



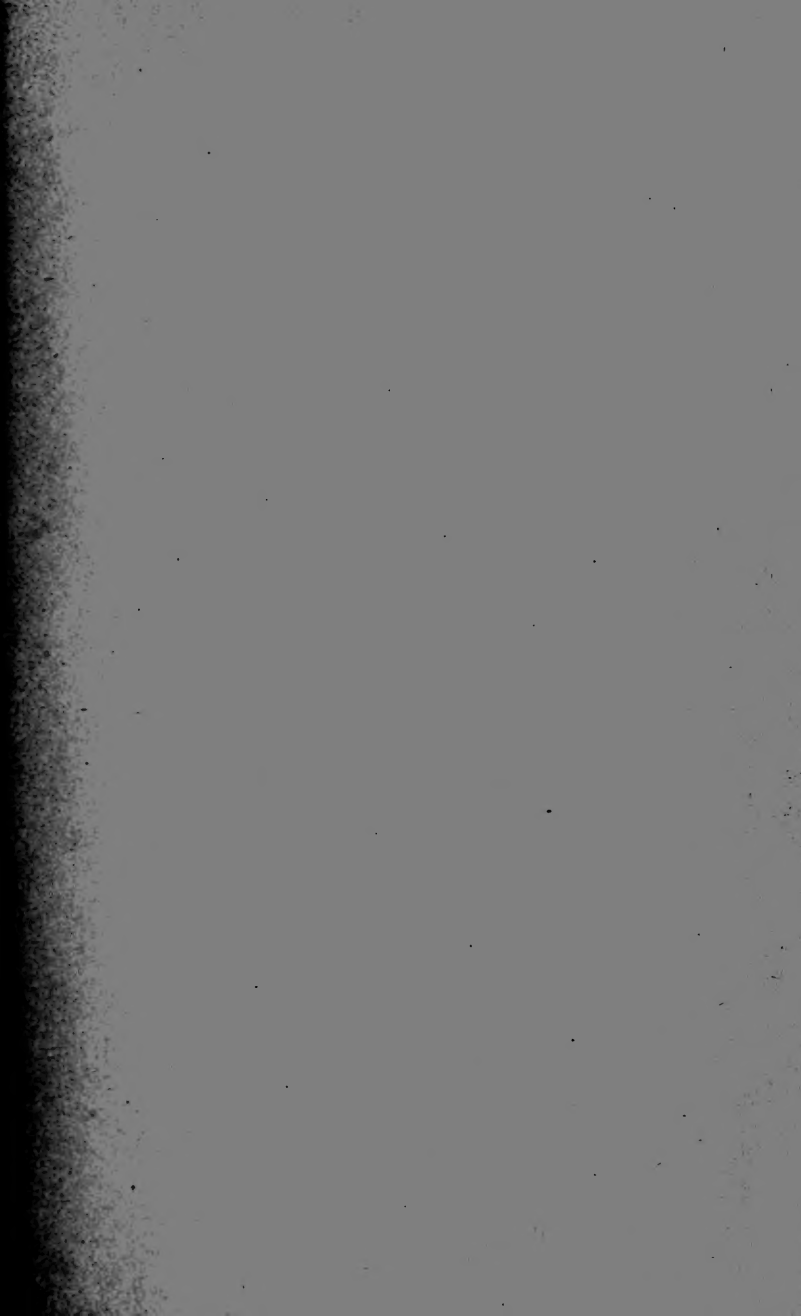
REPORT
BURY
NAT. HIST.
SOCIETY

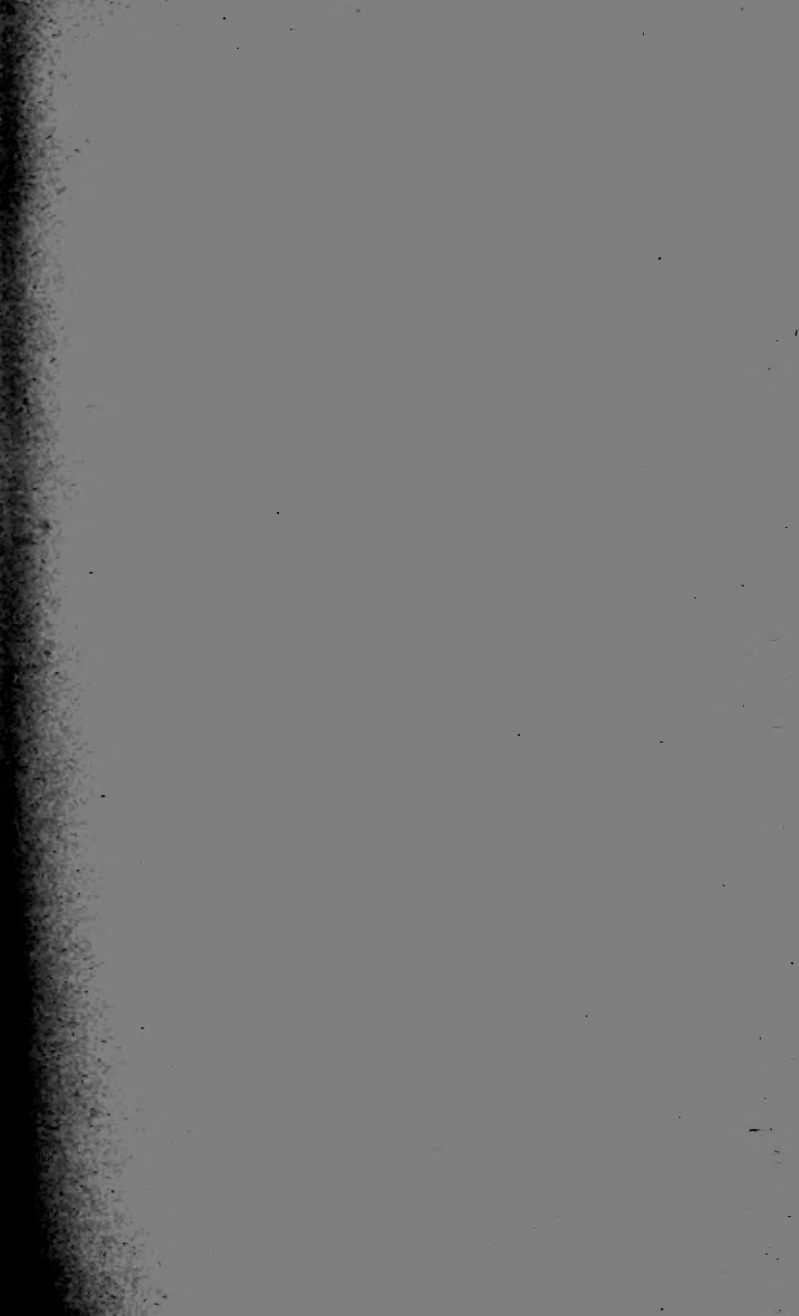
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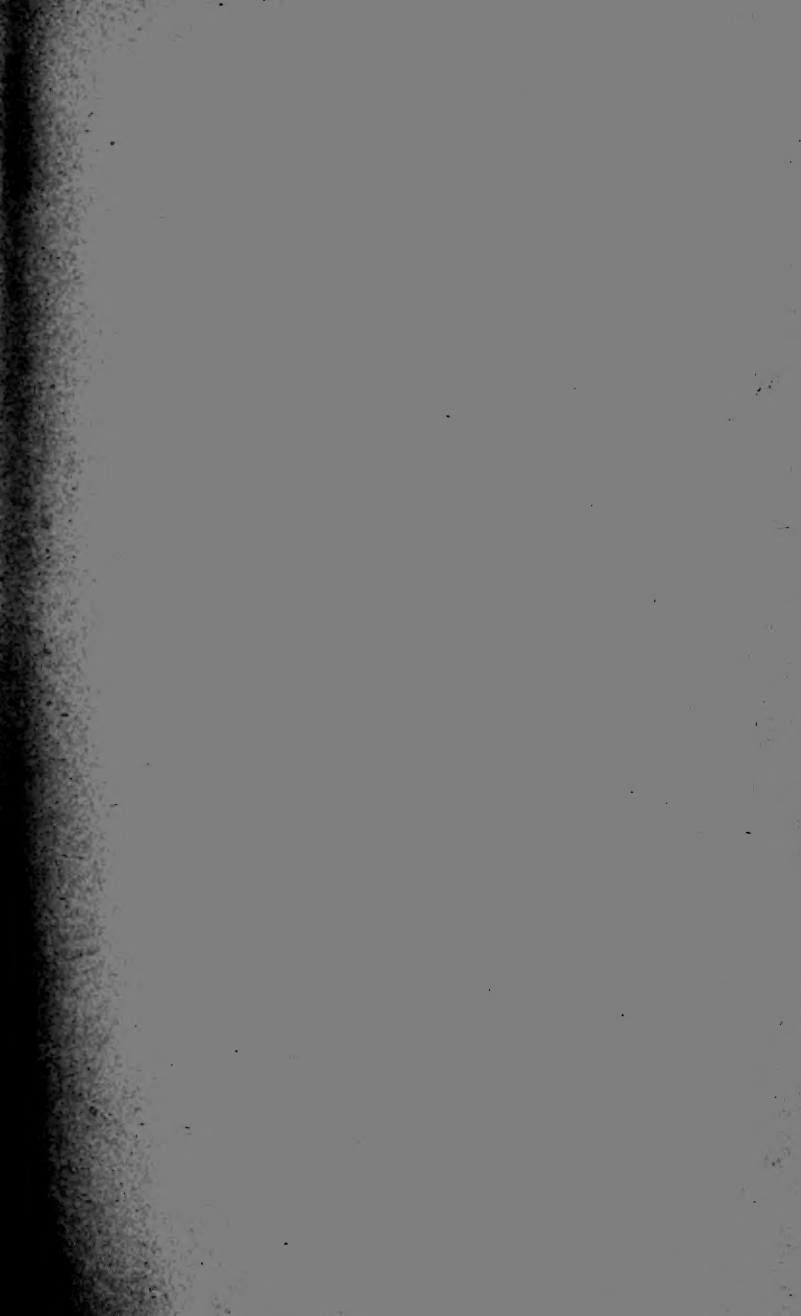
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1872















25 OCT. 1900

BURY NATURAL HISTORY SOCIETY,

FOUNDED JANUARY, 1868.

REPORT

FROM JANUARY, 1868, TO DECEMBER, 1871, INCLUSIVE,

WITH THE

RULES, LIST OF MEMBERS, &c.,

INCLUDING

LIST OF THE PLANTS,

INSECTS, BIRDS, AND ANIMALS OF THE DISTRICT,

AUTHENTICATED BY MEMBERS OF THE SOCIETY.



PUBLISHED BY THE BURY NATURAL HISTORY SOCIETY.

BURY:

JOHN HEAP, PRINTER AND STATIONER, "TIMES" OFFICE, UNION SQUARE.

1872.

PRICE ONE SHILLING.

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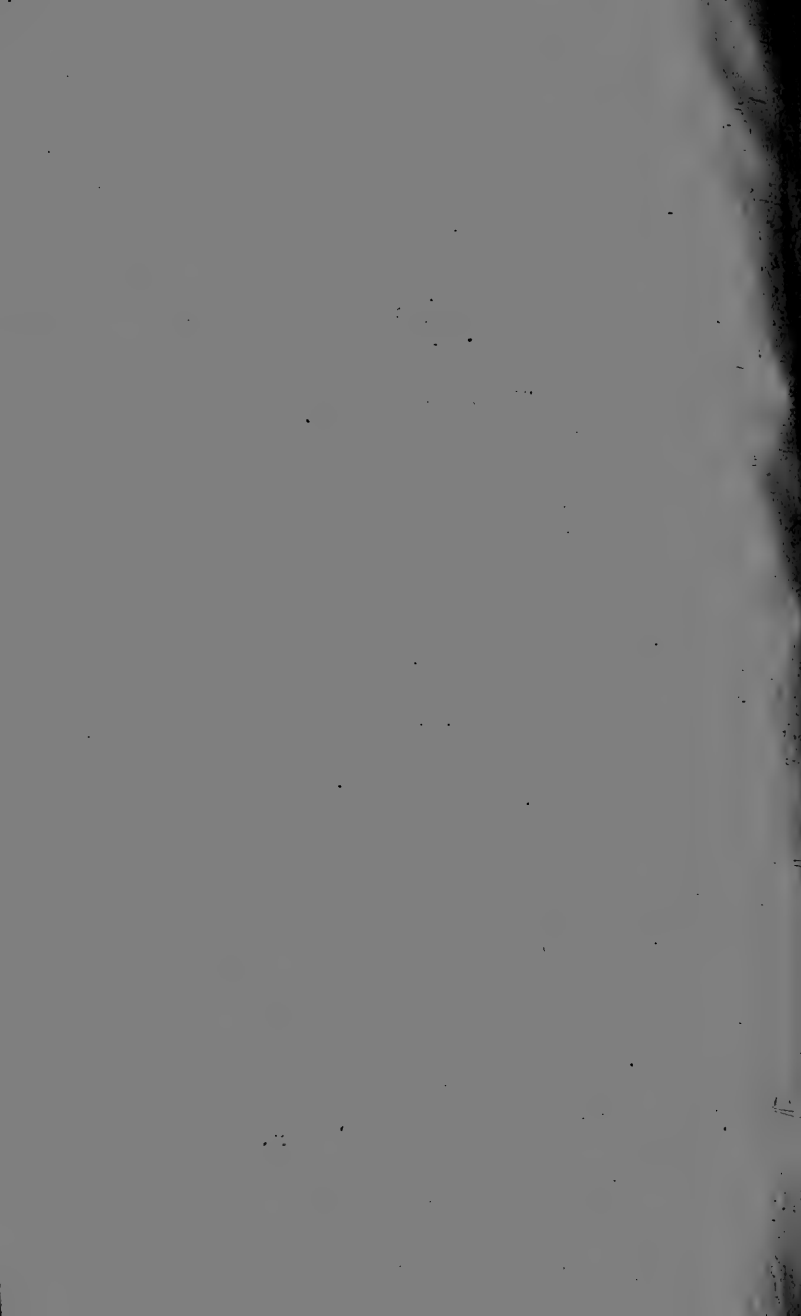
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LIST OF OFFICERS AND MEMBERS FOR 1872.

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ROBERT KAY, DAVID WORMALD.

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SAMUEL WILD.

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ALCOCK JOSEPH
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FAIRBROTHER ROBERT
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KAY ROBERT
KAY SAM.
LONSDALE EDWARD
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NUTTALL THOMAS
PATRICK WILLIAM
PIXTON JAMES
RICHARDSON JOSEPH
SHEPHERD JOSEPH
SIMPKIN EDWARD
SMITH JOHN THOMAS
TOOTILL ROBERT
TURNER THOMAS D.
WILD SAMUEL
WORMALD D. A.
WOOD JOSEPH.



CATALOGUE OF BOOKS

IN THE LIBRARY.

GEOLOGY.

- No.
1. Geology, Introductory Text Book of : Page.
2. Geological Examiner : Page.
3. Geology for General Readers : Page.

BOTANY.

4. Elementary Botany : Oliver.
5. Structural Botany : Cook.
6. Notes on the Food of Plants : Grundy.
7. Vegetable Kingdom : Lindley.
8. Handbook of British Flora : Bentham.
9. British Ferns : Moore.
10. Manchester Flora : Grindon.
11. Profitable Plants : Archer.

ENTOMOLOGY.

12. British Butterflies : Newman.
13. British Moths : Newman.

MICROSCOPY.

14. The Microscope and its Revelations : Carpenter.
15. Half-Hours with the Microscope : Lankester.
16. Common Objects of the Microscope : Wood.

PHYSIOLOGY.

17. Elementary Physiology : Huxley.
18. Questions on Physiology : Alcock.
19. Comparative Anatomy : Carns.

MISCELLANEOUS.

- No.
 20. Chemistry of Common Life. Vol. I. : Johnston.
 21. " Vol. II.
 22. Uses of Animals to Man : Lankester.
 23. Handbook to the Marine Aquarium : Gosse.
 24. Common Objects of the Country : Wood.
 25. Common Objects of the Sea-Shore : Wood.
 26. Summer Rambles in Lancashire, Yorkshire, Cheshire, and
 Derbyshire : Grindon.
 27. Land and Fresh Water Shells : Dyson.
 28. Hardwick's Science Gossip. 1865.
 29. " 1866.
 30. " 1867.
 31. " 1868.
 32. " 1869.
 33. " 1870.
 34. " 1871.
 35. Nature. Vol. I.
 36. " Vol. II.
 37. " Vol. III.
 38. Intellectual Observer. Vol. I.
 39. " Vol. II.
 40. " Vol. III.
 41. " Vol. IV.
 42. Science Lectures for the People. 1st series : Roscoe and others.
 43. " 2nd series.
 44. Selected Essays : Huxley.
 45. Foraminifera : Alcock. (From transactions of Manchester
 Literary and Philosophical Society.)
 46. Report of Lower Mosley Street Schools Natural History Society.
 1870.
 47. Transactions Norfolk and Norwich Naturalists' Society, 1870-71.

SAMUEL WILD.

RULES.

I.—The meetings of the members shall be held on the first and third Tuesday evening of each month at eight o'clock.

II.—The subscription shall be 6d. per month.

III.—Any member neglecting to pay his subscription for six months shall cease to be a member.

IV.—Members may propose at any of the ordinary meetings such books as they think it is desirable should be added to the Library; any member so proposing a book, to state its price and give all the information he can respecting it.

V.—Members shall return the Society's books at the next ordinary meeting after the expiration of the time allowed for reading, or failing to do so, shall pay a fine of 1d. a volume: the time allowed for reading cannot be extended if the book is wanted by any other member.

VI.—Any member damaging or losing any book, or other property of the Society, shall make good or replace the same.

VII.—On the first Tuesday in December of each year there shall be a meeting to elect officers, and arrange proceedings for the ensuing year; at such meeting the Secretary shall read a report of the proceedings of the past year, and the treasurer shall produce the accounts.

VIII.—The Society shall not be dissolved without the consent of three-fourths of the members.

IX.—All business connected with the Society (with the exception of that provided for by rule VIII.) shall be decided by a majority of the members present at the ordinary meetings.

X.—Any person wishing to become a member of the Society may be proposed at any ordinary meeting, and shall be balloted for at the next meeting of the Society; a majority of votes to elect.

XI.—The officers of the Society shall be President, Vice-Presidents, Treasurer, Secretary, and Librarian and Curator.

XII.—No addition shall be made to, nor alteration in the foregoing rules, nor shall any bye-law be made, excepting at a special meeting of the Society, called by circular addressed to each member, one month previously, stating the proposed addition, alteration, or bye-law.

P R E F A C E .

THE BURY NATURAL HISTORY SOCIETY having now been in existence four years, has resolved to publish this report for the use of its members and others to whom it may be of interest.

We have frequently felt the want of a list, showing our local Flora and Fauna, for reference. Much information has been brought before our Society, the utility of which to us will be greatly enhanced by this publication, and we believe that it may also prove useful to many who are not on our list of members.

There are several advantages to be derived from such a record however imperfect it may be, and it has therefore been decided not to wait until something like completeness could be attained, but print the information we have now.

Among the advantages which the existence of such a record offers are:—instruction to beginners as to where particular specimens may be found or looked for with a probability of success; an easy book of reference, to find the scientific name of a specimen, together with its classification, the English name being known; an addition (though slight) to the general knowledge of the Natural History of the Kingdom, and, above all (so far as our Society is concerned), an indication of the work that still remains to be done, by means of a detailed statement of the facts that we have so far ascertained or verified.

The filling up of many wide gaps will be facilitated by a reference to these lists, as they show what information we are short of.

It will be seen at once that, in several branches of Natural History, a great deal remains to be done. We present no geological report; we have recorded nothing of the Hepaticæ, Mosses, and Fungi, nor of microscopic animalcules and plants; the Mollusca are all but untouched, and the very interesting study of objects collected by pondredging seems to have found no favour with us. It would be easy to point out many such deficiencies, but the work of a general Natural History Society being of such vast extent as to be practically without limit, a young Society such as ours may be expected to touch but lightly for a while on the more difficult and abstruse branches of its study.

Still we exclude no section of Natural History, taking the term in its widest sense.

This was our programme at the foundation of the Society, and it has received the sanction of the numerous members who have since joined it.

The prominence of any one branch of inquiry beyond another indicates the popularity of that division, compared with the others, amongst our members. The greatest number of our hard workers

are without doubt Entomologists, and several of our members have excellent collections, especially of the Lepidoptera. It is no wonder that this is the case, when we consider not only the number and beauty of the various species, the excitement of the chase in capturing them, the readiness with which their wonderful development from the egg to the perfect insect may be watched at home in all its stages, but also the proximity of Chat Moss, Carrington Moss, and other places where they are to be found in great abundance, so that a large and interesting collection may be made in a short time. The making of a collection of specimens is almost, if not absolutely, essential to the successful study of Natural History, in any of its numerous divisions and sub-divisions. To examine at one time one specimen, and at another a different one, no matter how exact the notes which may be made, does not convey to and impress upon the mind anything like the same amount of information as may be gained by placing individual specimens side by side, in a collection. Beyond this there are those peculiar charms of memory—known only to collectors—connected with the history of each particular specimen; the time, the place, the companions, and other circumstances connected with it, are vividly recalled, and always with pleasure. Several members of our Society have taken great interest in the collection and preservation of birds and in the study of Ornithology. At the exhibitions that have been held by the Society, it has been remarked that there has been a great preponderance of Entomological and Ornithological specimens. These, and collections of birds' eggs, have been much admired for their excellence in every respect. Botanical specimens have not made so great a show, chiefly because dried specimens of plants occupy a great deal of space, are easily damaged, and are found not to be of great general interest. The botanical division of Natural History has, for this reason, been chiefly represented at our exhibitions by specimens of foreign vegetable productions, and illustrations of the uses to which they are applied.

These exhibitions have pretty fairly represented the chief divisions of Natural History that our Society has so far taken up.

Many of our members are provided with microscopes, and one—the property of the Society—is kept in the meeting room, for use whenever required.

The following report of our proceedings will show that numerous subjects, besides those already mentioned, have been brought before us.

The lists which we publish do not represent the number of specimens that have been submitted to our consideration. Numerous beasts, birds, fishes, reptiles, insects, and plants have been shown, which have been obtained from a distance. Deformities, both animal and vegetable, and cultivated garden plants have also been exhibited, and several members have at different times made excursions to

various parts of the country, in almost every direction, have reported what they have observed, and exhibited specimens that they have collected.

The majority of these excursions have been to the seaside, and chiefly to our western coast, including Aberystwith, Anglesea, Llandudno, Rhyl, Hilbre Island and the Hundred of Wirrall, Southport, Blackpool, Fleetwood, Ulverstone, Grange, Whitbarrow, and the Isle of Man. We have also had a few reports from the eastern coast, and several from members who have travelled inland.

We have determined to confine our lists to a radius of 20 miles from Bury, and only in a few instances has this rule been overstepped, when a rare specimen has been found, just outside the limit.

The compilation of the different lists has been entrusted to the members of the society whose names are attached.

Report of the Hury Natural History Society

From its commencement to December, 1871:

1868.

The first meeting of the Society was held January 15th, 1868, with a roll of 18 members. Six new members joined the Society during the year, but through leaving the town, and other causes, six retired, leaving the number as at first.

During the year 46 meetings were held, and 20 papers read on the following subjects:—

- Twelve lectures on “Structural and Economic Botany.” “The Fresh Water Fishes of England.” “The Natural Orders Cruciferae, Orobanchaceae, Scrophulariaceae, and Labiatae.” “The Bark-Cloth of the South Sea Islands,” illustrated by specimens collected in three voyages of Captain Cook, and lent by Mr. Hampden G. Glasspoole, of Ormsby St. Michael. By Mr. R. H. Alcock.
- “A Visit to a Bone Cave in Somersetshire,” by the Rev. B. Herford.
- “Fresh Water and Land Shells of England,” by Mr. S. H. Alcock.
- “Echinodermata,” by Dr. Alcock.
- “A Visit to North Wales,” by Mr. T. Holt.

The rest of the meetings were devoted to the ordinary business of the Society. An excursion was made to Simpson Clough.

At the commencement of the year the president offered a prize of £5 to the member who collected and produced at the end of the year the best collection of specimens of British plants. The prize was awarded to Mr. James Pixton, who produced about 160 specimens.

1869.

The Society commenced the year with 18 members, and ended it with 42, being an increase of 24. There has been a decrease in the number of lectures and papers, there being 9 this year against 20 in 1868. The following is a list of the subjects:—

- “The tribe Mammalia,” by Dr. Alcock.
- “Geology,” by Mr. D. Wormald.
- “The teachings of Science on the origin of man,” by Mr. J. Plant, F.G.S.
- “Birds, their nests and eggs,” by Mr. T. D. Turner.
- “Spring Flowers,” by Rev. Jos. Freeston.
- “The anatomy of Birds,” by Mr. Norman Moore, B.A.
- “The nervous system and nervous force,” by Mr. J. K. Wright, B.A.
- “Edible fruits,” by Mr. R. H. Alcock.

The remaining 37 meetings were occupied with the ordinary business of the Society. Two excursions were made in the course of the year, one to New Mills, in Derbyshire, on which occasion the members were entertained by Mr. S. H. Alcock; the other was to Ringley and its neighbourhood.

During the year a library was formed of 26 volumes. The Society also joined the Lancashire, Yorkshire, and Cheshire Amalgamated Natural History Society, which holds its meetings quarterly in the different towns connected with it in rotation.

1870.

This year 42 members were on the books at its commencement, and at its conclusion 45, being an increase of 3. Forty-nine meetings were held, with an average attendance of 10 members. At three of these the following papers were read:—

“The natural history of water,” by Mr. R. H. Alcock.

“The physical geography and natural history of Kinder, in Derbyshire,” read by Dr. Bott, contributed by Mr. R. H. Alcock.

“A second lecture on Butterflies and Moths,” by the Rev. J. T. Whitehead.

Thirty-eight evenings were occupied by the business of ordinary meetings, and the remaining eight by microscopical investigation, under the presidency of Mr. Samuel Horrocks and Dr. Bott.

Excursions were made to the following places:—Mere Clough, Simpson Clough, Hudcar (for the purpose of dragging a reservoir), Springside, Deeply Vale and Grant's Tower, and the cloughs near Ringley Road station.

In the course of the year an additional cabinet to hold the Society's specimens was obtained, at a cost of £5 10s., which was defrayed by the subscriptions of the members and a few friends. The Society is indebted to several of its members and friends for gifts of specimens this year. The library has increased from 26 to 31 volumes, and the following periodicals are now taken in;—“Nature,” “Hardwick's Science Gossip,” “Newman's Entomology.”

1871.

This year there has been a decrease of five in the number of members, leaving 40 upon the roll. Forty-nine meetings have been held. The largest attendance at an ordinary meeting has been 18, the smallest 3. On an average there has been an attendance of 9 at each meeting, against 10 last year. Twenty-nine of the 41 members have made an average attendance of 16, the remaining 12 being honorary members. The Society having come to the conclusion that weekly meetings are too frequent, has decided to hold them in future twice a month, viz., on the first and third Tuesdays. Lectures were delivered on—

“Foraminifera,” by Dr. Alcock.

“The Folk-lore of Natural History,” by Mr. Robert Holland.

“The Natural History of organised beings,” by the Rev. J. Ellis.

The following papers, followed by discussions, were read by members of the Society:—

“Insects and their eggs.”—Mr. Robert Kay.

“The Microscope.”—Mr. Samuel Horrocks.

“Spiders.”—Mr. Dennis Jackson.

“Larvæ.”—Mr. W. Hall.

“Starch.”—Mr. R. H. Alcock.

“The Eel.”—Dr. Bott.

“A visit to Aberystwith.”—Mr. R. H. Alcock.

Four evenings were spent in microscopical study, and the remaining 34 were ordinary meetings. Excursions have also been made to places of interest in the neighbourhood, and the Society has been favoured on one occasion by the company and assistance of Mr. Leo H. Grindon, during a walk to Deeply Vale, Grant's Tower, and neighbourhood.

The Library now contains 47 works, two or three being small pamphlets. It has been judged advisable to join the Ray Society, that we may have the advantage of its valuable publications, but we have not yet received any of them.

In December, 1870, an exhibition was held in connection with a meeting in Bury of the Amalgamated Society of Lancashire, Yorkshire, and Cheshire, which was attended by 1037 persons. Certain restrictions on the arrangements, arising from the rules of the Amalgamated Society, caused a loss of £2 10s. 3½d.

The report of the treasurer shows a balance in favour of the Society at the end of the year of £3 19s. 6d.

THOS. CHARLES.

LIST OF PLANTS

Noticed by the Bury Natural History Society within fifteen miles of Bury.

IN compiling this list, I have gone carefully through the minutes of our Society for the last four years, and have also examined the competing collections of botanical specimens for a prize, a few years back. I have supplemented the information derived from these sources only by the addition of such plants as I have noticed myself and can vouch for. Excepting in the case of very common plants which have been brought from time to time to our meetings either in the infancy of the Society, or for purposes of illustration, or anatomical study, or where a plant is recorded on my own observation only, the initials of the contributing members have been attached.

From causes already alluded to, there have been several changes in our constitution since we commenced operations, and therefore several authorities that I quote are no longer members of our Society. This is the key to the initials :—

J. P.—James Pixton.

J. T. W.—Rev. J. T. Whitehead.

J. W.—Joseph Wrigley.

J. A.—Joseph Alcock.

R. K.—Robert Kay.

R. F.—Robert Fairbrother.

S. H.—Samuel Horrocks.

T. C.—Thomas Charles.

W. H.—William Holt.

In arranging the list I have followed Bentham's "Handbook of the British Flora" so far as the flowering plants go. For the ferns I have taken Moore's British Ferns, because many make an almost exclusive study of these plants, and this admirable handbook only costs 1s.

As to the English names, I have been much puzzled. I have made no attempt to indicate systematically specific distinctions by English names, but have preferred to use those by which the plants are most commonly known. This even is no easy task to carry out, for many plants are not known by any English name, and in many instances I have never heard an English name, though there probably is one; in other instances there are several names. In cases of doubt of this kind I have referred principally to Withering's "British Plants," Smith's "English Flora," and to Hooker and Arnott's "British Flora."

A few Fungi have been brought to our meetings, and a few of us have become to a limited extent toad-stool eaters, but so little has been done by us in this study that I omit them altogether.

Several plants evidently not belonging to our neighbourhood, and some not belonging to the British Flora at all, I have observed growing where cotton refuse—more especially the refuse from Egyptian cotton—has been thrown down. Our Society has thought that it would be best not to omit all mention of them, but to distinguish them from the other plants by prefixing an asterisk (*).

R. H. ALCOCK.

CLASS I.—DICOTYLEDONS. TWO SEED-LEAVES.

SUB-CLASS 1.—Thalamiflores. Stamens inserted below the Pistil.

Order Ranunculaceæ. The Crowfoot Family.

- Anemone nemorosa.* Wood Anemone. Common.
Ranunculus aquatilis. Water Crowfoot. Not very common near Bury. Chesham.
R. hederaceus. Ivy C. Common.
R. Flammula. Spearwort. Common.
R. F. var. *sub-erectus* (Syme). Chesham.
R. Ficaria. Pilewort. Common.
R. acris. Upright Crowfoot. Common.
R. repens. Creeping C. Common.
R. bulbosus. Buttercup. Not so frequent as the two last, which are also commonly called Buttercups. Buckley wells, T. C. Gorsey brow.

Order Nymphæaceæ. The Waterlily Family.

- Nymphæa alba.* White Waterlily. Fletcher's fold, T. C. Hudcar.
Nuphar lutea. Yellow W. Hudcar.

Order Fumariaceæ. The Fumitory Family.

- Corydalis claviculata.* White Fumitory. Gigg wood, J. P.

Order Cruciferaæ. The Crucifer Family.

- Barbarea vulgaris.* Winter-cress. Frequent in the neighbourhood of gardens.
Nasturtium officinale. Water-cress. Elton fold. Plumpton, T. C.
Cardamine pratensis. May flower. Common.
C. hirsuta. Hairy Bitter-cress. Common.
Alliaria officinalis. Jack by the hedge. Springside, J. P.
Erysimum cheiranthoides. Wormseed. Castlecroft, J. P.
Brassica Sinapistrum. Charlock. Common.
Capsella Bursa-pastoris. Shepherd's purse. Common.
Lepidium campestre. Field-cress. Ogden valley.
 **L. ruderale.* Narrow-leaved cress. From cotton refuse.
 **Senebiera Coronopus.* Wart-cress. From cotton refuse.

Order Violaceæ. The Violet Family.

- Viola palustris.* Marsh Violet. Mere clough.
V. canina var. *sylvatica.* Dog Violet. Common.
V. tricolor. Pansy. Common.

Order Caryophyllaceæ. The Pink Family.

- Saponaria Vaccaria.* Ainsworth, in cornfields: Hudcar, twice as a garden weed.
Silene inflata. Bladder Campion. Castlecroft, J. P. Unsworth.
Lychnis vespertina. White C. Lammy bank, T. C. Unsworth.
L. diurna. Red C. Common in damp woods.
L. Githago. Corn-cockle. Chat moss, R. K.
L. Flos-cuculi. Ragged Robin. Common with *L. diurna.*

- Sagina procumbens. Pearlwort. Common.
 Arenaria serpyllifolia. Thyme-leaved Sandwort. Birtle, J. P.
 A. trinervis. Three nerved S. Common.
 Cerastium vulgatum. Mouse-ear chickweed. Common.
 Stellaria media. Chickweed. Common.
 S. uliginosa. Bog stitchwort. Common.
 S. Holostea. Greater stitchwort. Common.
 Spargula arvensis. Yarr. Common.

Order Hypericaceæ. The St. John's Wort Family.

- Hypericum quadrangulum. St. Peter's wort. Near Buckhurst school, J. P. Ainsworth, J. T. W.
 H. humifusum. Trailing St. John's wort. Near Buckhurst school, J. P.
 H. pulchrum. Pretty St. John's wort. Bamford wood.

Order Linaceæ. The Flax Family.

- Linum catharticum. Mountain Flax. On hill pastures. Common.

Order Malvaceæ. The Mallow Family.

- Malva sylvestris. Mallow. Hudcar and elsewhere as a garden weed; not otherwise common.
 *M. verticillata. From cotton refuse.

Order Tiliaceæ. The Lime Family.

- Tilia europæa. Lime tree. Does not seem to flower close to the town, but freely at Limefield.

Order Geraniaceæ. The Crane's bill Family.

- Geranium Robertianum. Herb Robert. Bamford wood.
 G. dissectum. Jagged Crane's bill. Lees, J. P. Chesham.
 Oxalis Acetosella. Wood-sorrel. Common.

Order Polygalaceæ. The Milkwort Family.

- Polygala vulgaris. Milkwort. Common.

Order Aceraceæ. The Maple Family.

- Acer Pseudo-platanus. Sycamore. Commonly cultivated, and withstands smoke well.

SUB-CLASS II.—Calyciflores. Stamens around or upon the Pistil.

Order Leguminosæ. The Leguminous Family.

- Ulex europæus. Gorse. Common.
 Genista tinctoria. Dyer's green-weed. Springside, J. P.
 G. anglica. Needle-whin. Near Buckhurst school, J. P.
 Ononis arvensis. Rest-harrow. Lees, J. P.
 Medicago maculata. Spotted Medick. Hudcar.
 Trifolium pratense. Honeysuckle Clover. Common.
 T. medium. Cow C. Common.
 T. repens. White C. Common.
 T. procumbens. Lesser Trefoil. Spring Side, J. P.
 T. filiforme. Least T. Common.
 Lotus corniculatus. Bird's-foot T. Common.
 Vicia hirsuta. Tare. Springs, J. P.
 V. Cracca. Tufted Vetch. Common.
 V. sativa. Fodder V. Not uncommon. Brandlesome.
 Lathyrus Aphaca. Yellow Vetchling. Appeared once as a garden weed at Hudcar.
 L. pratensis. Meadow V. Chesham, Ringley, &c. Common.
 L. macrorrhizus. Bitter Vetch. Common. Dunsters, T. C. Birtle Dean.
 *Scorpiurus sulcata. Caterpillars. From cotton refuse.

Order Rosaceæ. The Rose Family:

- Prunus communis.* Blackthorn. Broadoak Wood.
P. Cerasus. Dwarf Cherry. Mere clough, J. P.
P. Padus. Bird C. Kennels, Limefield, J. P. Chesham.
Spirœa Ulmaria. Meadow-sweet. Dunsters, T. C. Kennels, Limefield.
Rubus idœus. Raspberry. Bamford wood. Grant's tower.
R. fruticosus. Blackberry. Common.
Fragaria vesca. Strawberry. Mere clough, T. C. Bamford wood.
Potentilla Fragariastrum. Barren strawberry. Common.
P. Tormentilla. Tormentil. Common.
P. auserina. Silver-weed. Common. Unsworth.
Alchemilla vulgaris. Lady's mantle. Common.
A. arvensis. Parsley piert. Elton Vale, T. C.
Rosa canina. Dog Rose. Common.
R. arvensis. White D. R. Common.
Pyrus Aucuparia. Mountain-ash. Common. Holcombe, T. C.
Cratœgus Oxyacantha. Hawthorn. Common.

Order Onagraceæ. The Willow-herb Family.

- Epilobium hirsutum.* Hairy Willow-herb. Common. Ringley.
E. montanum. Broad-leaved W. Common. Simpson's clough.
Circœa Lutetiana. Enchanter's nightshade. Bamford wood.
C. alpina. Alpine E. nightshade. Bamford wood.

Order Saxifragaceæ. The Saxifrage Family.

- Chrysosplenium oppositifolium.* Opposite-leaved Sengreen. Common.
C. alterifolium. Alternate-leaved S. Not common. Mere Clough.
Drosera rotundifolia. Round-leaved Sundew. Chat moss. R. K.
D. longifolia. Long-leaved S. Chat moss, R. K.

Order Umbelliferæ. Umbelliferous Plants.

- Hydrocotyle vulgaris.* Pennywort. Chesham.
Apium graveolens. Celery. Springside, J. P.
 **Ammi majus.* ——— From cotton refuse.
 **Fœniculum vulgare.* Fennel. From cotton refuse.
Angelica sylvestris. Wild Angelica. Common.
Heracleum Sphondylium. Cow-parsnip. Common.
Myrrhis odorata. Sweet Cicely. Common.
Bunium flexuosum. Earth-nut. Common.
Chærophyllyllum sylvestre. Chervil. Common.
Caucalis Anthriscus. Hedge-parsley. Common.

Order Araliaceæ. The Ivy Family

- Hedera Helix.* Ivy. Common.

SUB-CLASS III.—Monopetals. Petals united.

Order Caprifoliaceæ. The Honeysuckle Family.

- Adoxa Moschatellina.* Moscatel. Not common. Mere clough.
Sambucus nigra. Elder. Common.
Viburnum Opulus. Guelder rose. Kirklees, T. C. Gigg wood, J. P. Chesham.
Lonicera Periclymenum. Honeysuckle. Common. Dunsters, T. C. Kennels, Limefield, Chesham fold, Ainsworth, &c.

Order Stellatæ. The Stellate Family.

- Galium palustre.* Marsh Bedstraw. Ringley.
G. uliginosum. Marsh Goosegrass. Ringley.

- G. saxatile.** Heath Bedstraw. Very common,
G. Aparine. Cleavers. Common. Ringley.
Asperula odorata. Sweet Woodruff. Bamford wood.
Sherardia arvensis. Field-madder. Not common about Bury. Ainsworth, J. T. W.

Order Valerianaceæ. The Valerian Family.

- Valeriana officinalis.** Great Valerian. Kennels, Limefield, J. P. Gigg, B. F. Dob wood, T. C. Common in wet places.

Order Dipsacaceæ. The Teasel Family.

- Scabiosa succisa.** Devil's bit. Common. Elton vale, W. H. Dunsters, T. C.

Order Compositæ. The Composite Family.

- Tussilago Farfara.** Colt's-foot. Common.
T. Petasites. Butter-bur. Common all along the river sides, and at Simpson clough, &c.
Solidago Virgaurea. Golden-rod. Springside. Near Grant's tower, J. P.
Inula dysenterica. Fleabane. Kennels, Limefield, J. P. Dunsters, T. C. Ainsworth, J. T. W.
Bellis perennis. Daisy. Common.
Chrysanthemum Leucanthemum. Oxeye. Common.
C. segetum. Corn-marigold. Ainsworth, J. T. W. Near Grant's tower, J. P. Hudcar.
C. inodorum. May-weed. Common.
Achillea Ptarmica. Sneezewort. Elton fold, T. C. Hudcar.
A. Millefolium. Yarrow. Common.
Tanacetum vulgare. Tansy. Railway bank, Castlecroft, J. P., probably an escape from a garden.
***Artemisia Abrotonum.** Lad's-love. From cotton refuse.
A. vulgaris. Mugwort. Between Ringley Road station and Giant's seal.
Gnaphalium uliginosum. Marsh Cudweed. Bury ground, J. F.
Senecio vulgaris. Groundsel. Common.
S. sylvaticus. Mountain G. Near Ringley Road station.
S. aquaticus. Marsh Ragwort. Common.
S. Jacobæa. Kettle-dock. Common.
Bidens tripartita. Bur-marygold. Bury ground, J. P. Ringley, Clifton.
Arctium Lappa. Burdock. Unsworth.
Carduus lanceolatus. Spear Thistle. Common.
C. arvensis. Plume Thistle. Common.
Centaurea nigra. Hard-irons. Common.
C. Cyanus. Blue-bottle. Occasional, but not very common.
Tragopogon pratense. Goat's-beard. Railway bank, near Black lane, J. T. W.
Hypochæris radicata. Cat's-ear. Common.
Lactuca muralis. Wall-lettuce. Springside, J. P. Radisher wood, T. C.
Taraxacum Dens-leonis. Dandelion. Common.
Crepis virens. Hawk's-beard. Common.
Hieracium Pilosella. Mouse-ear Hawkweed. Common.
H. sabaudum. Savoy H. Common.
Lapsana communis. Nipplewort. Springside, J. P. Tyldesley.
- Order Campanulaceæ. The Bell-flower Family.*
- Jasione montana.** Sheep's-bit. Springside, J. P. Ainsworth.
Campanula rotundifolia. Hare-bell. Common.
- Order Ericaceæ. The Heath Family.*
- Vaccinium Myrtillus.** Whinberry. Common.
V. Vitis-idaea. Cowberry. Common.
V. Oxycoccos. Cranberry. Behind Grant's tower, J. P.
Andromeda polifolia. Wild Rosemary. Behind Grant's tower, J. P. Clifton mess.
Erica vulgaris. Ling. Common.
E. Tetralix. Cross-leaved Heath. Common.

Order Primulaceæ. The Primrose Family.

- Hottonia palustris.* Water violet. Observed in one place.
Primula vulgaris. Primrose. Common. Dob wood.
Lysimachia vulgaris. Loose-strife. Castlecroft, J. P. The name Loose-strife is applied to *Lythrum Salicaria* and indifferently to the five species of *Lysimachia*.
L. nemorum. Yellow Pimpernel. Common.
Anagallis arvensis. Poor man's weather-glass. Common.
A. a. var. cærulea. Occasionally. Hudcar. Brookshaw.

Order Aquifoliaceæ. The Holly Family.

- Ilex Aquifolium.* Holly. Common.

Order Jasminiaceæ. The Jessamine Family.

- Fraxinus excelsior.* Ash tree. Common. One at Chesham has a girth of 7ft. 8in. five feet from the ground.
Ligustrum vulgare. Privet. Commonly cultivated.

Order Gentianaceæ. The Gentian Family.

- Erythræa Centaurium.* Sanctuary. Ringley, near the station.

Order Convolvulaceæ. The Bindweed Family.

- Convolvulus sepium.* Large Bindweed. Elton vale, W. H. Plumpton, T. C.

Order Boraginaceæ. The Borage Family.

- Myosotis palustris.* Water Forget-me-not. Not uncommon. Dob wood.
M. arvensis. Field F. Common.

Order Solanaceæ. The Nightshade Family.

- Solanum Dulcamara.* Bittersweet. Not uncommon, but local. Elton vale. Brandle-some, T. C. Broadoak wood. Ringley.
 **S. nigrum.* Black Nightshade. From cotton refuse.
 **Lycopersicum esculentum.* Tomato. From cotton refuse.

Order Scrophulariaceæ. The Figwort Family.

- Verbascum Thapsus.* Great Mullein. Hudcar, as a garden weed.
Scrophularia nodosa. Knotty Figwort. Kennels, Limefield, J. P.
Digitalis purpurea. Foxglove. Common. Dunsters, T. C. Kennels, Limefield.
Veronica officinalis. Common Speedwell. Common.
V. Beccabunga. Brooklime. Waterfold, J. P.
V. Chamædrys. Germander Speedwell. Common. Bluepits, J. P. Mere clough, T. C. Bamford wood, and frequent in hedge banks.
V. argrestis. Field S. Common.
V. arvensis. Wall S. Birtle, J. P. Dunsters, T. C.
Bartsia Odontites. Red Bartsia. Mere clough, T. C.
Euphrasia officinalis. Eyebright. Holcombe, T. C. Common on hill pastures.
Rhinanthus Crista-galli. Yellow-rattle. Chat moss, R. K.
Pedicularis sylvatica. Lousewort. Common. Dunsters, T. C. Mere clough. Helmsshore.
Melampyrum pratense. Cow-wheat. Dob wood. T. C.

Order Labiatæ. The Labiate Family.

- Mentha aquatica.* Water-mint. Kennels, Limefield, J. P. Elton vale, T. C.
M. arvensis. Common Mint. Common.
 **M. Pulegium.* Pennyroyal. From cotton refuse.
 **Origanum vulgare.* Marjorum. From cotton refuse.
Nepeta Glechoma. Robin-run-i'th'-hedge. Common.
Prunella vulgaris. Self-heal. Common.

- Scutellaria galericulata. Scull-cap. Ringley, S. H.
 Stachys Betonica. Wood-betony. Ringley, S. H.
 S. sylvatica. Hedge Woundwort. Common.
 S. palustris. Clown's W. Common.
 Galeopsis Tetrahit. Hemp-nettle. Elton vale, T. C. Ainsworth, Brandlesome,
 Unsworth. Common in corn fields.
 *Ballota nigra. Black Horehound. From cotton refuse.
 Lamium purpureum. Red Dead-nettle. Common.
 Teucrium Scorodonia. Wood-sage. Common.
 Ajuga reptans. Bugle. Gigg, J. P. Mere clough.

Order Verbenaceæ. The Vervein Family.

- *Verbena officinalis. Vervein. From cotton refuse.

Order Plantaginaceæ. The Plantain Family.

- Plantago major. Plantain. Common.
 P. lanceolata. Ribwort. Common.

SUB-CLASS IV.—Monochlamydeæ. Perianth⁺ single, or none.

Order Chenopodiaceæ. The Goosefoot Family.

- *Chenopodium polyspermum. Many seeded Goosefoot. From cotton refuse.
 C. album. White G. Common.
 Atriplex patula. Fat hen. Common.

Order Polygonaceæ. The Buckwheat Family.

- Rumex obtusifolius. Broad-leaved Dock. Common.
 R. sanguineus. Bloody-veined D. Hudcar.
 R. Acetosa. Sorrel. Common.
 R. Acetosella. Sheep's S. Common.
 Polygonum aviculare. Knot-grass. Common.
 P. Convolvulus. Climbing Buckwheat. Common.
 P. Bistorta. Patience-dock. Common.
 P. amphibium. Amphibious Snakeweed.
 P. Persicaria. Spotted S. Common.
 P. Hydropiper. Water-pepper. Common.

Order Euphorbiaceæ. The Spurge Family.

- Euphorbia Helioscopia. Sun-spurge. Common.
 E. Peplus. Petty-spurge. Common.
 Mercurialis perennis. Dog's mercury. Common..

Order Empetraceæ. The Crowberry Family.

- Empetrum nigrum. Crowberry. Cuckoo narrow, Deeply vale, &c.

Order Callitrichaceæ. The Starwort Family

- Callitriche aquatica. Starwort. In most ditches.

Order Urticaceæ. The Nettle Family.

- Urtica dioica. Great nettle. In the immediate neighbourhood of Bury, nettles are scarce.

+ "A general name for the floral envelope; applied in cases where there is only a calyx, or where the calyx and corolla are alike."—*Manual of Botany*, BALFOUR.

Order Cannabinaceæ. The Hemp Family.

Humulus Lupulus. Hop. Owlbarrow, J. W. Near Bolholt, T. C. Birtle, Lomases.

Order Ulmaceæ. The Elm Family.

Ulmus montana. Wych Elm. Common.

U. campestris. Field Elm. Common.

There are well grown trees of both these Elms at Chesham.

Order Amentaceæ. The Catkin-bearing Family.

Alnus glutinosa. Alder. Common.

Betula alba. Birch. Common. Excavations of peat near Hudcar indicate that this ancient forest was almost entirely of birch.

Carpinus Betulus. Hornbeam. Common. Chesham.

Corylus Avellana. Hazel. Common.

Fagus sylvatica. Beech. Common. It seems to withstand smoke pretty well. There is a beech at Broomfield, Ainsworth, with a girth of 8ft. 2in. five feet from the ground. It is 2½ miles from Bury, and 3½ miles from Bolton.

Quercus Robur. Common Oak. There are plenty of oaks about Bury, and some fair trees, but they do not seem to be flourishing well now.

Q. Cerris. Turkey Oak. Common. It seems to withstand smoke better than the common oak.

Salix pentandra. Sweet bay-leaved Willow. Near Frog-hall, J. P.

S. fragilis. Crack W. Common.

S. alba. White W. Common. Handsome trees in the dells near Ringley Road station.

S. viminalis. Osier W. Common.

S. Caprea. Common Sallow.

Populus alba. White Poplar. Common, but does not grow well.

P. nigra. Black Italian P. There is a fair tree at Spring side, measuring in circumference 6ft. 7in. five feet from the ground, but they generally do very badly and die in a short time in smoky places.

P. fastigiata. Lombardy P. Commonly cultivated, but with very poor success.

P. balsamifera. Balsam P. The last remark applies.

Order Coniferæ. The Cone-bearing Family.

Pinus sylvestris. Scotch Fir. Grows badly in smoke. There is a good tree at Spring-side, but most in the neighbourhood are dead or dying.

CLASS II.—MONOCOTYLEDONS. ONE SEED-LEAF.

Order Typhaceæ. The Bullrush Family.

Sparganium ramosum. Bur-reed. Bury ground, J. P. Elton-vale, T. C.

Order Araceæ. The Cuckoo-pint Family.

Acorus Calamus. Sweet-flag. Bury ground.

Order Lemnaceæ. The Duckweed Family.

Lemna minor. Duckweed. Common.

Order Naiadaceæ. The Pondweed Family.

Potamogeton natans. Flatter-docks. Common.

Order Alismaceæ. The Water-Plantain Family.

Alisma Plantago. Water-plantain. Common.

Order Hydrocharidaceæ. The Frogbit Family.

Elodea canadensis. American Water-weed. A very common and troublesome weed. Chesham. Bury and Heap Commercial Company's reservoir. Reservoir, Higher mill, Freetown. Openshaw fold. Hampson mill, &c.

Order Orchidaceæ. The Orchis Family.

Epipactis latifolia. Broad-leaved Helleborine. Kennels, Limefield, J. P.
Orchis mascula. Early purple Orchis. Kennels, Limefield, J. P. Ainsworth.
O. maculata. Spotted O. Kennels, Limefield, J. P. Dunsters, T. O.

Order Iridaceæ. The Crocus Family.

Iris Pseud-acorus. Yellow-flag. Kirkloes, T. C.
Crocus nudiflorus. Autumnal Crocus. Birtle J. A.

Order Liliaceæ. The Lily Family.

Scilla nutans. Blue-bell. Common.
Allium ursinum. Garlic. Mere clough, T. C. Dob wood.
Narthecium ossifragum. Lancashire Asphodel. Behind Grant's tower, J. P.

Order Juncaceæ. The Rush Family.

Juncus communis. Common Rush. Common.
J. articulatus. Jointed-rush. Common.
J. obtusiflorus. Blunt-flowered J. Common.
J. squarrosus. Heath-rush. Common.
J. bufonius. Toad-rush. Common.
Luzula pilosa. Broad-leaved Wood-rush. Frequent in moist woods.
L. sylvatica. Great W. Common in woods.
L. campestris. Field W. Common everywhere.

Order Cyperaceæ. The Sedge Family.

Scirpus palustris. Creeping Spike-rush. Near Radcliffe.
Carex remota. Distant-spiked Carex. Hudcar.
C. cæspitosa. Tufted bog C. Hudcar.
C. flava. Yellow C. Hudcar.

Order Gramineæ. The Grass Family.

Anthoxanthum odoratum. Vernal grass. Common.
 **Phalaris canariensis.* Canary grass. From cotton refuse.
Phleum pratense. Timothy grass. Common.
Alopecurus pratensis. Foxtail-grass. Common.
A. geniculatus. Floating F. Common in wet places.
Aira cæspitosa. Tufted Hair-grass. Common.
A. flexuosa. Waved H. Common.
Holcus lanatus. Meadow Soft-grass. Common.
H. mollis. Creeping S. Common.
Nardus stricta. Mat-grass. Common on hill pastures.
Triticum repens. Couch-grass. Common.
Lolium perenne. Darnel. Common.
Dactylis glomerata. Cock's foot grass. Common.
Cynosurus cristatus. Crested Dog's tail grass. Common.
Briza media. Quaking-grass. Not uncommon. Hercules, J. P. Pilsworth, R. F.
Poa aquatica. Reed Meadow grass. Broadoak wood.
P. fluitans. Floating M. Common.
P. annua. Annual M. Everywhere.
P. pratensis. Smooth stalked M. Common.
Melica uniflora. Wood Melic grass. Dob wood.

CLASS III.—CRYPTOGAMS. NO FLOWERS.

Division Filices. Ferns.

- Polypodium Phegopteris.* Beech-fern. Simpson's clough.
P. Dryopteris. Oak-fern. Simpson's clough. The Park.
Allosorus crispus. Parsley-fern. Fo edge.
Polystichum aculeatum, form *lonchitidoides*. Common Shield-fern. Bamford wood.
Lastrea montana. Mountain Buckler-fern. Common.
L. Filix-mas. Male-fern. Common.
L. dilatata. Broad Buckler-fern. Common.
Athyrium Filix-femina. Lady-fern. Common.
Blechnum Spicant. Hard-fern. Common.
B. S. var. strictum. One specimen. Cockeymoor-lane.
Pteris aquilina. Bracken. Common.
Botrychium Lunaria. Moonwort. Hill pastures, behind Bury.

LIST OF BUTTERFLIES AND MOTHS.

The following is an attempt to furnish a list of the Lepidoptera, (omitting Tortrices, Tineæ, and Pterophori), which have occurred within a radius of 20 miles of Bury, in which I have been kindly assisted by several collectors, especially Messrs. Chappell and Porter.

The list contains the Scientific and English Name, and time of appearance of the perfect Insect. The numbers indicate the months the insect is in the imago form; when they are followed by (h) it implies that the insect has hibernated. The Food Plant, so far as is known is given, and also the known localities for some of the species, and for convenience a number of abbreviations are used as follows:—
A. Ainsworth. *B. Bolton.* *Bi. Birch.* *Bl. Blackstonedge.* *Br. Bradshaw.* *Bu. Bury.* *B.W. Bamford Wood.* *C. Clifton.* *Ca. M. Carrington Moss.* *C.M. Chat Moss.* *D. Droylsden.* *G. Greenfield.* *H. Horwich.* *H.P. Heaton Park.* *H.T. Hoghton Tower.* *L. Leigh.* *L.L. Little Lever.* *M. Manchester.* *Mi. Middleton.* *P. Prestwich.* *Pa. Patricroft.* *P.P. The Park, Pilkington.* *R. Radcliffe.* *S. Stalybridge.* *S.B. Staley Brushes.*

ROBT. KAY.

DIURNI.

- Pieris Brassicæ*, Large White, 4 5 8, Cabbages and several Cruciferae. Common everywhere.
- P. Rapæ*, Garden White, 4 5 8 9. Common everywhere.
- P. Napi*, Green-veined White, 4 5 8, Rape and other Cruciferae. Common everywhere.
- Anthocharis Cardaminis*, Orange Tip, 4 5, Bitter-cress, Tower-wort, &c., C.M., P., Bu., M., B.W. Not a common insect.
- Gonepteryx Rhamni*, Brimstone, 5 7, Buckthorn, Alder Buckthorn, M., B., Mi. Not a common insect.
- Colias Edusa*, Clouded Yellow, 8 10, Several Leguminous plants, B., L., M. Very rare.
- C. Hyale*, Pale Clouded Yellow, 8, Bu., B. Two specimens were captured near Bury recently.
- Argynnis Paphia*, Silver-washed Fritillary, 7 8, Dog Violet, B. Has occurred in the neighbourhood of Bolton.
- Melitea Artemis*, Greasy Fritillary, 6, Scabious, Plantain, Foxglove, B., M. Uncommon.
- Vanessa C. Album*, Comma, 6 7, Elm, Currant, Sloe, Nettle, M., B., Bu. Scarce.
- V. Urticæ*, Small Tortoise-shell, 3h 5h 6 9, Nettle. Widely distributed and common.
- V. Polychloros*, Large Tortoise-shell. 3h 5h 7 8, Elm, B., Bu. Scarce.
- V. Antiopa*, Camberwell Beauty, 3h 5h 8 10, Willow, &c., H., B., L.L. A specimen has been captured at each of these places.
- V. Io*, Peacock, 3h 5h 8 9, Nettle. Not common. but widely distributed.
- V. Atalanta*, Red Admiral, 8 9. Not common, but widely distributed.
- V. Cardui*, Painted Lady, 3h 5h 7 9, Thistles. Uncommon, and very uncertain in appearance.
- Arge Galathea*, Marbled White, 7 8, Timothy Grass, Mi. A number of specimens were taken some years ago.

- Satyrus Megæra*, Wall, 5 8 9, various Grasses, M., C.M. Uncommon.
S. Janira, Meadow Brown, 6 7 8, Various Grasses, C.M., Bv., M. Very common.
S. Tithonus, Gate Keeper, 7 8, Annual Meadow Grass, B., M. Local and uncommon.
S. Hyperanthus, Ringlet, 6 7, Millet and Annual Meadow Grasses, M., C.M. Local, but common.
Chortobius Davus, Large Heath, 6 7, Cotton Grass, Beak Rush, C.M., Ca.M. Local, but common.
C. Pamphilus, Small Heath, 6 7 8 9, Annual Meadow Grass, B. Appears to be the only locality.
Thecla Rubi, Green Hair Streak, 6 7 8, Bramble and Papilionaceous Plants, M. Very local,
T. Quercus, Purple Hair Streak, 7 8, Oak, H.T. Local.
Polyommatus Phlæas, Small Copper, 5 6 7 8 9, Sorrel. Common and widely distributed.
Lycæna Ægon, Silver-studded Blue, 7 8, Vetches, Bird's-foot Trefoil, C.M. Local and uncommon.
L. Alexis, Common Blue, 5 6 7 8 9, Clover, Bird's-foot Trefoil, Bv., B., C.M., M. Mr. Uncommon.
L. Alsus, Small Blue, 5 6, Milk Vetch, Mr. Several specimens have been captured.
L. Argiolus, Azure Blue, 5 6 7 8, Holly, Ivy, H.T.
Thanaos Tages, Dingy Skipper, 5 8, Bird's-foot Trefoil, M., H.T., C.M. Local, not common.
Hesperia Sylvanus, Large Skipper, 5 8, Meadow Soft-grass, &c., C.M., H.T., M. Frequenting drain sides and railway embankments.

NOCTURNI.

- Smerinthus Ocellatus*, Eyed Hawk Moth, 5 6 7, Willow, Poplar, Apple, C.M., Bv., Br., Mr. Not a common species.
S. Populi, Poplar Hawk Moth, 5 6, Poplar, Aspen, Sallow. Common and widely distributed.
Acherontia Atropos, Death's-head Hawk Moth, 8 9, Potato, Jasmine, M., Bv., B., Br., Br. Uncommon.
Sphinx Convolvuli, Convolvulus Hawk Moth, 9, Small Bindweed, B., D., Br. Several specimens have been captured near Bolton.
Deilephila Euphorbiæ, Spurge Hawk Moth, 6, Cypress Spurge, Sea Spurge. A specimen was captured at Chorley gardens, near Bolton, about 1865.
D. Galii, Bedstraw Hawk Moth, 7 8, Yellow Bedstraw, Fuchsia, H., B., Mr., S. Very rare.
D. Lineata, Striped Hawk Moth, 8 9, Bedstraw and Vine, M., Br. One specimen was found at rest by Mr. Taylor, of Middleton, and is now in his collection.
Chærocampa Celerio, Silver-striped Hawk Moth, 10, Vine, B. Has occurred several times in the neighbourhood.
C. Porcellus, Small Elephant Hawk Moth, 6, Bedstraw, C.M. Not common.
C. Elpenor, Elephant Hawk Moth, 6, Willow-herb, Bedstraw, Fuchsia, C.M., M., Bv. Not common.
C. Nerii, Oleander Hawk Moth, 10, Oleander, Periwinkle, B. One specimen at Chorley gardens, near Bolton.
Macroglossa Stellatarum, Humming-bird Hawk Moth, 5 6 7 8 9, Bedstraw, Widely distributed, but not common.
M. Bombyliiformis, Narrow-bordered Bee Hawk Moth, 7 8, Field Scabious, M. Local and uncommon.
Sesia Culiciformis, Large Red-belted Clearwing, 5 6, Wood of Birch Trees, M., C.M. Local and uncommon.
S. Tipuliformis, Currant Clearwing, 6, Pith of Currant bushes. Widely distributed, but not common.
S. Speciformis, White-barred Clearwing, 5 6, Stems of Alder, C.M. A local species, and very rare.
S. Bembeciformis, Hornet Clearwing, 6, Wood of Sallow, Poplar, Osier, Bv., B., M., R. Not uncommon, at rest.

- Cossus Ligniperda*, Goat Moth, 6 7, Solid wood of Willow, Elm, Oak, Pa., A., B., H.T., P., M. Sometimes found in the larva state.
- Hepialus Hectus*, Gold Swift, 6, Roots of various plants, H.T., P.P., B.W., &c. Rather common.
- H. Lupulinus*, Common Swift, 6, Roots of Herbaceous Plants. Abundant and widely distributed.
- H. Sylvinus*, Wood Swift, 7 8, Unknown, B., M., B.W., H.T. Not common.
- H. Velleda*, Northern Swift. 6 7, Roots of Bracken, Bu., M., B., B.W., C.M., H.T. A common species.
- H. Humuli*, Ghost Swift, 6, Roots of Burdock, Nettle, &c. Common everywhere.
- Procris Statices*, Forester, 6, Sorrel, C.M., P.P. Uncommon, fond of settling on Thistles.
- Zygæna Trifolii*, Broad-bordered five-spotted Burnet, 6, Horse-shoe Vetch, Bird's-foot Trefoil, M. Local. this appears to be the only known locality.
- Z. Filipendulæ*, Six spotted Burnet, 6, Crowfoot Trefoil, C.M., H.T., M. A local, but common insect.
- Setina Irrorella*, Dew Moth, 6, Lichens, P.P. One example.
- Lithosia Mesomella*, Four-dotted Footman, 6 7, Lichens, C.M. Local and uncommon.
- L. Complana*, Common Footman, 7, Lichens on Oak, Blackthorn, M. Local and uncommon.
- L. Sericea*, Leaden Footman, 7, Lichens. Very scarce and local.
- Deiopeia Pulchella*, Crimson speckled, 9, Field Forget-me-not, Mr., M. A specimen was found at rest on a Railway waggon at Middleton, September, 1871.
- Euthemonia Russula*, Clouded Buff, 6, Plantain, Dandelion, &c., C.M. Appears to be the only locality, uncommon.
- Chelonia Plantaginis*, Wood Tiger, 5 6, Plantain, &c., Ca.M., C.M., S.B., Bl. Not common.
- C. Caja*, Large Tiger, 7, Nettles, Strawberry, Dock, Plantain. Widely distributed, not so common with us as formerly.
- Arctia Fuliginosa*, Ruby Tiger, 6 7, Dandelion, Plantain, M., C.M., S.T., B., Bu. Uncommon, and generally distributed.
- A. Mendica*, Muslin Moth, 5 6, Dandelion, Plantain, &c., M. Has occurred sparingly.
- A. Lubricipeda*, Buff Ermine, 6 7, various low plants. Common and widely distributed.
- A. Menthastri*, White Ermine, 6 7, various low plants. Common and widely distributed.
- Liparis Auriflua*, Gold-tail, 7 8, Whitethorn, Apple, Bu., C.M., B. Often abundant where it occurs.
- Orgyia Antiqua*, Vapourer, 7 8 9 10, Various Trees and Shrubs. Widely distributed and often common.
- Pœcilocampa Populi*, December Moth, 11 12, Poplar, Hawthorn, &c., Bu., M. Not common, sometimes at light.
- Bombyx Rubi*, Fox, 5 6, Heath, Bramble, C.M., S.B., Ca.M., B. Appears to be confined to Mosses and Moors.
- B. Quercus*, Oak Eggar, 7 8, Whitethorn, Heath, M. Not so common as *Callunæ*.
- B. Callunæ*, (?) Oak Eggar, 6 7, Heath, Sallow, Whitethorn, C.M., Bu., Ca.M., S.B. Widely distributed.
- Odonestis Potatoria*, Drinker, 7, Various Grasses, M. Local, rather common.
- Saturnia Carpini*, Emperor, 4 5, Heath, Willow, Whitethorn, C.M., Bu., Ca.M., B., S.B. Appears on all our Mosses and Moors.

GEOMETRÆ.

- Uropteryx Sambucata*, Swallow-tailed, 7, Ivy, Elder, Bramble, Oak, P.P., C.M., H.T. Rather common, flying at dusk.
- Epione Apiciaria*, Bordered Beauty, 7, Willow, Hazel, Poplar, C.M. Local and uncommon.
- Rumia Cratægata*, Brimstone, 4 5 6 9, Whitethorn, Blackthorn. Common everywhere.

- Metrocampa Margaritata*, Light Emerald, 7, Birch, Oak, Beech, C.M., Br. Local, not common.
- Ellopia Fasciaria*, Barred Red, 7, Scotch Fir, C.M. Local, not common.
- Pericallia Syringaria*, Lilac Beauty, 7, Lilac, Privet, Elder, M. Very local and scarce.
- Selenia Illunaria*, Early Thorn, 3 4 7, Willow, Plum, P.P., B., M., Bu. Found at rest on Trees, and flying at dusk.
- S. Lunaria*, Lunar Thorn, 5 6, Sloe, Oak, Elm, M., B.W. Found at rest on Trees, and flying at dusk.
- Odontopera Bidentata*, Scalloped Hazel, 5, Oak, &c. Widely distributed, often found at rest.
- Crocallis Elinguaria*, Scalloped Oak, 7 8 9, Honeysuckle, Apple, Beech. Widely distributed, often found at rest.
- Ennomos Tiliaria*, Canary-shouldered Thorn, 8, Birch, Oak, &c., C.M. Local and uncommon.
- E. Fuscantaria*, Dusky Thorn, 8 9, Ash, Privet, M. Local and uncommon.
- E. Erosaria*, September Thorn, 8 9, Birch, Oak, M. Local and uncommon.
- Himera Pennaria*, Feathered Thorn, 10, Oak, B.W., C.M., H.P., M. Widely distributed, comes freely to light.
- Phigalia Pilosaria*, Pale Brindled Beauty, 3 4, Oak. Common in all our woods, at rest and light.
- Nyssia Hispidaria*, Small Brindled Beauty, 3, Oak, M. Is the only known locality, Rare.
- Amphidasis Prodrornaria*, Oak Beauty, 3 4, Birch, Oak, Osier, M. Is the only known locality. Uncommon.
- A. Betularia*, Peppered Moth, 5 6, Oak, Whitethorn, Birch, Lime. Widely distributed, the black var. being rather common.
- Cleora Lichenaria*, The Brussels Lace, 7, Lichens, H.T.
- Boarmia Repandata*, Mottled Beauty, 6 7, Birch, Plum, B.W., H.T., M. Sometimes common at Bamford at rest.
- B. Rhomboidaria*, Willow Beauty, 6 7, Birch, Plum, Rose, Oak, M. Local and uncommon.
- B. Roboraria*, Great Oak Beauty, 7, Oak, M. Rare and local.
- Tephrosia Crepuscularia*, Small Engrailed, 5 6, Willow, Poplar, Elm, Alder, Bu., C.M., M. Does not appear to be common with us.
- T. Biundularia*, Engrailed, 4 8, Plum, Oak, M. Rare and local.
- T. Punctulata*, Grey Birch, 5 6, Birch, Alder, C.M., H.T. Sparingly.
- Geometra Papilionaria*, Large Emerald, 6, Birch, Hazel, Beech, C.M. Very scarce.
- Iodis Lactearia*, Little Emerald, 6, Birch, Bu., M., C.M. Uncommon, flying at dusk.
- Ephyra Punctaria*, Maiden's Blush, 5 8, Oak, M. Uncommon, flying at dusk.
- Hyria Auroraria*, Gold-bordered Purple, 7, Plantain, C.M., Ca.M. Very local and uncommon.
- Asthena Luteata*, Small Yellow Wave, 6, Unknown, C.M., H.T. Very local and uncommon.
- A. Candidata*, Small White Wave, 5 6, Hornbeam, C.M., H.T., M. Uncommon and local.
- A. Sylvata*, Waved Carpet, 6, Alder, M., C.M., H.T. Uncommon and local.
- A. Blomeraria*, Blomers' Rivulet, 6, Unknown, H.T. Very local and uncertain.
- Eupisteria Heparata*, Dingy Shell, 6, Alder, C.M., M., Bu., H.T. Not a common Insect.
- Venusia Cambricaria*, Welsh Wave, 7, Mountain Ash, Bu., H.T. Very local, not so common as formerly.
- Acidalia Rubricata*, Tawny Wave, 6, Unknown, M. Scarce and local.
- A. Scutulata*, Single-dotted Wave, 6, Flowers of Burnet Saxifrage, Wild Chervil, M. Not common.
- A. Bisetata*, Small Fan-footed Wave, 6, Dandelion, C.M., M. Uncommon and local.
- A. Trigeminata*, Treble Brown Spot, 7, Unknown, M. Scarce and uncertain.

- A. Osseata, Dwarf Cream Wave, 6 7, Unknown, M. Uncommon and local.
- A. Circellata, Circellate, 7, Knotgrass, C.M. Very local and uncommon; few localities are known for this species.
- A. Ornata, Lace Border, 6 7, Thyme, C.M. Scarce.
- A. Subsericeata, Satin Wave, 6, Unknown, M. Local and uncommon.
- A. Remutata, Cream Wave, 5, Unknown, C.M. M. Local and uncommon.
- A. Fumata, Smoky Wave, 6, Knotgrass, Heath? S.B., C.M. Local and uncommon.
- A. Imitaria, Small Blood-vein, 8, Sorrel, M. Local and uncommon.
- A. Aversata, Riband Wave, 6, Meadow Sweet, Water Avens, Common Avens. Widely distributed, and rather common.
- A. Inornata, Plain Wave, 6 7, Willow, and several low plants, Bu., M., C.M. Uncommon.
- A. Emarginata, Small Scallop, 6 7, Bindweed, M. Rare.
- Cabera Pusaria, Common White Wave, 6 7, Birch, Very common and widely distributed.
- C. Exanthemaria, Common Wave, 6 7, Sallow, Alder. Not so common as the above.
- Corycia Termerata, Clouded Silver, 5, Blackthorn, Bird-cherry, Sloe, M. Appears to be the only locality.
- Macaria Litura, Tawny-barred Angle, 7, Fir, C.M. Local, but not uncommon.
- Halia Wavaria, V. Moth, 7, Currant, Gooseberry. Common and distributed.
- Panagra Petrararia, Brown Silver Line, 6, Bracken, C.M. Rather common.
- Numeria Pulveraria, Barred Umber, 4 5, Sallow, H.T.
- Scodonia Belgaria, Grey Scalloped Bar, 5 6, Heath, Ca.M., C.M. Widely distributed on the Mosses, not common.
- Fidonia Atomaria, Common Heath, 5 6 7 8, Trefoils, &c. Distributed and abundant, especially on C.M.
- F. Piniaria, Bordered White, 5 6, Scotch Fir, Bu., C.M. P. Very common, flying round Fir Trees.
- Aspilates Strigillaria, Grass Wave, 6 7, Heath, S.B., C.M. Common.
- Abraxas Gossulariata, Currant Moth, 6, Currant, Sloe, Hazel, Pear. Common and distributed.
- A. Ulmata, Clouded Magpie, 6, Elm, B.W., C., C.M., H.T. Local, but common.
- Lomasipilis Marginata, Clouded Border, 5 6 7, Sallow, M., B.W., P.P. Common, by beating.
- Hybernia Rupicapraria, Early Moth, 1 2, Whitethorn, Blackthorn, Oak. Common, at rest on fences.
- H. Leucophearia, Spring Usher, 2 3, Oak. Not so common as the above.
- H. Aurantiaria, Scarce Umber, 10 11, Birch, Oak, M. B.W., P.P. Generally distributed.
- H. Progemmaria, Dotted Border, 2 3 4, Whitethorn, Birch, Oak. Abundant everywhere, at rest on fences.
- H. Defolaria, Mottled Umber, 10 11, Oak, Hazel, Whitethorn. Distributed, not common.
- Anisopteryx Æscularia, March Moth, 4, Lime, Elm, Oak, Whitethorn. To be found in all our woods.
- Cheimatobia Brumata, Winter Moth, 11 12, Whitethorn and most trees. Abundant, especially on fences at night.
- C. Boreata, Northern Winter Moth, 10, Birch, C.M., M., Bu. Local, not common.
- Oporabia Dilutata, November Moth, 11, Oak, Sloe, Whitethorn. Common in all our woods.
- O. Filigrammaria, Autumnal 8 9, Heath, S.B., B. Probably on all our moors.
- Larentia Didymata, Twin-spot Carpet, 6 7, Common Chervil. Common and widely distributed.
- L. Multistrigaria, Mottled Grey, 3 4, Bedstraw. Common and widely distributed.
- L. Cœsiata, Grey Mountain Carpet, 6, Bilberry. Common and widely distributed.
- L. Salicata, Striped Twin-spot Carpet, 6 8, Bedstraw, Sweet-woodruff, B., M., S.B., Bu. Uncommon and local.
- L. Olivata, Beech-green Carpet, 6 7, Bedstraw, Bu., M. Uncommon and local.
- L. Pectinitaria, Green Carpet, 6 7, Bedstraw. Common everywhere.

- Emmelesia Affinitata**, Rivulet, 6 7, Seeds of various Plants. Widely distributed and uncommon.
- E. Alchemillata**, Small Rivulet, 6 7, Hemp-nettle. Widely distributed and uncommon.
- E. Albulata**, Grass Rivulet, 6, Yellow-rattle. Widely distributed and uncommon.
- E. Decolorata**, Sandy Carpet, 6 7 Red Champion, M., B.W., P.P., C.M., H.T. Uncommon.
- Eupithecia Linariata**, Toadflax Pug, 6 7, Yellow Toadflax, C.M. One specimen near Astley.
- E. Pulchellata**, Foxglove Pug, 5 6, Foxglove. Distributed, and may be bred freely by collecting bloom of food plant.
- E. Centaureata**, Lime Speck, 6 7, Ragwort, Golden Rod, &c. Widely distributed, uncommon by beating.
- E. Succenturiæata**, Bordered Lime Speck, 7 8. Yarrow, Wormwood, M. Uncommon, by beating.
- E. Subfulvata**, Tawny Speck, 8, Yarrow, M. Uncommon, by beating.
- E. Plumbeolata**, Lead-coloured Pug, 5 6, Cow-wheat, B. Local.
- E. Pygmæata**, Marsh Pug, 6, Unknown. Near Bury uncommon, obtained by beating.
- E. Satyrata**, Satyr Pug, 6, Black Knapweed, Bedstraw. Widely distributed, uncommon.
- E. Castigata**, Grey Pug, 5, Flowers of White Bedstraw, Black Knapweed, &c. Not common, but distributed by beating.
- E. Virgaureata**, Golden Rod Pug, 5 6, Golden Rod, Ragwort, M. Uncommon.
- E. Albipunctata**, White-spotted Pug, 5 6, Wild Angelica, Hog-weed, M. Uncommon.
- E. Pimpinellata**, Pimpinel Pug, 4 8, Lesser Burnet Saxifrage, M. Uncommon.
- E. Fraxinata**, Ash-tree Pug, 6 7, Ash. May be found at rest on the boles of Ash Tree. Often common.
- E. Indigata**, Ochreous Pug, 5 8, Fir, Wild Juniper, Cypress, C.M., M. At rest on Firs.
- E. Nanata**, Narrow-winged Pug, 5, Flowers of Ling, C.M. Common, probably on all our moors.
- E. Vulgata**, Common Pug, 5 6, Whitethorn, Willow. Common everywhere, at rest on palings, &c.
- E. Absynthiata**, Wormwood Pug, 6 7, Yarrow, Mugwort, Ragwort. Local, occurs near Bury, mostly in gardens.
- E. Minutata**, Ling Pug, 6, Flowers of Ling, C.A.M., C.M. Uncommon.
- E. Assimilata**, Currant Pug, 5 8, Black Currant, Wild Hop. By beating in gardens and amongst Wild Hop. Widely distributed.
- E. Tenuiata**, Slender Pug, 6, Catkins of Sallow, B. Rare.
- E. Abbreviata**, Brindled Pug, 3 4, Oak. Uncommon, widely distributed.
- E. Exiguata**, Mottled Pug, 5 6, Sallow, Ash, Whitethorn. Uncommon, distributed.
- E. Rectangulata**, Green Pug, 6, Apple, Pear. At rest on Apple trees. Common.
- Lobophora Lobulata**, Early Tooth-striped, 4, Honeysuckle, Sallow, C.M. Local, uncommon.
- Thera Variata**, Shaded Broad Bar, 6 7 8 9, Fir, C.M., H.T. Common, local.
- T. Firmata**, Pine Carpet, 7, Fir, C.M. Common, local.
- Ypsipetes, Impluviata**, May Highflyer, 5, Alder, B., B., M., B.W., P.P. Common and distributed.
- Y. Elutata**, July Highflyer, 7 8, Sallow, Alder, Bilberry. Common and widely distributed.
- Melanthia Rubiginata**, Blue-bordered Carpet, 7 8, Alder, Br., H.T., M. Uncommon and local.
- M. Ocellata**, Purple-bar Carpet, 6 7, Bedstraw. Widely distributed and pretty common.
- M. Albicillata**, Beautiful Carpet, 6 7, Bramble, Raspberry, C.M., B., H.T. Local and uncommon.
- Melanippo Hastata**, Argent and Sable, 8, Birch, P.P., C.M. Local and uncommon.
- M. Unangulata**, Sharp-angled Carpet, 6 7, Chickweed, M. Only occurring in one locality.
- M. Subtristata**, Common Carpet, 5 7, Bedstraw. Not uncommon and distributed.

- M. Montanata*, Silver Ground Carpet, 5 8, Primrose. Not uncommon and distributed.
- M. Galiata*, Galium Carpet, 6 7, Bedstraw. Not uncommon, and distributed.
- M. Fluctuata*, Garden Carpet, 4 5 6 7 8, Horse-raddish, Cabbage. Abundant everywhere.
- Anticlea Badiata*, Shoulder Stripe, 3 4, Rose, H.T., Mr., M. Does not appear to be common.
- A. Derivata*, Streamer, 4 5, Honeysuckle, Rose, H.T., M. Local and uncommon.
- Coremia Propugnata*, Flame Carpet, 5 6, Cabbage. Widely distributed and common.
- C. Unidentaria*, Dark-barred Twin-spot Carpet, 5 6, Bedstraw. Widely distributed and uncommon.
- Campptogramma Bilineata*, Yellow Shell, 6 7 8, Grass and various plants, M., C.M. Common at the places mentioned, appears to be local.
- Phibalapteryx Lignata*, Oblique Carpet, 6 7 8, Unknown, H.T., M. Local and scarce.
- Scotosia Dubitata*, Tissue, 4 5 8 9, Buckthorn, Bu. Appears to be the only locality known, not common.
- S. Undulata*, Scallop Shell, 6, Sallow, C.M. Local and uncommon.
- Cidaria Corylata*, Broken-barred Carpet, 6, Sloe, C.M. Local and uncommon.
- C. Russata*, Common Marbled Carpet, 5 6 7 8, Wild Strawberry. Distributed and uncommon.
- C. Immanata*, Marbled Carpet, 7 8 9, Wild Strawberry, Bu., B., M. Common.
- C. Suffumata*, Water Carpet, 5, Bedstraw, C.M. Local and uncommon.
- C. Silaceata*, Small Phoenix Moth, 5 6, Aspen, M., Bu., P.P., B., H.T. Common in some localities.
- C. Prunata*, Phoenix, 7 8, Currant, Gooseberry, M., Bu. Often beaten out of fences.
- C. Testata*, Chervon, 7 8 9, Aspen, M. Local, not uncommon in suitable localities.
- C. Populata*, Northern Spinach Moth, 7 8, Sallow, Bilberry. Common and generally distributed.
- C. Fulvata*, Barred Yellow, 7 8, Rose. Common and generally distributed.
- C. Pyraliata*, Barred Straw, 7 8, Bedstraw, M., H.T. Local and uncommon.
- C. Dotata*, Spinach, 7, Currant, M. Local and uncommon.
- Pelurga Comitata*, Dark Spinach, 7, Goosefoot, M., Bu. Local and uncommon.
- Eubolia Mensuraria*, Small Mallow, 6 7 8, Grass, M. Local and uncommon.
- E. Palumbaria*, Belle, 6 7, Heath, Clover, M., C.M. Local and uncommon.
- Carsia Imbutata*, Manchester Treble-bar, 7, Cranberry, Ca.M., C.M. Local and uncommon.
- Anaitis Plagiata*, Treble Bar, 6 7 8, St. John's-wort, Bu., M. Local and uncommon.
- Chesias Spartiata*, Streak, 9 10, Broom, M., S.B. Local and uncommon.
- Tanagra Chærophyllata*, Chimney Sweeper, 6 7, Chervil. Abundant everywhere.

DREPANULÆ.

- Platypteryx Lacertula*, Scalloped Hook-tip, 5 6 8, Birch, C.M. Uncommon.
- P. Falcula*, Pebble Hook-tip, 5 6 7 8? Birch, Alder, Willow, Oak, C.M. Uncommon.
- Cilix Spinula*, Chinese Character, 5 6 8, Sloe, Hawthorn. Common and widely distributed.

PSEUDO-BOMBYCES.

- Dicranura Bicuspis*, Alder Kitten, 5, Alder Kitten, H.T. Scarce.
- D. Furcula*, Sallow Kitten, 6 7 8, Sallow, Bu., H.T., M. Rare.
- D. Bifida*, Poplar Kitten, 6 7 8, Poplar, M., P.P., C.M. Sometimes pretty common.
- D. Vinula*, Puss Moth, 5 6, Sallow, Poplar, Willow. Common everywhere.
- Pygæra Bucephala*, Buff Tip, 6 7, Oak, Birch, Sallow, Ash. For a number of years was uncommon, but is now plentiful.
- Notodonta Camelina*, Coxcomb Prominent, 6 7 8, Birch, Whitethorn, Hazel, Bu., B.W., C.M., M. Widely distributed.
- N. Dictæa*, Swallow Prominent, 5 6 7, Poplar, Willow, M., H.T. Local and scarce.

NOCTUÆ.

- N. Dictæoides*, Lesser Swallow Prominent, 5 6, Birch, M. Local and scarce.
N. Dromedarius, Iron Prominent, 6, Birch, M., Bu., C.M. Uncommon.
N. Ziczac, Pebble Prominent, 5 6 8, Sallow, Poplar, M. Local and scarce.
N. Chaonia, Lunar Marbled Brown, 5, Oak, M. Local and scarce.
Diloba Cæruleocephala, Figure of 8, 9, Whitethorn, Blackthorn. Does not appear to be common.
Thyatira Derasa, Buff Arches, 7, Bramble, M., P.P., H.T. Comes rather freely to sugar.
T. Batis, Peach Blossom, 6 7, Bramble, P.P., M., H.T. Comes rather freely to sugar.
Cymatophora Duplaris, Lesser Satin Carpet, 6 7, Birch, C.M., H.T. Uncommon.
C. Diluta, Lesser Lutestring, 8 9, Birch, Bu. Uncommon.
C. Flavicornis, Yellow-horned, 3 4, Birch. Generally distributed and sometimes common.
C. Ridens, Frosted Green, 4, Oak, M. Local and uncommon.
Bryophila Algæ, Tree-lichen Beauty, 7, Lichens. Very rare and little known.
B. Perla, Marbled Beauty, 7 8, Lichens, Bu., M., B. Common at rest on old walls.
Acronycta Psi, Common Dagger, 6 7 8, Whitethorn, &c. Very common at rest on trees.
A. Leporina, Miller, 6 7, Birch, C.M., H.T. Local and uncommon.
A. Aceris, Sycamore Tussock, 6, Sycamore, Horse Chestnut, M. Local and uncommon.
A. Megacephala, Poplar Grey, 6 7, Poplar. Common and distributed.
A. Alni, The Alder, 6, Alder, Birch, Sallow, Oak, B.W., M. Very rare.
A. Rumicis, Knot Grass, 5 6 7, Willow, Heath, Dock, Strawberry, M., C.M. Common.
A. Menyanthidis, Moss Dagger, 6 7, Sweet-gale, Willow, Ca.M., C.M., B., Bu., S.B. Often found at rest.
Leucania Lithargyria, Ochreous Brown, 7, Chickweed, Plantain. Common and widely distributed.
L. Comma, Shoulder Stripe Wainscot, 6 7, Sorrel, Grasses, M., H.T. Local and uncommon.
L. Impura, Smoky Wainscot, 6 7 8, several species of Sedge. Common everywhere. Partial to flowers at dusk.
L. Pallens, Common Wainscot, 6 7 8, various Grasses. Common everywhere. Partial to flowers at dusk.
Nonagria Fulva, Small Wainscot, 8 9, Stems of Reed Meadow Grass, Sedge. Local but common.
N. Typhæ, Bullrush, 8 9, Stems of Reed Mace. Local but common.
Gortyna Flavago, Frosted Orange, 8 9, Stems of Thistle, Burdock, Water Betony. Widely distributed and common.
Hydræcia Nictitans, Golden Ear, 7 8, Roots of various Grasses. Widely distributed and common.
H. Petasitis, Butter Bur, 8 9, Stems and Roots of Butter-bur, B.M., Bu., C.M., H.T., R.S. Widely distributed, and not uncommon.
H. Micæa, Rosy Rustic, 8 9, Roots of various Docks, B.M., Bu., C.M., R.S. Widely distributed, and not uncommon.
Axylia Putris, Clouded Dart, 6 7, various low plants. Common and distributed.
Xylophasia Rurea, Bordered Brindle, 6 7, Grass, Sorrel, Primrose. Common and distributed; a variable insect.
X. Sublustris, Reddish Light Arches, 6 7, Unknown, M. Scarce.
X. Polyodon, Dark Arches, 6 7, Roots of Grasses and other low plants. Abundant everywhere, comes freely to light and sugar.
X. Scolopacina, Slender Clouded Brindle, 7 8, Club Rush, Quaking Grass, M. Uncommon and local.
Heliophobus Popularis, Feathered Gothic, 8, Roots of Grass, M. Uncommon and local.

- Charæas Graminis*, Antler, 8, Roots of Grass, M., C.M., Bu., B., Mr., S., D. Common, flying early in the morning.
- Luperina Testacea*, Lesser Flounced Rustic, 8 9, Stems of Grass. Widely distributed and common, at rest on old fences.
- L. Cespitis*, Turf Rustic, 8 9, Grass. M. Uncommon and local.
- Maestra Aneeps*, Large Nutmeg, 6, Unknown. Uncommon and local.
- M. Brassicæ*, Cabbage, 6 7, Cabbages and various plants. Abundant everywhere.
- M. Persicariæ*, Dot, 6 7, Elder and numerous plants, M., R. Local, sometimes common.
- Apamea Basilinea*, Rustic Shoulder Knot, 6, Wheat, afterwards many herbaceous plants. Common and very destructive in the larva state.
- A. Gemina*, Brown Pinion, 6 7, various Grasses. Widely distributed and common.
- A. Unanimis*, Small Clouded Brindle, 7 8, various Grasses, M. Local and uncommon.
- A. Oculea*, Common Rustic, 7 8, various Grasses. Distributed and common at sugar.
- Miana Strigilis*, Marbled Minor, 6 7, Stems of Grasses. Abundant everywhere; a very variable insect.
- M. Fasciuncula*, Middle Barred Minor, 6 7, Stems of Turfy Hair Grass. Very common and distributed.
- M. Literosa*, Rosy Minor, 6 7, Unknown, Bu., M., B. Common at sugar.
- M. Arcuosa*, Least Minor, 7, Stems of Tufted Hair Grass, Mr., M., Bu., B. Widely distributed and not uncommon.
- Celena Haworthii*, Haworth's Minor, 7 8 9, Cotton Grass, S.B., CA.M., C.M. Uncommon and local.
- Grammesia Trilinea*, Triple Lines, 6 7, Plantain. Common at sugar, and flying in meadows at dusk.
- Caradrina Morpheus*, Bordered Rustic, 6 7 8, various low plants, M. Local and uncommon.
- C. Cubicularis*, Mottled Beauty, 6 7 8, Chickweed. Widely distributed and common.
- Rusina Tenebrosa*, Brown Feathered Rustic, 6 7, Knotgrass. Not so common as the above.
- Agrotis Saucia*, Pearl Underwing, 7 8 9, Plantain, Dock, M. Appears to be local, sometimes common.
- A. Segetum*, Common Dart, 6 7 8 9, Turnips, Mangold-wurzel, Carrots. Abundant, the larvæ are very destructive.
- A. Suffusa*, Dark Sword Grass, 9, Roots of Radishes, Lettuce, &c. Distributed, but not common.
- A. Exclamationis*, Heart and Dart, 6 7 8, Roots of various low plants. Abundant; partial to flowerbeds at dusk.
- A. Nigricans*, Garden Dart, 6 7 8, Clover and other low plants, C.M. Local and common.
- A. Tritici*, White Line Dart, 8, Grasses, &c., M. Local and scarce.
- A. Agathina*, White Letter, 8, Heath, near M. Local and scarce.
- A. Porphyrea*, True Lover's Knot, 6 7, Heath, CA.M., C.M. Uncommon.
- Triphæna Janthina*, Small Broad Bordered Under Wing, 7 8, Primrose and various low plants. Uncommon and distributed.
- T. Fimbria*, Broad Bordered Yellow Under Wing, 6 7, Sallow, Birch, &c., C.M., Bu., M. Does not appear to be a common species.
- T. Orbona*, Lesser Yellow Under Wing, 7 8, Sallow, Birch, &c. Common and generally distributed.
- T. Pronuba*, Large Yellow Under Wing, 6 7 8, Sallow, Birch, &c. Abundant everywhere.
- Noctua Glareosa*, Autumnal Rustic, 9, Broom, Sorrel, Dock, Bu., B., H.T., M., S.B. Local and uncommon.
- N. Depuncta*, Black Spotted, 7 8, Sorrel and other low plants, M. Scarce.
- N. Augur*, Double Dart, 6 7, Whitethorn, Sallow and other shrubs. Common and widely distributed.
- N. Plecta*, Flame Shoulder, 6 7, Bedstraw and other low plants. Common and widely distributed.
- N. C—Nigrum*, Hebrew Character, 7 8, various low plants, M., Bu. May be taken at sugar and flying at dusk.

- N. *Triangulum*, Double Square-Spot, 6, various low plants. Distributed and common.
- N. *Brunnea*, Purple Clay, 7, Sallow and various low plants. Distributed and common.
- N. *Festiva*, Ingrailed Clay, 6, 7. Very common at sugar, a variable insect.
- N. *Dahlia*, Barred Chesnut, 7, 8, various low plants, S.B., M. Appears to be somewhat local and uncommon.
- N. *Rubi*, Small Square-Spot, 5, 8, various low plants. Distributed, but uncommon.
- N. *Umbrosa*, Six-Striped Rustic, 8, various low plants. Distributed, but uncommon.
- N. *Baja*, Dotted Clay, 7, various low plants. Distributed, but uncommon.
- N. *Neglecta*, Grey Rustic, 8, Heath, afterwards various low plants, M. Local and uncommon.
- N. *Xanthographa*, Square-Spot Rustic, 8, various Grasses. Abundant everywhere.
- Trachea Pimiperda*, Pine Beauty, 3, 4, Scotch Fir. Local and uncommon.
- Taniocampa Gothica*, Hebrew Character, 3, 4, Oak, Sallow, Whitethorn. Very common everywhere.
- T. *Leucographa*, White-marked, 3, 4, Plantain, H.T. It is said to frequent the catkins of the sallow.
- T. *Rubricosa*, Red Quaker, 3, 4, Dock, B., M., B., D., S., M., R. Common at Sallows.
- T. *Instabilis*, Clouded Drab, 3, 4, Oak, Willow, Sloe. Common everywhere.
- T. *Populeti*, Intermediate, 3, 4, Poplar, Aspen, M., H.T. Uncommon, and appears to be very local.
- T. *Stabilis*, Common Quaker, 3, 4, Oak, Elm. Common everywhere.
- T. *Gracilis*, Powdered Quaker, 3, 4, Willow, M., H.T. Uncommon and local.
- T. *Miniosa*, Blossom Underwing, 3, 4, Oak. Very scarce.
- T. *Munda*, Twin-Spotted Quaker, 3, 4, Elm, Aspen, H.T., M. Local and uncommon.
- T. *Cruda*, Small Quaker, 3, 4, Oak. Common and widely distributed.
- Orthosia Suspecta*, Allied Rustic, 7, 8, Unknown, M., S.B. Local and uncommon.
- O. *Ypsilon*, Dingy Shears, 7, Willow and Poplar, M. Local and uncommon.
- O. *Lota*, Red-Line Quaker, 9, 10, Willow. Common and widely distributed.
- O. *Macilentia*, Yellow-Line Quaker, 9, 10, Beech. Common and generally distributed.
- Anchocelis Rufina*, Flounced Chesnut, 9, Oak. Not so common as the above.
- A. *Litura*, Brown-Spot Pinion, 8, 10, Willow, Alder, and various low plants. Common and widely distributed.
- Cerastus Vaccinii*, Chesnut, 10, 11, 2h, 3h, Oak and various low plants. Common and widely distributed.
- C. *Spadicea*, Black Chesnut, 10, 11, 2h, 3h, Sloe, Hawthorn, Honeysuckle. Common and widely distributed.
- Scopelosoma Satellitia*, Large Chesnut, 10, 11, 2h, 3h, 4h, Oak, Elm, Beech. Common and widely distributed.
- Xanthia Citrigo*, Orange Sallow, 9, Lime. Local and uncommon.
- X. *Cerago*, Sallow, 9, Sallow and several low plants. Abundant and distributed.
- X. *Silago*, Pink-Barred Sallow, 9, Sallow and several low plants. Abundant and distributed.
- X. *Ferruginea*, Brick Coloured Moth, 9, 10, Poplar, Willow. Common everywhere.
- Cirrhoëdia Xerampelina*, Centre-Barred, 9, Ash, M. Rare.
- Tethea Subtusa*, Olive Moth, 7, 8, Poplar, B.M. Uncommon.
- Cosmia Trapezina*, Dun-bar, 7, 8, Oak, Birch. Common and distributed.
- Dianthæcia Carpophaga*, Tawny Shears, 6, Bladder Campion, H.T.
- D. *Capsincola*, Lychnis, 6, Red Campion, White Campion, M., B., M. Common.
- D. *Cucubali*, Campion, 6, Bladder Campion, M., M. Local and uncommon.
- D. *Conspersa*, Marbled Coronet, 6, 7, Bladder Campion, Ragged Robin, M., H. Local and uncommon.
- Polia Chi*, Stone Moth, 8, 9, Sow-thistle, Whitethorn, Lettuce, B., B., S.B., S., D. Very common, at rest.
- Epunda Nigra*, Dusky Nutmeg, 9, Chickweed, Dock, &c., C.M., at sugar. Not common.
- Miselia Oxyacanthæ*, Green-Brindled Crescent, 9, 10, Hawthorn, Sloe. Common everywhere.
- Agriopsis Aprilina*, Marvel-du-Jour, 9, 10, Oak. Common everywhere.

- Phlogophora Meticulosa*, Angle-Shades, 6 9 10, numerous low plants. Common everywhere.
- Euplexia Lucipara*, Small Angle-Shades, 6 7, numerous low plants. Common everywhere.
- Aplecta Herbida*, Green Arches, 6 7, numerous low plants, M., H.T. Local and uncommon.
- A. Occulta*, Great Brocade, 7 8, numerous low plants, M. Local and uncommon.
- A. Nebulosa*, Grey Arches, 6 7, Whitethorn, Sallow, Birch, Bu., M., C.M., H.T. Local and uncommon.
- Hadena Adusta*, Dark Brocade, 6 7, various low plants, M. Local and uncommon.
- H. Proteus*, Brindle Green, 9, Oak. Common and distributed.
- H. Glauca*, Glaucous Shears, 6, Willow, B., Bu., S.T., C.M. Uncommon, at rest.
- H. Dentina*, Common Shears, 6 7, various low plants. Common everywhere.
- H. Suasa*, Dog's Tooth, 6, various low plants, M. Uncommon and local.
- H. Oleracea*, Bright-Line Brown Eye, 6, various low plants. Common everywhere.
- H. Pisi*, Broom Moth, 6, Broom, Birch, Fern, &c., Bu., B., M., Mr., C.M. Common.
- H. Thalassina*, Pale-Shouldered Brocade, 6 7, Broom, Honeysuckle, &c. Not so common as the above: distributed.
- H. Contigua*, Beautiful Brocade, 6, Hazel, Birch, Oak, M. Rare.
- H. Rectilinea*, Saxon, 6, Bilberry, Bramble, Sallow, M. One specimen at Trafford Park.
- Cloantha Solidaginis*, Golden-rod Brindle, 8, Bilberry, S.B., B. Local, probably on most of our Moors at rest.
- Calocampa Vetusta*, Red Sword-Grass, 9 10 3h 4h, various meadow and marsh plants, C.M., M. Comes to sugar and Ivy Blossoms.
- C. Exoleta*, Sword-Grass, 9 10 3h 4h, various meadow and marsh plants Mr., Bu., M., C.M.. Comes to sugar and Ivy Blossoms.
- Xylina Rhizolitha*, Grey Shoulder-Knot, 9 10 3h 4h, Oak, M. Uncommon and local; may be found at rest, and taken at sugar.
- Cucullia Umbratica*, Tansy Shark, 6, Common Sow-thistle, Corn Sow-thistle, Bu., M., Mr., R. Sometimes found at rest on Palings, &c.
- Anarta Myrtili*, Beautiful Yellow Underwing, 5 6 8, Heath, Ca.M., C.M. Appears to be confined to the Mosses.
- Heliodes Arbuti*, Small Yellow Underwing, 5 6, Mouse-ear Chickweed. Uncommon and local.
- Brephos Parthenias*, Orange Underwing, 3, Birch, Mr. One specimen at Sallow-bloom.
- Abrostola Urticæ*, Spectacle, 6 7, Nettle, B., Bu., M. Distributed and uncommon.
- A. Triplasia*, Dark Spectacle, 6 7, Nettle, B., Bu., M. Distributed and uncommon.
- Plusia Chrysitis*, Burnished Brass, 6 7 8, Nettle, Thistle. Uncommon and distributed.
- P. Bractea*, Gold Spangle, 7, Hemp-agrimony, M. Local and uncommon.
- P. Festucæ*, Gold Spot, 8 9, Reeds, and other marshy plants, Bu., M., B., C.M. Local and uncommon.
- P. Iota*, Golden Y, 6 7, Nettle, Groundsel, Honeysuckle, Bu., M., B., C.M., H.T., Uncommon.
- P. V—Aureum*, Beautiful Golden Y, 6 7 Nettle, Groundsel, Honeysuckle. Bu., M, B., C.M., H.T. Local and uncommon.
- P. Gamma*, Silver Y, 6 7 8 9 10, Nettle, Groundsel, Honeysuckle. Common everywhere.
- P. Interrogationis*, Scarce silver Y, 6 7, Heath, S.B. Uncommon, appears to be the only known locality.
- Gonoptera Libatrix*, Herald, 8 9 3h 4h 5h 6h, Willow. Common and widely distributed.
- Amphipyra Tragopogonis*, Mouse, 7 8 9, numerous low plants. Common and widely distributed.
- Mania Typica*, Dark Gothic, 6, numerous low plants. Common and widely distributed.
- M. Maura*, Old Lady, 7 8, numerous low plants. Common and widely distributed.
- Stilbia Anomala*, Anomalous, 8 9, Grasses, S.B. Local and uncommon.

Catocala Fraxina, Clifden Nonpariel, 8 9, Poplar, Aspen, Ash, B., M., P. Very rare, the last being captured near Bolton; it flew into a cottage, being attracted by the light.

Euclidia Mi, Mother Shipton, 6, Clover, and other low plants, M., C.M. Local, not uncommon.

E. Glyphica, Burnet Companion, 6, Dutch Clover, M. Uncommon and local.

Phytometra Ænea, Small Purple Barred, 6 7, Milkwort, M. Uncommon and local.

DELTOIDES.

Hypena Proboscidalis, The Snout, 6 7, Nettle, M. Common amongst Nettles.

Herminia Grisealis, Small Fan-foot, 6 7, Golden Saxifrage, M., H.T. By beating Hedges.

PYRALIDES.

Pyralis Farinalis, Meal Moth, 6 7 8 9, Straw, Corn, &c. Common and distributed in stables, &c.

Aglossa Pinguinalis, Tabby, 6 7, Feeds on greasy Horse-cloths, &c. Common and distributed in stables.

Pyrausta Purpuralis, Crimson and Gold, 5 6 7 8, Mint, M. Flying in sunshine.

P. Ostrinalis, Scarce Purple and Gold, 6 7 8, Unknown, M. Flying in sunshine.

Herbula Cespitalis, Straw-barred, 5 6 7 8, Unknown, S.B. Flying in sunshine.

Cataclysta Lemnalis, Small China Mark, 6 7 8, Duckweed. Common at old ponds, widely distributed.

Paraponyx Stratiotalis, Ringed China Mark, 6 8, Water Aloe, Water Starwort, M. Very local.

Hydrocampa Nymphæalis, Brown China Mark, 6 7, Water Lily, Pondweed. Widely distributed, common at ponds.

H. Stagnalis, Beautiful China Mark, 6 7, Pondweed. Widely distributed, common at ponds.

Botys Pandalis, Bordered Pearl, 6, Unknown, M. Local and scarce.

B. Flavalis, Gold China Mark, 7, Unknown, M. Local and scarce.

B. Hyalinalis, Scarce Pearl, 7, Unknown, M. Local and scarce.

B. Verticalis, Mother-of-Pearl, 6 7, Nettle. Rather local, amongst Nettles.

B. Fuscalis, Dusky Brindled, 6, Seeds of Yellow Rattle. By beating, common and distributed.

B. Urticalis, Small Magpie, 6 7, Nettle. Amongst Nettles, common and widely distributed.

Ebulea Crocealis, Small Straw China Mark, 7, Common Fleabane, M., H.T. Local, rather uncommon.

E. Sambucalis, Garden China Mark, 6 7 8, Elder, Bindweed. Common, by beating amongst food plant.

Pionea Forficalis, Garden Pebble, 5 6 7 8, Cabbage, Horse-radish. Common in gardens.

Spilodes Stricticalis, Diamond Spot, 7 8, Sea Wormwood, M. Rare and local.

Scopula Lutealis, Pale Straw, 7 8, Coltsfoot, Knapweed. Generally distributed and common.

S. Olivalis, White Brindled, 6 7, various low plants. By beating, common and distributed.

S. Prunalis, Dusky Brindled, 6 7, various low plants, M., H.T. Common.

Scoparia Ambigualis, Small Brown Bar, 6 7, Moss. At rest on Pine Trees, common.

S. Cembræ, Large Grey, 7 8, Unknown. Frequently in brick-yards.

S. Murana, Muranine, 6 7, Moss, G. At rest on rocks.

S. Lineola, Line Grey, 8, Lichen on Sloe, M. Very scarce.

S. Mercurella, Small Grey, 7 8, Unknown, M. Local, uncommon.

S. Truncicolella, Traunian, 7 8, Unknown, M. Very local, not scarce.

S. Angustea, Narrow Grey, 8 9 10 4h, Moss. At rest on walls, uncommon.

S. Pallida, 7 8, C.M. Not abundant.

CRAMBITES.

- Crambus Pratellus, Dark Inlaid Veneer, 5 6 7. Abundant, generally distributed.
- C. Hamellus, Pearl-streak Veneer, 7. Heaths and Mosses, scarce.
- C. Pascuellus, Inlaid Veneer, 6 7, C.M. Amongst heath.
- C. Margaritellus, Pearl Veneer, 6. On Mosses, common.
- C. Pinetellus, Pearl Veneer, 7 8. Found on Honeysuckle.
- C. Perlellus, White Veneer, 7 8, C.A.M., C.M. Uncommon.
- C. Warringtonellus, Leaden Veneer, 7 8, C.M. Extremely local.
- C. Selasellus, Hübner's Veneer, 7 8. Very local, uncommon.
- C. Tristellus, Dingy Veneer, 7 8 9. Common, widely distributed.
- C. Culmellus, Small Straw-yellow Veneer, 6 7. Abundant everywhere.
- C. Hortuellus, Garden Veneer, 6 7, Moss. Common on Mosses.
- Schoenobius Forficellus, Aquatic Veneer, 6 7, Reed Meadow Grass. Amongst Reeds at dusk.
- Ephestia Elutella, Narrow Veneer, 6 7, Hazel Nuts, Chocolate, Figs. In Grocer's Shops.
- Phycis Befulella, Three Streaked, 6 7, Birch. Rare and local.
- P. Carbonariella, Brown Knot-horn, 6 7. On burnt places on heaths.
- Pempelia Palumbella, Mealy Knot-horn, 7 8, C.M. Amongst Birch Bushes.
- Rhodophæa Tumidella, Warded Knot-horn, 7 8, Oak, C.M. Extremely scarce.

LIST OF BIRDS.

In compiling this list of the Birds of our neighbourhood, I have divided them into three sections; first, the permanent residents; second, summer visitors; and last, winter and occasional visitors. Of the first we have 66 specimens, the second 34, and the third 43, making a total of 143 out of 350, which are supposed to comprise the Birds of Great Britain and Ireland. In addition to the names of persons that appear in the remarks, the Society is much indebted to the following gentlemen who have contributed largely to the information therein contained: Mr. Wright Johnson, of Prestwich; Mr. Holland and Mr. J. Turner, of Jumbo, near Middleton; Mr. R. Entwistle, of Bolton; Mr. H. Miller, of Accrington; and Mr. J. Drake, of Bury, late of Rochdale.

R. DAVENPORT.

PERMANENT RESIDENTS.

- Falco aesalon*: Merlin. Not very common, being much hunted for by collectors. A beautiful specimen was obtained by Mr. John Drake (a member of our Society), at Clegg Hall, near Rochdale; others have been taken about Prestwich, Middleton, and Rawtenstall every year.
- F. tinnunculus*: Kestrel. Common everywhere; breeding at Simpson Clough, and The Park, Pilkington.
- F. nisus*: Sparrow Hawk. Not so common as *F. tinnunculus*; nests have been found at The Park, in the year 1870.
- Otus vulgaris*: Long-eared Owl. Several specimens have been taken in this neighbourhood, one at Copy Wood, near Middleton, 1868, another at Pilsworth, 1869. Though designated common, it is far from being so.
- O. brachyotus*: Short-eared Owl. A very rare bird in this neighbourhood; one was taken at Rawtenstall, 1868, another at Pilsworth, 1870.
- Strix flammea*: Barn, or White Owl. Very plentiful in the country, breeding about old buildings, such as Hay Sheds, &c.
- Turdus viscivorus*: Missel Thrush. A very common bird in our wooded districts. Spring Side and Simpson Clough are well stocked with them.
- T. musicus*: Song Thrush, or Throstle. A very common and always welcome bird; generally found in Gardens where the young may be brought up in safety. I heard one giving forth its melodious notes as early as January 3rd, of the present year (1872) in the garden of Mr. Lomax, Walmersley Road, Bury.
- T. merula*: Blackbird. Very common, and a great plague to the gardeners, robbing them of a very great deal of fruit.
- Accentor modularis*: Hedge Sparrow. A very common bird, laying beautiful blue eggs and plenty of them. I have heard of instances where eggs have been taken from their nests every day till as many as 20 have been obtained from one nest.
- Sylvia Rubecula*: Robin Redbreast. Very common, as every one knows, approaching our dwellings during hard and frosty weather.
- S. phenicurus*: Redstart. A very shy and retiring bird, keeping away from the habitation of man. It breeds at Simpson Clough, Prestwich, Heaton Park, and Holcombe.
- S. rubicola*: Stonechat. Used to be plentiful in the neighbourhood of Middleton, but is now rare.

- Regulus cristatus*: Golden-crested Wren. The nest and eggs of this bird have been taken at Cockey Moor, as well as Reddish Wood.
- Parus major*: Great Tit (Oxeye). Common about Prestwich and Heaton Park.
- P. cæruleus*: Blue Tit. Very common.
- P. ater*: Cole Tit. Common about Prestwich and Heaton Park.
- P. palustris*: Marsh Tit. Not so common as the three last. It is found, as its name implies, about swampy places.
- P. caudatus*: Longtailed Tit. Common, breeding plentifully round about Bolton, and building a nest something of the shape of a round ended soda-water bottle.
- Motacilla Yarrellii*: Pied Wagtail. A bird that is very common about our meadows and brooks; 'tis a pleasing sight to watch them in country places running along the tops of houses in search of food.
- M. boarula*: Rock Wagtail. Plentiful about Tottington, mostly in the winter plumage; seemingly it prefers other localities for incubation.
- Anthus pratensis*: Cheeping, or Tit Lark. A very common bird in this locality, breeding plentifully, as almost every one knows.
- Alauda arvensis*: Sky Lark. Very common.
- Emberiza miliaria*: Common Bunting. Though designated common it is far from being so. In this neighbourhood, and also about Holcombe and Bolton, the Yellow Hammer exceeds it by far in point of numbers.
- E. schoeniclus*: Black-headed Bunting. Very common about old pits, breeding very plentifully about Heap
- E. citrinella*: Yellow Bunting. The most common of the Bunting family, being taken in great numbers on stubble fields in winter.
- Fringilla cœlebs*: Chaffinch, or Pink. This bird derives its latter name from its call note, "pink, pink," often and well imitated by the Great Tit, which thereby deceives the young fowler and causes its own destruction.
- F. montifringilla*: Brambling. Not very common, though appearing some winters in great numbers, locating itself in plantations of Beech Trees, upon the seeds of which it feeds chiefly whilst here.
- F. montana*: Tree Sparrow. This species breeds but sparingly with us. I have had the eggs from behind Grant's Tower, Walmersley, and a few birds are occasionally shot about Middleton, Simpson Clough, and Prestwich.
- F. domestica*: House Sparrow. Very common.
- F. chloris*: Green Linnet. Very common, and much persecuted by gardeners on account of its liking for seeds, especially mustard. It breeds plentifully.
- Linota cannabina*: Brown Linnet. Very common in stubble fields in winter; breeds at Simpson Clough, Prestwich, and Heaton Park generally.
- L. linaria*: Lesser Redpole, or Grey-bob. This bird breeds but sparingly about Bury. Its nest has been taken at Cockey Moor Woods, Simpson Clough, and other such places.
- L. montium*: Twite. Plentiful in stubble fields and about granaries, but mostly keeping in flocks in winter.
- Sturnus vulgaris*: Starling. Very common, congregating in immense flocks in autumn and winter.
- Corvus corone*: Carrion Crow. Very rare, and seldom seen in company with its species. One was shot by Mr. J. White, at the Bury Reservoir, Radcliffe, 1870, several others about Middleton and Rawtenstall.
- C. frugilegus*: Rook. There are several rookeries in the neighbourhood of Bury; the largest are "Starkies," Bamford Hall, and Spring Side.
- C. monedula*: Jackdaw. It breeds in the steeple of St. Luke's Church at Heywood, and the Parish Church, Bury, and among the rooks at Bamford.
- C. Pica*: Magpie. Very common.
- C. glandarius*: Jay. This bird was once pretty common about Ringley, but is now of rare occurrence, except on Chat Moss. It is occasionally shot at Heaton Park and Middleton.
- Picus viridis*: Green Woodpecker. Has been known to lay its eggs at Simpson Clough, but has been robbed of them before incubation has been completed.

- P. major**: Great Spotted Woodpecker. Not very plentiful in the immediate neighbourhood of Bury. Several have been obtained at Alkington, near Middleton, and also at Bamford Wood.
- Certhia familiaris**: Creeper. Once plentiful about Gorsey Brow, but now met with but sparingly.
- Troglodytes vulgaris**: Wren. Very common almost everywhere.
- Alcedo ispida**: Kingfisher. A remarkable instance of the tameness of this usually shy bird occurred last year at the Bury Reservoir. A Mr. White was fishing there, when a hen Kingfisher came flying up the feeder, and alighted on the end of his fishing rod, where it stayed some time. It breeds near Spring side up the river Irwell and at Simpson Clough.
- Columba ænas**: Stock Dove or Wood Pigeon. Breeds at the Park, Pilkington; Chat Moss, and Holcombe.
- Phasianus Colchicus**: Common Pheasant. A foreign bird introduced into this country, but now quite naturalised.
- Lagopus Scoticus**: Red Grouse. Breeds on Chat Moss, Holcombe, Blackstone Edge, and in fact on all our moorlands.
- Perdrix cinerea**: Partridge. Very common.
- Charadrius pluvialis**: Golden Plover. Not very plentiful with us; still, a few are met with every year about Pilsworth and Holcombe.
- C. hiaticula**: Ringed Plover. This bird is met with every year on the river banks and reservoirs, both summer and winter.
- Vanellus cristatus**: Pewit or Lapwing. Very common, breeding freely in our ploughed fields, and generally depositing its eggs in the impression of a horse's foot or some such rough place.
- Streptilas interpres**: Turnstone. Occasionally shot during stormy weather.
- Calidris arenaria**: Sanderling. Generally seen in flocks towards October or November, though specimens have been shot at Bury, Belmont, and other places in full summer plumage.
- Ardea cinerea**: Common Heron. A few of these birds are seen at Bury Reservoir and Belmont almost every month of the year. One, a young bird, was shot at the "Old Charley Lodge," January, 1870, during the severe frost, taking gold fish. From the condition of its body it must have been starving.
- Numenius arquata**: Curlew. Several have been taken in this neighbourhood. It breeds occasionally on Chat Moss.
- Totanus calidris**: Redshank. Occasionally shot at Bury Reservoir, Belmont, though rare.
- Tringa maritima**: Purple Sandpiper. A few specimens have been obtained both in summer and winter, about Hollingworth, and Bury Reservoirs. One at the latter place so late as December 8th, 1871, shot by Mr. George Holt, of Elton.
- Rallus aquaticus**: Water rail. Occasionally seen and known to breed at Chamber Hall, Bury.
- Gallinula chloropus**: Moorhen or Waterhen. Breeds abundantly about Chamber Hall.
- Fulica atra**: Coot. Frequents old pits, and is occasionally seen at Chamber Hall, though rare.
- Anser leucopsis**: Bernicle Goose. A few specimens are occasionally met with in this neighbourhood. One was shot on Morris Lodge, Pilsworth, 1868, and others at Belmont.
- Anas boschas**: Wild Duck. Frequently shot at Bury reservoir, Springside, and other places.
- A. crecca**: Teal Duck. Shot occasionally, but not common.
- A. penelope**: Wigeon. More plentiful than either Mallard or Teal; a regular visitor to Belmont and Hollingworth.
- Podiceps minor**: Little Grebe. Breeds at Chamber Hall, and is occasionally met with at Bury reservoir; two were shot there last year (1871).

SUMMER VISITANTS.

- Falco subbuteo*: The Hobby. A very rare bird in this neighbourhood. One shot at Hollingwood, near Manchester, is now in the possession of Mr. Wright Johnson, Prestwich; another was shot at Bolton, 1870.
- Muscicapa grisola*: Spotted Flycatcher. A very common and interesting little bird, breeding freely about Prestwich and Cockey Moor.
- M. atricapilla*, Pied Flycatcher. A regular visitor to these parts, but not so plentiful as *M. grisola*.
- Cinclus aquaticus*: Dipper. A rare bird in this neighbourhood. The eggs have been found at Simpson Clough, by Mr. A. Wood, of that place; it is plentiful about Accrington.
- Turdus torquatus*: Ring Ouzel. Very plentiful on the Moorlands, gathering in flocks on the approach of winter.
- Sylvia rubetra*: Whinchat. A very pretty bird, breeding freely about Springside.
- S. ænanthe*: Wheat-ear. Common about the old walls and stone quarries on the Moorlands.
- S. phragmitis*: Sedge Warbler. Very plentiful about Chamber Hall, and breeds at Simpson Clough, where it is called "Mock Nightingale."
- S. locustella*: Grasshopper Warbler. Very common about Middleton.
- S. atricapilla*: Black-cap Warbler. Common in most places, arriving early in May.
- S. hortensis*: Garden Warbler. A very charming songster, found in orchards plentifully.
- S. cinerea*: Common Whitethroat. Very common everywhere.
- S. curruca*: Lesser Whitethroat. Very rare and bad to find owing to its retreating habits; it frequents the thickest parts of woods and orchards.
- S. sibilatrix*: Wood Warbler. Not so common as *S. trochilus*; found at Prestwich, Middleton, and other places.
- S. trochilus*: Willow Warbler. Very common everywhere.
- S. rufa*: Chiff-chaff. Very common in woods and orchards.
- Motacilla Rayii*: Yellow Wagtail. A very beautiful and common bird on our ploughed fields, on its first arrival, spreading afterwards to the meadows in the breeding season.
- Anthus arboreus*: Tree Pipit. A very common bird in summer time, remarkable for its peculiar flight during song.
- Alauda arborea*: Wood Lark. A rare bird, breeding sparingly in this neighbourhood; it is found at Heaton Park, Prestwich, and Chatterton, near Oldham.
- Carduelis elegans*: Goldfinch. A rare bird in its wild state in this neighbourhood. One was shot at Bradshaw Fold, Middleton Junction, a short time since, by Mr. Holland.
- Yunx torquilla*: Wryneck. A rare bird; never very plentiful. One was shot at Prestwich, 1871; another at Cockey Moor, in the same year; it was once a common summer visitor.
- Cuculus canorus*: Cuckoo. Very much persecuted by game-keepers for its supposed destruction of game birds' eggs. I believe this is a great mistake, as last year I had the opportunity of examining the craws of several, and could trace nothing but insect (caterpillar) food therein. Very common, arriving about the middle of April.
- Hirundo rustica*: Swallow. }
H. riparia: House Martin. } All very common in summer time; more useful birds
H. urtica: Sand Martin. } we could not have.
- Cypselus apus*: Swift. Once very common about Rooden Lane, Prestwich, but now only of rare occurrence.
- Caprimulgus Europæus*: Night-jar. The eggs of this singular bird have been brought to the Bury Natural History Society from Chat Moss, by Mr. Robert Kay, and also from the same place by Mr. Robert Tootill. The bird has been shot both at Birtle, 1868, and Cockey Moor, 1869.
- Perdix Coturnix*: Quail. Breeds at Unsworth almost every year, though sparingly.
- Charadrius morinellus*: Dottrel. Very rare; it has been shot at Blackstone Edge-Holcombe, and White-moss, near Middleton.

- Squatarala cinerea*: Grey, or Silver Plover. Very rare, mostly keeping to the Sea Coast. One shot at Pilsworth, 1862; another at Belmont, near Bolton, 1868.
- Totanus hypoleucos*: Common Sandpiper. Very common.
- Tringa variabilis*: Dunlin. Very common.
- Gallinula crex*: Corn Crane. Very common in corn fields and meadows; very deceptive in its voice, seeming to have the powers of a ventriloquist.
- G. porzana*: Spotted Crane. Very rare; a couple were shot at Chamber Hall, 1867.

WINTER VISITANTS, AND STRAY, AND OCCASIONAL BIRDS.

- Falco halicæetus*: Osprey. One was shot at Heaton Park, Prestwich, 1870, and another at Gigg, near Bury, some time ago.
- Buteo lagopus*: Rough-legged Buzzard. A very rare bird; one was shot at Lostock Flats, 1852, by Mr. R. Shaw; another at Blackstone Edge, 1868.
- Lanius excubitor*: Grey, or Ash-coloured Shrike. A rare bird in this neighbourhood; one shot at Nabb Wife, 1869.
- L. collurio*: Red-backed Shrike. Occasionally shot, but not plentiful; a couple were shot at Tottington, some time ago, by J. Preston.
- L. rutilus*: Wood-chat Shrike. One shot at Walton-le-dale, 1870; for the information of which I am indebted to F. Entwistle, of Bolton.
- Turdus pilaris*: Fieldfare. Very common; coming in October, generally, and leaving us again in April.
- T. iliacus*: Redwing. A companion of the Fieldfare; coming, going, and associating with it.
- Oriolus galbula*: Golden Oriole. A young bird was shot at Cockey Moor, 1868, by C. Jackson, and another was in its company.
- Bombycilla garrula*: Waxwing Chatterer. A very fine specimen was shot at Diggle Hill, Prestwich, 1868, by Mr. Saunders, of Prestwich; others have been met with at Bolton, Rochdale, Middleton, and other places.
- Motacilla alba*: White Wagtail. Very rare indeed; one was shot at Bradshaw fold, April, 1869, and is now in Mr. Holland's collection, at the same place.
- Emberiza nivalis*: Snow Bunting. A few of these north-countrymen are taken every year in the country northwards; a couple at Walmersley, 1871.
- E. Laponica*: Lapland Bunting. A specimen of this rare bird was shot some time ago on White-moss, near Middleton, is now in Mr. Holland's collection.
- Fringilla spinus*: Siskin or Aberdevine. A pair were shot, 1871, at The Park, Pilkington, by Mr. John Bleakley.
- Loxia pyrrhula*: Bullfinch. A rarity in our woods at present, keeping more south.
- L. curvirostra*: Common Crossbill. Very rare; occasionally shot about Middleton and Bolton.
- Pastor roseus*: Rose-coloured Pastor. One specimen of this rare bird was shot in Denton Lane, Chadderton, near Oldham, 1860.
- Corvus corax*: The Raven. One was shot at Rawtenstall some time ago, and is now in Mr. Harrison's collection, of the same place.
- C. cornix*: Hooded Crow. One shot at Tonge, about 1860; several others have been seen in the neighbourhood.
- Picus minor*: Lesser-spotted Woodpecker. Has been taken several times at Alkington Hall, and has been known to breed at Simpson Clough.
- Upupa epops*: Hoopoe. A very handsome specimen was shot at Ringley Moss, 1870.
- Scelopax rusticola*: Woodcock. }
S. Gallinago: Common Snipe. } Regular winter visitors, coming stronger in some
S. Gallinula: Jack Snipe. } winters than others.
- S. major*: Great, or Solitary Snipe. Very rare; one was shot near Chadderton some time ago, and is now in Mr. Holland's collection, at Middleton Junction.
- Tringa Canutus*: Knot. An occasional winter visitor, though far from being plentiful.
- T. pusilla*: Little Stint. Four (probably a nest) of these Grallatores were shot at Bury Reservoir, 1870, by Mr. Frederick Oates; this is the only instance of their being taken in this neighbourhood.

- Crex pusilla*: Little Crake. Very rare, shot at Bradshaw Fold, 1864, by Mr. Holland.
- Cygnus ferus*: Wild Swan. Several made their appearance at Hollingworth, 1869, out of which two were shot.
- Anser ferus*: Wild Goose. Occasionally seen and obtained at Belmont, and other sheets of water.
- Fuligula marila*: Scaup Duck. One was shot on Morris Lodge, 1870, by Mr. J. Howe; others have been taken in the neighbourhood.
- Mergus albellus*: Smew. A very rare bird indeed. One was shot at Bury Reservoir some time ago, and is now in Mr. Johnson's collection, at Radcliffe.
- Podiceps cristatus*: Great Crested Grebe. Very rare; several have been seen at Chamber Hall, but few taken.
- Colymbus glacialis*: Great Northern Diver. One was taken some time ago at Bury Reservoir, and is now in the possession of Mr. Howard, Elton.
- Uria grylle*: Black Guillemot. A young bird was picked up dead at Summerseat, by Mr. H. Pickup, of that place.
- Sterna Boysii*: Sandwich Tern. Has been taken at the Rochdale Canal some time ago.
- S. hirundo*: Common Tern. } Several of all three of these Terns are met with every
S. arctica: Arctic Tern. } year during stormy weather.
S. minuta: Lesser Tern. }
- S. nigra*: Black Tern. One shot on the River Roach, at Blackford Bridge, 1870, another at Bury Reservoir, 1871; both birds of the first year.
- Larus ridibundus*: Brown-headed Gull. Occasionally seen in stormy weather.
- L. tridactylus*: Kittiwake. The same may be said of this Gull as *L. ridibundus*.
- Thalassidroma pelagica*: Stormy petrel. Several have been found dead through dashing against telegraph poles or wires.
- T. Leachii*: Fork-tail petrel. Caught alive at Middleton Junction Station, 1858, flying about a lamp on a foggy night.

LIST OF BIRDS BREEDING IN THE NEIGHBOURHOOD.

In preparing a list of the localities in which the Species of Birds breeding within a radius of 20 miles from this town may be found, I have endeavoured, as far as possible, to indicate a centre of the district in which the birds breed; and for that purpose I have selected some town or village, as, for instance,—Manchester (M.), and Hapton (HAP.); that town or village representing the centre of a circle with a radius of 6 miles or thereabouts. Sometimes it intersects the circle of another district; for it must be apparent to Naturalists that most species of Birds (which are of so migratory a character) cannot be expected to be found in one spot year after year.

Many of the species I have mentioned as breeding in this neighbourhood, do so only at intervals, and some few have only been found nesting once or twice.

The draining of marsh and waste land, the levelling of woods, and enclosing of heaths, have no doubt done much to diminish the number of our birds; though not to the same extent, it is to be feared, as the reckless destruction of the eggs and young birds by youths; which is a practice to be strongly condemned. If a collection of eggs is wanted as a supplement to one of Birds, a couple of eggs, or even more, may be taken from the nests of most Birds without causing them to leave the place; particularly when incubation has commenced.

The information concerning some of the species has been given me by friends in the country,—as farmers, game-keepers, &c., who have had opportunities of noting them.

In my list, B. Edge stands for Blackstone Edge; Bu., Bury; B., Bolton; HAS., Haslingden; HAP., Hapton; Hou; Houghton; M., Manchester; T., Turton; W., Whalley; *n.m.*, Materials of which the nests are formed.

J. H. WOOD.

Falco aesalon, Merlin, W., B. Edge, Rowley Moor, Dry parts of moors on ground. *n.m.*, Heather, lined with dry grass. Very rare, one nest on Rowley Moor in 1855.

Falco tinnunculus, Kestrel, Bu., B., W., Tops of tall trees, and in old magpie nests. *n.m.*, Twigs and dry leaves. Generally diffused, though not common.

Falco nisus, Sparrowhawk, Bu., B., M., in thick trees, sometimes near ground. *n.m.*, Large nest of twigs and dry grass. Much scarcer than Kestrel.

Strix flammea, Barn or White Owl, Bu., M., W., Old ruins or Church towers. *n.m.*, Slight nest of sticks, and debris of its prey. Rare around here; nests at Stand, and Radcliffe, in 1871.

Lanius collurio, Redbacked Shrike, HAP., Hou., Tall hedge or young tree. *n.m.*, Large nest of twigs, roots, and wool. Only an occasional visitant.

- Muscicapa grisola**, Spotted Flycatcher, Bu., &c., End of haystack, in old wall, or low tree. *n.m.*, Roots, dry grass, wool, and feathers. Rather numerous in nesting season.
- M. atricapilla**, Pied Flycatcher, W., M., In holes in trees. *n.m.*, Dry grass, wool, and feathers. Very rare, one seen in June, 1868, at Redvales.
- Cinclus aquaticus**, Dipper, Bu., W., &c., Under bridges, and on sides of stones near streams. *n.m.*, Large nest like Wren's, of moss and leaves. Shy in breeding season, and nest very difficult to find.
- Turdus viscivorus**, Missel Thrush, Bu., &c., On trees in orchards and woods. *n.m.*, Large nest of dry grass, and twigs. Nests easily found and often robbed.
- T. musicus**, Song Thrush, Bu., &c., In fences, hollies, or young trees. *n.m.*, Dry grass and moss, with lining of mud and cowdung, worked smooth, and when dry quite watertight.
- T. merula**, Blackbird, Bu., &c., On the side of steep banks, under tree roots, in stacks of timber, and sometimes in fences and young trees. *n.m.*—Dry grass and roots, then a layer of mud, with lining of finer grass and roots. Commonest in orchards and gardens.
- T. torquatus**, Ring Ouzel, Bu., T., Has., On ground on moors, in quarries, stone walls, &c. *n.m.*—Large nest of twigs, heather, mud, moss, and sheep's wool. Local, confined to particular moors.
- Accentor modularis**, Hedge Sparrow, Bu., &c., In thick hedges, sometimes close to the ground. *n.m.*—Twigs, moss, and hair. Nests most frequently in gardens.
- Sylvia Rubecula**, Robin Redbreast, Bu., &c., On sides of hedge bankings. *n.m.*—Dry leaves and grass, hair, and fine roots.
- S. phœnicurus**, Redstart, Bu., T., W., Holes in rocks, trees, or buildings, timber stacks, under tree roots, &c. *n.m.*—Moss, dead leaves, hair, feathers, and small fibres. Nests often inaccessible, and rarely robbed.
- Saxicola rubicola**, Stonechat, Bu., T., Has., In heather on hill sides, under furze bushes, on hedge sides. *n.m.*—Roots, grass, hair, sheep's wool, and feathers. Nests bad to find, the birds will decoy intruders away.
- S. rubetra**, Whinchat, Bu., &c., Under furze bushes, on hedge sides, on ground in meadows. *n.m.*—Dry grass, with lining of finer grass. Nests throughout South Lancashire.
- S. œnanthe**, Wheatear, Bu., T., Has., B., In stone walls, stone quarries, dry drains, old rabbit burrows. *n.m.*—Scanty nest of dry grass. Nests bad to find, the birds will decoy intruders successfully away.
- Sylvia locustella**, Grasshopper Warbler, Bu., M., At the bottom of thick underwood in woods, commons, &c. *n.m.*—Grass and moss. Nests rarely found, though the birds may be often heard and seen.
- S. phragmitis**, Sedge Warbler, Bu., &c., In bushes on banks of pits and brooks. *n.m.*—Roots, long stems of grass, and moss. Breeds plentifully in the southern and western parts of district.
- S. arundinacea**, Reed Warbler, Bu., Hap., Amongst reeds on banks of rivers. *n.m.*—Deep nests of reeds and grasses. Very rarely nests in the north.
- S. atricapilla**, Black-cap Warbler, M., W., Brambles or tall herbage. *n.m.*—Loose nest of roots and grass. Very seldom nests in the neighbourhood.
- S. hortensis**, Garden Warbler, M., In herbage on banks in woods and orchards. *n.m.*—Loose nest of roots, grass, and fibres. Not common in breeding season; more so in south.
- S. cinerea**, Whitethroat, Bu., &c., In thickets or herbage near the ground. *n.m.*—Flattish nest of long stems of grass and hair. Common in the southern and western parts of district.
- S. Curruca**, Lesser Whitethroat, M., Herbage on ground or hedgerows. *n.m.*—Grasses and hair. Very seldom breeds.
- S. sylvicola**, Wood Warbler, Bu., &c., On the ground in woods. *n.m.*—Domed nest of moss, hair, and feathers. Nests where tall trees abound.
- S. trochilus**, Willow Wren, Bu., &c. On the ground or the bankings of hedges. *n.m.*, Dry grass, lined with a profusion of feathers; the nest is entered from the side. Very plentifully distributed in breeding season.

- S. rufa*, Chiff-chaff, *Bu.*, &c., Amongst tangled brushwood on the ground. *n.m.*—Dry grass and moss, lining of feathers, the nest, like the preceding, entered from the side. Not so common as preceding, frequenting wooded districts more than it.
- S. cristatus*, Golden Crested Wren, *Bu.*, *HAP.*, *M.*, In fir and yew trees near the ground, generally on END of branch. *n.m.*—Moss, hair, and feathers; very like a diminutive Chaffinch's nest. A species much reduced in the immediate neighbourhood.
- Parus major*, Great Tit, *Bu.*, *M.*, Hole in tree or stump, sometimes old Magpie or other nest. *n.m.*—Twigs, moss, feathers, wool, Nests in thick woods; only one pair in a wood. Very pugnacious.
- P. caeruleus*, Blue Tit, *Bu.*, *M.*, &c., Hole in tree or stone wall. *n.m.*—moss, wool, feathers, hair. Plantifully distributed.
- P. ater*, Cole Tit, *Bu.*, *M.*, *HAS.*, *HAP.*, Hole in tree, very often in the roots of large trees, when laid bare by a slip of land. *n.m.*—Dry grass, wool, hair, feathers. Not common. Haunts extensive woods.
- P. palustris*, Marsh Tit, *Bu.*, *HAP.*, In cracks in the bark of old willows, or in tops of pollarded trees. *n.m.*—Dry grass, down of willows and feathers. Least numerous of the Tits, breeds in swampy parts of thick woods.
- P. caudatus*, Longtailed Tit, *HAP.*, *M.*, *Bu.*, Tall hollies, or other thick trees in hedgerows. *n.m.*—Large nest of moss and feathers, bottle-shaped. Scarce in the immediate neighbourhood.
- Motacilla Yarrellii*, Pied Wagtail, *Bu.*, *M.*, On the rocky or steep banks of rivers. Found a nest in 1870, on a fishing boat moored in the river Wyre. *n.m.*—Dry grass and hair. Numerous wherever there is water.
- M. boarula*, Grey Wagtail, *Bu.*, *HAP.*, on steep banks of rivers, sometimes on a drier part of a swamp. *n.m.*—Dry Grass and Hair. Not often here in breeding season, commoner further north.
- M. flava*, Grey-headed Wagtail, *Bu.*, on the ground in a meadow near river or stream. *n.m.*—Dry grass and hair. Only one nest, found in Walmersley.
- M. Rayii*, Ray's or Yellow Wagtail, *Bu.*, *M.*, &c., on the ground in a meadow or corn field, sometimes a long way from water. *n.m.*—Beautiful nest of dry grass and horse hair. Breeds in abundance close to the town.
- Anthus arboreus*, Tree Pipit, *Bu.*, *M.*, &c., on sloping banks in woods, often amongst thick herbage. *n.m.*—Dry Grass and a few hairs. Commonest in open woods and parks.
- A. pratensis*, Meadow Pipit, *Bu.*, &c., on ground on moors or meadows. *n.m.*—Dry grass.
- Alauda arvensis*, Sky Lark, *Bu.*, &c., on ground on moors or meadows. *n.m.*—Deep nest of dry grass.
- A. arborea*, Wood Lark, *HAP.*, *W.*, on ground in woods. *n.m.*—Deep nest of Dry grass. Scarce in immediate neighbourhood, preferring extensive woods.
- A. cristata*, Crested Lark, *Bu.*, on ground in open pasture field. *n.m.*—Deep nest of fine dry grass. One nest found in Pilsworth, 1869.
- Emberiza miliaria*, Common Bunting, *Bu.*, *M.*, in low bushes on outskirts of woods, often in hedge rows. *n.m.*—Large loose nest of long stems of grass, lined with fine fibres. Only breeds where the land is well cultivated, and then only when grain is plentiful.
- E. citrinella*, Yellow Bunting, *Bu.*, &c., in low fences or trees, sometimes on ground amongst thick herbage. *n.m.*—Loose nest of dry grass lined with fibres. Prefers a farming locality.
- E. shaniculus*, Black-headed Bunting, *Bu.*, &c., amongst thick rush beds near streams and ponds. *n.m.*—Dry grass and rush stems lined with hair. Common where the land is undrained and rushes are plentiful.
- E. cirrus*, Cirl Bunting, *Bu.*, *W.*, *HAP.*, in hedge rows or young trees. *n.m.*—Dry grass, fibres, and hair. Seldom breeds, though no doubt often overlooked.
- Fringilla coelebs*, Chaffinch, *Bu.*, &c., in tall hedgerows and trees. *n.m.*—Beautiful nest of moss, hair, and feathers, made to imitate an excrescence of the bark or whatever the nest is built upon. Common in orchards and plantations.

- F. montana*, Tree Sparrow, Bu., HAP., in holes in tall trees, generally a great height from the ground. *n.m.*—Dry grass, feathers, and wool, enough may often be taken out to fill a man's hat. Breeds here very seldom; two nests near Tottington in 1868.
- F. domestica*, House Sparrow, Bu., &c., in holes in buildings, &c., sometimes makes large nests in trees. *n.m.*—Dry grass, feathers, and wool, in abundance.
- F. chloris*, Greenfinch, Bu., in hedgerows. *n.m.*—Twigs, roots, moss, wool, and feathers. Breeds mostly where orchards and gardens are plentiful, commoner the farther we go away.
- F. carduelis*, Goldfinch, M., W., in tall hedgerows or young trees. *n.m.*—Twigs, roots, moss, feathers, and the down of willows, one nest found at Lytham lined with Pheasants' feathers. Almost extinct in this neighbourhood.
- F. linota*, Linnnet, Bu., M., W., 'T., in low bushes, almost invariably gorse bushes. *n.m.*—Twigs, roots, dry grass, wool, and hair. Prefers an open broken country to breed in.
- F. linaria*, Lesser Redpole, Bu., M., HAP., in tall hedgerows or young trees. *n.m.*—Dry grass and roots, lined with willow down. Much reduced in this district.
- F. montium*, Twite or Mountain Linnnet, Bu., &c., under shelter of a tuft of heather on high moors. *n.m.*—Roots and stalks of heath, dry grass, wool, hair, and feathers. Breeds numerously on most of the moors around here.
- Loxia pyrrhula*, Bullfinch, W., HAP., M., in a young tree or bush, rather close to the ground. *n.m.*—Nest very like ring-doves of slender twigs laid platform shape, lining of finer twigs and roots. Very rare in immediate neighbourhood, rather numerous in parts of North Lancashire; nest at Holcombe in 1869
- L. curvirostra*, Crossbill, Bu., in tall fir trees close to the top. *n.m.*—Flattish nest of twigs, roots, dry grass, and hair-like roots for a lining. One nest found at Cockey Moor Wood in 1865, the only known instance in the district.
- Sturnus vulgaris*, Starling, Bu., &c., in holes in old buildings, rotten trees, clefts of rocks, &c. *n.m.*—Large nest of dry grass, straw, wool and feathers. Will sometimes breed in colonies, as at Hapton, where several hundred pairs breed in a honey-combed cliff.
- Corvus corone*, Carrion Crow, Bu., HAP., B., M., on the topmost branches of tall trees in unfrequented places. *n.m.*—Large nest of twigs and dry grass. Not common, but occurs more frequently on the northern side of the town. Known to nest in Walmersley.
- C. frugilegus*, Rook, Bu., &c., in colonies of sometimes a hundred or more in tall trees. *n.m.*—Twigs and dry grass. Numerous enough in this district.
- C. monedula*, Jackdaw, Bu., M., HAP., W., in small colonies, in old church towers and ruins, and hollow trees. *n.m.*—Sticks, roots, dry grass, and sometimes sheep's wool. More numerous about 10 miles to the north.
- C. pica*, Magpie, Bu., &c., on the tops of trees, most often in woods. *n.m.*—Large domed nest of dry twigs, mud, and roots.
- C. glandarius*, Jay, M., W., in trees in thick woods. *n.m.*—Sticks and dry grass lined with fine roots. Would be much commoner if not persecuted by keepers.
- Picus viridis*, Green Woodpecker, near B. Edge, M., W., in holes in trees. *n.m.*—No nest, eggs laid on dust of tree. Very rare in this neighbourhood.
- P. major*, Great Spotted Woodpecker, M., W., in holes in trees. *n.m.*—No nest, eggs laid on dust of tree. Very rarely nests around here, though the preceding species and even this have been known to breed at Chesham some years ago.
- Yunx torquilla*, Wryneck, M., W., in holes in trees. *n.m.*—No nest. Very rare and only occurs at wide intervals.
- Hirundo rustica*, Barn Swallow, Bu., &c., on rafters in barns and outhouses, sometimes on cornices of doors and windows. *n.m.*—Mud, dry grass, and lining of feathers. Breeds mostly in the country away from town.
- H. urbana*, House Martin, Bu., &c., under cornices and eaves of windows, &c. Semi-circular nest of mud, and lining of feathers. Commonest in the town.
- H. riparia*, Sand Martin, Bu., &c., in holes in sandbanks, made by the bird itself, near to water. *n.m.*—Slight nest of dry grass and feathers. Breeds in colonies mostly.

- Cypselus apus*, Swift, Bu., B., W., M., in holes in old buildings, and under slated roofs. *n.m.*—When a nest is made it is constructed of dry grass glued together by a natural secretion of the bird, often no nest when the stones of the building are “crumbly.” Seldom nests in immediate neighbourhood. A pair bred on one of the warehouses of the Lancashire and Yorkshire Railway Station for four successive seasons, terminating in 1868.
- Caprimulgus Europæus*, Night-jar, Fern-Owl, or Goatsucker, C. Moss., near M., Bu., W., B., B. Edge, on ground amongst heather or dead grass. *n.m.*—Slight nest of dry grass and leaves. Has been known to breed at Birtle and at Cockey Moor.
- Troglodytes vulgaris*, Wren, Bu., &c., in thick fences, roots of old trees, under copings of walls, &c. *n.m.*—Large circular nest of moss, leaves, and roots, lined with feathers. Sometimes two or three nests will be built and left untenanted.
- Sitta Europæa*, Nuthatch, Bu., W., in holes in trees, invariably in thick woods and orchards. *n.m.*—Dead leaves, moss, and bark, aperture plastered up with mud when too large. Very rare. One nest at Chesham several years ago.
- Certhia familiaris*, Creeper, Bu., M., &c., in a hollow tree, or in a crack of the bark of an old willow tree. *n.m.*—Dry grass, small twigs, and feathers. Breeds sparingly throughout the district.
- Cuculus canorus*, Cuckoo, Bu., &c., makes no nest, laying its eggs in the nest of some other bird, as the meadow pipit, hedge-sparrow, and wagtail.
- Alcedo ispida*, Kingfisher, Bu., M., B., &c., in holes in banks near water. *n.m.*—Platform of fishes’ bones, and other deposits. Generally distributed.
- Columba palumbus*, Ring Dove, M., HAP., nr. B. Edge, in trees. *n.m.*—Flat nest of twigs laid crosswise. Never breeds in immediate neighbourhood.
- C. ænas*, Stock Dove, in parts of North Lancashire, in holes in tree trunks. *n.m.*—Slight nest of dry grass. Very rare—has been known to nest in the neighbourhood of Blackstone Edge.
- C. turtur*, Turtle Dove, naturalised in parts of the district, in M., &c. *n.m.*—In trees in woods. Flat nest of twigs.
- Phasianus colchicus*, Pheasant, W., HAP., Belmont, amongst thick herbage on ground. Nest formed out of the grass surrounding the situation.
- Tetrao scoticus*, Red Grouse, parts of Cheshire, on the moors throughout the district, large nest amongst the heath of grass, heather, &c. Breeds very numerously on Blackstone Edge.
- Perdix cinerea*, Partridge, Bu., &c., on the banks of hedges under the thorns, amongst corn, grass, &c. *n.m.*—Scarcely any nest beyond a deep depression in the ground. Eggs invariably covered over with dead leaves when the birds leave the nests.
- P. coturnix*, Quail, Bu., &c., on the ground in corn fields and meadows. *n.m.*—No nest, a cavity being scratched in the earth. Has bred in many parts of the district, but not often annually.
- Charadrius pluvialis*, Golden Plover, B. Edge, Pendle Hill, on the ground on moors. Scarcely any nest.
- Vanellus cristatus*, Lapwing, Bu., &c., on the ground on moors, pasture fields, corn fields, &c. *n.m.*—Slight nest of dry grass. Breeds abundantly about 12 miles to the north of Bury, and commonly throughout the district.
- Totanus hypoleucos*, Common Sandpiper, Bu., M., B., on the ground close to a river or pond, amongst herbage. *n.m.*—Slight nest of dry grass and leaves. Rather numerous in several parts of the district.
- Scolopax gallinago*, Common Snipe, Bu., B., W., &c., on the ground under shelter of a tuft of rushes or grass. *n.m.*—Slight nest of dry grass in a deep depression. Breeds annually on all the surrounding moors, sometimes quite close to the town.
- Tringa variabilis*, Dunlin, C. Moss, on the ground on bogs or moors near the sea. *n.m.*—Slight nest of dry grass. Has been known to breed on Chat Moss, and supposed to have bred on the moors near here.

- Gallinula crex**, Land Rail, BU., &c., on the ground in meadows, corn fields, &c. *n.m.*—Nest of dry grass. Though not so common as formerly, it is still far from rare.
- Rallus aquaticus**, Water Rail, BU., on the swampy sides of streams and ponds. *n.m.*—Large nest of flags and reeds. Rarely breeds in the neighbourhood, eggs have been found at Chamber Hall.
- Gallinula chloropus**, Moorhen, BU., &c., amongst reeds on sides of ponds, sometimes floating on the water itself and attached to a tree root. *n.m.*—Large nest of reeds. Breeds commonly in many localities around here, notably at Chamber Hall.
- Fulica atra**, Coot, BU., &c., in thick reed beds close to water. *n.m.*—Large compact nest of reeds. Formerly bred in places in the district, now almost extinct.
- Gallinula porzana**, Spotted Crane, BU., in thick grass near water. *n.m.*—Large nest of reeds and rushes. One nest only has been found in this neighbourhood.
- Anser Canadensis**, Cravat Goose, Cheshire, on the ground near water. *n.m.*—Dry grass. This bird is naturalised and breeds abundantly in Cheshire.
- Anas boschas**, Wild Duck, B., W., B. Edge, on the ground near water, sometimes on moors. *n.m.*—Dry grass and leaves. This species breeds numerously on the banks of the large reservoirs near Winter Hill.
- Podiceps minor**, Little Grebe, BU., &c., on the surface of the water in ponds, &c., and kept from floating loose by interweaving amongst the reeds, &c. *n.m.*—Large nest of flags, &c. Breeds generally throughout the district and annually at Chamber Hall.

APPENDIX.

Rather than entirely pass over those other divisions of the Animal Kingdom which are represented in our neighbourhood, we have drawn up the following very imperfect list of Mollusca, Pisces, Reptilia, and Mammalia, of which we have seen specimens excepting in a few cases when the contrary is stated.

MOLLUSCA.

The land shells—unless it be the minute ones which are to be found under stones, and in similar situations—are comparatively scarce, but the water shells are to be found in great abundance in most of our ponds, ditches, and water courses. We are indebted to Mr. Samuel Alcock for pointing out the rarest in the subjoined list.

FRESH WATER SHELLS.

CONCHIFERA—BIVALVES.

- Cyclas cornea*. Common. Unsworth.
C. rivicola. Peak Forest Canal, near Hyde.
Pisidium pusillum. Common. Broadcar, near Bury.
Anodonta cygnea. Hollins Vale. Hudcar.
Dreissena polymorpha. Peak Forest Canal, near Hyde.

GASTEROPODA—UNIVALVES.

- Paludina contecta*. Peak Forest Canal, near Hyde. A number of these shells were distributed in ponds near Bury some years ago, but have not since been heard of.
Bythinia tentaculata. Peak Forest Canal, near Hyde.
Planorbis albus. Highfield, near Bredbury.
P. complanatus. Unsworth.
Physa hypnorum. Bredbury.
Limnæa peregra. Very common: may be found even in Barnbrook, Bury.
L. stagnalis. Common. Openshaw fold particularly abundant and fine.
L. truncatula. Pond near Radcliffe.

LAND SHELLS.

- Succinea putris*. Woodley.
Helix nemoralis. Not very common about Bury.
Clausilia nigricans. Marple.
C. bidens. Disley.
Carychium minimum. Marple.

PISCES.

As is usually the case with large towns having small rivers, the state of the rivers and most of the small streams of Bury and its neighbourhood is unfavourable for fish; yet the Irwell still contains some, though neither in great number nor variety. We have seen a quantity of Gudgeons, Minnows, and Loaches from below Bury Bridge, and have tried them cooked, but they had a decided flavour of gas-tar. Most old inhabitants can tell of the fishing there used to be in the river. We have heard of a man from Heywood who made his living some years ago by catching Eels, and selling them, and that his favourite piece of water was about Bury Bridge, and how that angling matches were formerly held at Chest-Wheel Bridge, near Woodroad; but so far as

we can gather the last of these must have come off 60 or 70 years ago, for our informant is advanced in years and it was when he was a lad that his grandfather shewed him the place, and spoke of the institution as a thing of the past.

It is worthy of remark that though there are but few fish in the Irwell, they thrive well in the canal reservoir, which receives its supply of water from the river by means of an open channel, a couple of miles long. It is probable that any considerable saving of the waste materials of towns, which at present flow into the rivers, would allow the existence of a number of species of fish, which cannot now live in them, and motives of economy together with care for the public health, seem to be steadily moving public opinion in the direction of river purification. It must however still be a long time before either the Irwell or the Roach is a good trout stream.

The numerous reservoirs that have been constructed for various purposes usually contain a great quantity of fish. Those provided for the supply of domestic wants and several others in which the water is scarcely less pure have Trout, and often of considerable size, while Perch, Tench, and Pike are common in many other reservoirs. Factory reservoirs in which the water is usually warm, are nearly all stocked with different sorts of Carp, and such situations seem to suit them for they breed enormously.

ACANTHOPTERYGII. SPINY FINS.

- Perca fluviatilis*. The Perch. Common, but seldom exceeding 8oz. in weight.
Cottus gobio. The Bullhead. May be found in several streams, but not much sought for.
Gasterosteus semiarmatus. The common Stickleback, or Jack Sharp. Very common.

MALACOPTERYGII. SOFT FINS.

- Cyprinus carpis*. Common Carp. Scarce, but to be met with in some mill reservoirs of large size. We have weighed one 8lbs., and have heard of others 10lbs. and over.
C. carassius. Prussian Carp. Very common in factory reservoirs, and not unfrequently 2 lbs. to 3 lbs. in weight.
C. gibelio. Not common, but in reservoirs occasionally.
C. auratus. Goldfish. Very frequent in factory reservoirs, in endless variety of colour, deformity, and disease.
Gobio fluviatilis. Gudgeon. Common.
Tinca vulgaris. Tench. Common in reservoirs, and frequently met with from 1½ lbs. to 2lbs. weight.
Leuciscus rutilus. Roach. Common. It has been taken 1lb. weight from a reservoir, but we do not recollect weighing a heavier specimen.
L. vulgaris. Dace. Common; small.
L. cephalus. Chub. Not uncommonly stored in ponds in the neighbourhood of Hyde. It was formerly abundant in Gatley Carrs both in the Mersey and its tributaries, and was commonly stored in ponds in that neighbourhood.
L. phoxinus. Minnow. Common; the Irwell, Ogden Valley, &c.
Cobitis barbatula. Loach. Common.
Esox lucius. Pike. Common, and large in proportion to the amount of its food. One was caught last year in the Bury canal reservoir, by Mr. J. Hall, 12½ lbs. weight; its skin was preserved by Mr. Rd. Davenport.
Salmo fario. Brook Trout. Common in all our unpolluted streams. In some reservoirs they have been taken as large as 6lbs. weight.

Murcena auguilla. Eel. Commonly stored in reservoirs, young ones being frequently brought from near Preston, not much larger than a bodkin. They grow rapidly and frequently become 2lbs. to 3lbs. weight, in a few years.

CHRONDROPTERYGII. CARTILAGINOUS FISHES.

Petromyzon planerii. Small River Lamprey, or Seven-eyes. Common. Gigg brook, Pilsworth.

REPTILIA.

The reptiles of the district are not very numerous. The common green snake has frequently been reported to have been captured at Cockey Moor, but we have no authentic information that a native specimen has ever been seen there. There have been some taken and exhibited, but they were clearly shewn to have been imported from a distance, and to have been mere tricks on the public. We therefore remain incredulous as to the existence of *bona fide* Cockey Moor snakes.

Zootoca vivipara. Common Lizard. Common on fences and mosses.

Auguis fragilis. Blindworm. Rare. Rooden Lane, Blackley, near Prestwich.

Peluis Berus. Viper. Common on Chat Moss and Carrington Moss.

Rana temporaria. Common Frog. Common.

Bufo vulgaris. Toad. Common.

Triton cristatus. Warty Newt. Common in old pits.

Lissotriton punctatus. Smooth Newt. Not so common as the last.

MAMMALIA.

Among the Mammalia we believe that the Water Shrew (*Sorex fodicus*) might be numbered as belonging to our district, as we have it reported from some localities, but we have not seen a specimen. We may add that the Otter (*Lutra vulgaris*) formerly bred at Castle Mill, on the Bollin, and one was caught at Northenden about 40 years ago, which our informant saw. It is said to be still found on the Bollin, but we have no certain information.

Plecotus auritus. Long-eared Bat. Simpson Clough and The Park, Pilkington.

Scotophilus murinus. Common Bat. Very common.

Erinaceus Europæus. Hedgehog. Not very common near Bury, but very abundant in Cheshire, as at Gatley.

Talpa vulgaris. Mole. Very plentiful.

Sorex araneus. Common Shrew. Common.

Mustella vulgaris. Weasel. Common.

M. Erminea. Stoat. Common.

M. Putorius. Polecat or Fomart. Common.

Vulpes vulgaris. Fox. On the borders of Cheshire, within 20 miles of Bury, not uncommon.

Sciurus vulgaris. Common or Red Squirrel. Abundant at Dunham Park.

Mus sylvaticus. Long-tailed Field Mouse. Common.

M. decumanus. Brown Rat. Common.

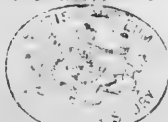
M. musculus. Domestic Mouse. Everywhere.

Arvicola amphibius. Water Vole. Rivers Irwell and Roach, and also mill dams at Hudcar.

Lepus timidus. Common Hare. Very common.

L. cuniculus. Rabbit. Very common.

Bred
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ERRATA.

Page 16, 10th line from the bottom, for "procumbeus," read "procumbens."

P. 17, 11th line from the top, for "auserina," read "anserina."

P. 19, 13th line from the bottom, for "Odontiltes," read "Odontites."

P. 29, 13th line from the top, for "Succentiurêata," read "Succenturiata."

P. 31, omit "Noctuæ" at the top of the page, and insert it above "Thyatira
Derasa."

