana*\*; in Wytham Woods also on *Carpinus Betulus*.\*\*
- N. betulicola** Staint. Tubney Wood. Cothill. Boar's Hill. Bagley Wood. Oxford: in the University Parks. Waterperry Wood. Often abounds in the larval stage. On *Betula alba*\* and *B. pubescens*.\*
- N. plagicolella** Staint. Common. On *Prunus spinosa*,\* *P. insititia*\* (Kennington) and *P. domestica*\*\* (Cothill and Wolvercote).
- N. ignobilella** Staint. Cothill. Cumnor, 1916. Bagley Wood. Enslow, Yarnton and Wolvercote, in hedges by the Canal. Oxford: in the University Parks. Marston Ferry. Headington Hill: the imago occurs on fences. Weston-on-the-Green, 1928. Waterperry Wood. Otmoor, 1928. Hell Coppice. Rather common. On *Crataegus*.\*

- N. glutinosae** Staint. Cothill, several examples captured and bred. On *Alnus glutinosa*.\*
- N. luteella** Staint. Tubney Wood. Cothill. Boar's Hill, 1926. Bagley Wood. Wytham Woods, 1924. Oxford: in the University Parks. Waterperry Wood. Fairly common. On *Betula*.\*
- N. woolhopiella** Staint. Tubney, 1928. Cothill. Boar's Hill. Oxford: in the University Parks. Waterperry Wood. Fairly common, but easily mistaken for the next species. On *Betula*.\*
- N. argentipedella** Zell. Found wherever there is birch, and often abundant in the larval stage. On *Betula alba*.\*
- N. basalella** Herr.-Schäff. Tubney Wood. Cothill, one mine in 1922. Bagley Wood. Wytham Woods. Between Kirtlington and Weston-on-the-Green, mines found in 1928. Rather common in the larval stage. On *Fagus sylvatica*.\*
- N. turicella** Herr.-Schäff. Common wherever its food-plant is found. On *Fagus sylvatica*.\*
- N. malella** Staint. Cothill. Bagley Wood. Wytham Woods. Weston-on-the-Green, 1928. Shotover. Waterperry Wood. Shabbington Wood. Fairly common in the larval stage. On *Pyrus Malus*\* (wild only).
- N. atricollis** Staint. Cothill. Bagley Wood. South Hinksey. Wytham Woods. Shotover. Prattle Wood, 1928. Hell Coppice. Shabbington Wood. Locally plentiful in the larval stage. On *Crataegus*\* and *Pyrus Malus*\*\*
- N. angulifasciella** Staint. Cothill. Bagley Wood. Wytham Hill. Oxford: in gardens and in the University Parks. Prattle Wood, 1928. Holton Pits. Forest Hill: in Polecat End Lane. Waterperry Wood. Heli Coppice. In woods and gardens, often abundant. On *Rosa canina*\* and cultivated species.\*
- N. rubivora** Wocke. Cothill. Bagley Wood. Wytham Woods. Between Binsey and Godstow. Yarnton railway embankment. Forest Hill: in Polecat End Lane. Hell Coppice. The larvae abound wherever the food-plant grows freely. On *Rubus caesius*.\*
- N. arcuatella** Herr.-Schäff. Tubney Wood, mines found. Bagley Wood, larvae plentiful but very local. Wytham Hill, mines found in 1928. On *Fragaria vesca*.\*
- N. salicis** Staint. Common. On *Salix cinerea*\*, *S. Caprea*\* and perhaps other species.



- N. vimineticola** Frey. Cothill, 1928. Enslow, one mine in 1924. Oxford: larvae plentiful in the University Parks. Marston Ferry. Near Iffley, mines found in 1924 (A.H.H.). Weston-on-the-Green, mines found in 1928. Otmoor, mines found in 1928. On *Salix fragilis*\* and *S. triandra*\* (Marston Ferry, and near Iffley). The genitalia prove *N. vimineticola* to be distinct from *N. salicis* (teste W. Petersen).
- N. floslactella** Haw. Common. On *Corylus Avellana*\*; also on *Carpinus Betulus*\*\* in Wytham Woods and the University Parks.
- N. lapponica** Wocke. Tubney Wood. Cothill. Bagley Wood. Wytham Woods. Oxford: in the University Parks. Waterperry Wood. Hell Coppice. Shabbington Wood. Larvae or empty mines have been noticed in many spots, but occur sparingly except at Cothill. On *Betula*\*\*.
- N. confusella** Wals. Cothill. Boar's Hill: above Chilswell. Bagley Wood. Wytham Woods. Oxford: in the University Parks. Waterperry Wood. Identified chiefly from the conspicuous empty mines, which are not scarce. On *Betula*\*\*.
- N. septembrella** Staint. General; larvae and cocoons often found in abundance. On *Hypericum perforatum*\*.
- N. catharticella** Staint. Cothill. Boar's Hill. South Hinksey: in the Happy Valley. Between Binsey and Godstow. Oxford: in the University Parks. Marston Ferry. Holton Pits. Hell Coppice. Rather common. On *Rhamnus catharticus*\*.
- N. intimella** Zell. Tubney Warren. Cothill. Boar's Hill, one in 1920. Wytham Woods, one in 1915. Yarnton, 1928. Waterperry Wood. Hell Coppice. The larvae are locally common. On *Salix cinerea*\*.
- N. quinquella** Bed. Tubney Wood. Hitch Copse. Local, but found abundantly in the larval stage. On *Quercus Robur*\*.
- N. trimaculella** Haw. Bagley Wood. Kennington. Wytham. Oxford. Shotover. Otmoor, 1928. Rather common. On black poplar,\* *Populus Tacamahacca*\*\* and abundant in the University Parks on *P. italica*\*.
- N. assimilella** Zell. Cothill, on *Populus canescens*\*. Bagley Wood, on *P. tremula*\*\* Waterperry Wood, on *P. tremula*\*\* Very local, but the larvae are not scarce. Cf. Ent. Mo. Mag., LXIV, 1928, p. 219.

- N. subbimaculella** Haw. General and abundant. On *Quercus Robur*.\*
- N. albifasciella** Hein. Tubney Wood, bred from larvae in 1928; on the strength of these specimens it was placed for the first time on the British list. The mines had been distinguished from those of *N. subbimaculella* a few years earlier. In the autumn of 1928 the larvae were found also at Cothill, and in Bagley, Wytham and Prattle Woods. On *Quercus Robur*.\* Cf. Ent. Mo. Mag., LXIV, 1928, p. 248.
- N. argyropeza** Zell. Bagley Wood. Prattle Wood, 1928. Waterperry Wood. Shabbington Wood, one in 1922. Locally plentiful. On *Populus tremula*.\*
- N. pulverosella** Staint. Cothill. Bagley Wood. Wytham Woods. Weston-on-the-Green, 1928. Shotover. Waterperry Wood. Shabbington Wood. The larvae and empty mines are found rather commonly, chiefly in woods. On *Pyrus Malus*\* (wild only).
- Trifurcula atrifrontella** Staint. Tubney Wood, two examples captured on September 10th, 1920.
- T. immundella** Zell. Foxcombe Hill, in gardens. Cumnor Hurst, fairly common. Among *Cytisus scoparius*.
- Scoliaula quadrimaculella** Boh. Cothill, several examples captured in 1922 and 1925. Among *Alnus glutinosa*.

## MICROPTERYGINA.

### HEPIALIDAE.

- Hepialus hectus** Linn. Common.
- H. lupulinus** Linn. Very common.
- H. vellela** Hübn. Bagley Wood, one captured in 1924 (O.W.R.).† Recorded from Woodstock by C. Rippon in the Oxfordshire list.
- H. sylvinus** Linn. Hen Wood, 1902 (N.V.S. Diary).† Bagley Wood, 1900 (A.S. and N.V.S. diaries).† North Oxford, occasional. Headington Hill, two in 1918 (A.W.P.-C.). Marston, 1900 (N.V.S.). Oxford district, four specimens dated 1896-1900 (W.G.P.-S.).
- H. humuli** Linn. Common.

### MICROPTERYCIDAE.

- Eriocrania semipurpurella** Steph. Cothill. Boar's Hill: above Chilswell, plentiful. Among birch.

- E. Sangi** Wood. Cothill (?). Boar's Hill : above Chilswell. Bagley Wood, two in 1899 (W.G.P.-S.) (?). Among birch. It is possible that more than one species is included under this name; but undoubted examples of *Sangi* have been captured at Boar's Hill.
- E. purpurella** Haw. Cothill. Boar's Hill. Bladon Heath, 1915. Common among birch.
- E. salopiella** Staint. Boar's Hill : above Chilswell, one example captured on April 22nd, 1913. Among birch.
- E. sparmannella** Bosc. Cothill, larvae found in 1928. Boar's Hill : above Chilswell. Bagley Wood, 1899 (W.G.P.-S.); larvae found in 1928. On *Betula alba*.\*\*
- Mnemonica unimaculella** Zell. Cothill, one example captured on April 21st, 1924. Among birch.
- M. subpurpurella** Haw. Common. On *Quercus Robur*.\*\*
- Micropteryx thunbergella** Fabr. Cothill, 1923. Bagley Wood, often plentiful. South Hinksey : one in the old Rifle Range, 1912. Wytham Woods, 1897 and 1900 (A.S.).
- M. mansuetella** Zell. Tubney Wood, one in 1920. Boar's Hill : Powderhill Copse. Bagley Wood, locally plentiful. South Hinksey, one in 1915. Waterperry Wood, 1923. Hell Coppice.
- M. aruncella** Scop. Cothill. Boar's Hill. Bagley Wood. Yarnton. Wolvercote. Shotover, 1899 (A.H.H.), 1922 (O.W.R.). † Holton Pits. Waterperry Wood. Rather common.
- M. calthella** Linn. General and abundant, in woods and copses. On this species, *M. thunbergella* and *M. aruncella*, see O. W. Richards in Ent. Mo. Mag., LIX, 1924, p. 31.

## APPENDIX

The undermentioned insects, recorded as occurring in the Oxford district, have not been admitted into the foregoing list. The reasons for their exclusion, final in some cases, purely temporary (we may hope) in others, are briefly stated in each instance. Only published records have been taken into account.

## PYRALIDINA.

## PHYCITIDAE.

**Homoeosoma cretacella** Rössl. Recorded as *H. senecionis* Vaughan in the Berkshire List (*teste* A.S.). An error of identification; the specimens are *H. binaevella* Hübn.

## PYRAUSTIDAE.

**Diasemia litterata** Scop. 1901 list (*teste* F. W. Lambert); cf. Nat. Hist. Ox., p. 231. This record requires confirmation; no specimen or other evidence supporting it has been traced.

**Pyrausta ostrinalis** Hübn. (Regarded by Mr. Meyrick as conspecific with *P. purpuralis* Linn.). Mentioned in Stainton's Manual, II, p. 138, as occurring at Oxford. The record is improbable; Stainton, or his informant, may have intended it to refer to the chalk downs of Oxfordshire or Berkshire, where *ostrinalis* is common.

**P. flavalis** Schiff. Stainton's Manual, II, p. 149. A still more improbable record than the preceding; possibly the chalk downs were intended.

**Scoparia lineola** Curt. 1901 list. An error of identification; probably for *S. angustea* Steph.

**S. basistrigalis** Knaggs. Nat. Hist. Ox., p. 241. An examination of the genitalia proved the specimens in question to be *S. ambigalis* Treits. (*teste* O.W.R.).

**S. atomalis** Doubl. 1901 list. An error of identification; presumably for *S. ambigalis* Treits., of which *atomalis* appears to be a moorland form.

## TORTRICINA.

## TORTRICIDAE.

**Tortrix rusticana** Treits. Recorded as *Clepsis rusticana* in the Berkshire list (*teste* W.G.P.-S.). An error of identification; the specimens are *Capua favillaceana* Hübn.

**Cnephasia abrasana** Dup. Recorded as *Sciaphila abrasana* in Ent. Mo. Mag., L, 1914, p. 241. The specimens in question, captured at North Hinksey, are a dark unicolorous form of *C. pascuana* Hübn.

**C. conspersana** Dougl. Recorded as *Sciaphila conspersana* in Ent. Mo. Mag., L, 1914, p. 241. An examination of the genitalia has proved the specimen in question to be *C. chrysanthemana* Dup. (teste O.W.R.).

**Peronea variegana** Schiff. ab. **albana** Westw. Recorded from Glympton, with the generic name *Acalla*, in Ent. Mo. Mag., LXII, 1926, p. 29. As Mr. W. G. Sheldon has pointed out to me, the form in question is not *albana*, and at present lacks a name.

### EUCOSMIDAE.

**Polychrosis fuligana** Haw. Recorded as *Sericoris fuligana* in the Berkshire list (teste A.S., N.V.S., W.G.P.-S.). Undoubtedly an error for *Endothenia carbonana* Barr. (then incorrectly known as *fuligana* Hübn.).

**Endothenia oblongana** Haw. Recorded as *Penthina marginana* Haw. in the Ent. Mo. Mag., L, 1914, p. 241. The specimens in question are *E. sellana* Hübn.

**E. fuligana** Hübn. Ent. Mo. Mag., L, 1914, p. 241 (*Penthina fuligana*), and LVII, 1921, p. 17 (*Olethreutes fuligana*); also Nat. Hist. Ox., p. 236 (do.). The records refer to the *Ajuga*-feeding species, *E. carbonana* Doubl.

## TINEINA.

### GELECHIADAE.

**Bryotropha decrepidella** Herr.-Schäff. var. **lutescens** Const. Nat. Hist. Ox., p. 238. The specimens in question are regarded by Mr. Meyrick as a pale form of *Gelechia terrella* Hübn.

**Celechia cuneatella** Dougl. Berkshire list (teste W.G.P.-S.). An error of identification; specimens standing under this name in the collection of A. Sidgwick are *Chelaria gibbosella* Zell.

**C. muscosella** Zell. 1901 list and Berkshire list (teste N.V.S.). An error of identification; the specimens in question are *Anacamptis populella* Clerck.

### COSMOPTERYCIDAE.

**Chrysoclista bimaculella** Haw. 1901 list. The specimen on which the record is based has not been traced, and confirmation is necessary.

**DECOPHORIDAE.**

- Depressaria pallorella** Zell. 1901 list (*teste* A.S.). An error of identification; the specimens in question are *D. litur-ella* Schiff.
- D. capreolella** Zell. 1901 list (*teste* A.S.). An error of identification; the single specimen is probably a small and worn example of *D. applana* Fabr.

**ELACHISTIDAE.**

- Elachista gangabella** (Fisch. v. Rösl.) Zell. 1901 list (*teste* N.V.S.). An error of identification; a specimen standing under this name in the collection of A. Sidgwick is *Stomopteryx vorticella* Scop.
- E. adscitella** Staint. Berkshire list (*teste* A.S.). The specimens in question are *E. megerlella* Staint., with which Mr. Meyrick considers *adscitella* to be conspecific.
- E. obliquella** (Edl.) Staint. Berkshire list (*teste* N.V.S.). A specimen standing under this name in the Pogson-Smith collection is merely a worn *E. megerlella*. *Obliquella* is in any case a doubtful species.

**HYPONOMEUTIDAE.**

- Hyponomeuta evonymella** Linn. Recorded as *H. euonymellus* Linn. in the 1901 list and the Berkshire list. Evidently an error for *H. cognatella* Hübn.

**COLEOPHORIDAE.**

- Coleophora ochrea** Haw. Nat. Hist. Tin., V, p. 112; cf. Ent. Mo. Mag., LXIII, 1927, p. 72. Stainton's mention of 'Oxford' as a locality for this species may possibly refer to the chalk downs of Oxfordshire or Berkshire; cf. the remarks made above on *Pyrausta ostrinalis* and *P. flavalis*.

**GRACILARIADAE.**

- Lithocolletis pyrivorella** Banks. Ent. Mo. Mag., LXI, 1925, p. 194. The specimens in question are all referred by Mr. Meyrick to *L. concomitella* Banks.
- L. amyotella** Dup. 1901 list (*teste* A.S.). Undoubtedly an error of identification, although the specimen on which the record was based cannot be traced.
- Phyllocnistis sorhageniella** Lüders. Recorded as *P. tremul-ella* Zell. in Ent. Mo. Mag., LXI, 1925, p. 88. An error of identification, based on examples of the summer brood of *P. suffusella* Zell.

**TINEIDAE.**

- Monopis imella** Hübn. Recorded as *Tinea imella* in the 1901 list (*teste* A.S.). An error of identification; two speci-

mens under this name in the collection of A. Sidgwick are *M. rusticella* Hübn.

**Ochsenheimeria bisontella** Zell. Nat. Hist. Ox., p. 237. An error of identification; the specimen is *O. birdella* Curt.

## Census of Species

Phylum.	Family.	Species in Britain.	Total.	Species in the Oxford district.	Total.
PYRALIDINA.	PHYCITIDAE .....	49		18	
	GALLERIIDAE .....	5		3	
	CRAMBIDAE .....	33		13	
	PYRAUSTIDAE .....	68		32	
	PYRALIDIDAE .....	8		6	
	PTEROPHORIDAE .....	34		15	
			197		87
TORTRICINA.	PHALONIADAE .....	47		26	
	TORTRICIDAE .....	83		50	
	EUCOSMIDAE .....	208		129	
			338		205
TINEINA.	GELECHIADAE .....	137		65	
	COSMOPTERYGIDAE ...	27		18	
	BLASTOBASIDAE .....	2		0	
	OECOPHORIDAE .....	75		42	
	ORNEODIDAE .....	1		1	
	AEGERIADAE .....	15		10	
	HELIOZELIDAE .....	6		4	
	HELIODINIDAE .....	6		3	
	GLYPHIPTERYGIDAE ..	12		7	
	ELACHISTIDAE .....	38		28	
	DOUGLASIADAE .....	1		0	
	SCYTHRIDAE .....	9		3	
	HYPONOMEUTIDAE ...	54		33	
	COLEOPHORIDAE .....	82		42	
	GRACILARIADAE .....	80		59	
	EPERMENTIADAE .....	9		3	
	PLUTELLIDAE .....	25		15	
	LYONETIADAE .....	33		21	
	TINEIDAE .....	50		25	
LAMPRONIADAE .....	11		9		
ADELIDAE .....	14		10		
			687		398
NEPTICULINA.	NEPTICULIDAE .....	77		56	
			77		56
MICROPTERYGINA.	HEPIALIDAE .....	5		5	
	MICROPTERYGIDAE ...	14		11	
			19		16
			1318		762

The above total of 1,318 British species includes four which have been added since the publication of Mr. Meyrick's Revised Handbook, and eleven which that work does not recognise as being specifically distinct. The total for the Oxford district amounts to nearly 58 per cent. of the whole. In it are included a few species (e.g. *Salebria fusca*, *Gelechia umbrosella*, *Dichomeris marginella*, *Chirocampa lambda*, *Argyresthia conjugella*, *Lithocolletis sorbi* and *L. strigulatella*) whose presence is probably or certainly due to artificial introduction; but any attempt to draw a clear line of demarcation between indigenous and introduced Micro-lepidoptera would be futile. Two species (*Crambus chrysonuchellus* and *Tortrix paleana*) have only been found a short distance outside the ten-mile radius, and the occurrence within that radius of certain others (*Cnephasia osseana*, *Schiffermuelleria augustella*, *Epigrapha steinkellneriana*, *Lampronia capitella* and *Nepticula dulcella*) requires confirmation. A few undescribed species, known to occur in the Oxford district, but not yet adequately studied, have been omitted from the census.

