The Entomological Section.

President—The Rev. Preb. A. P. Wickham, F.E.S., East Brent Vic., Burnham.

Joint Recorders—Colonel T. Jermyn, F.E.S. (5, Highbury Road,
Weston-s.-Mare), and Mr. H. H. Slater.

Treasurer—Mr. H. Doidge, The Bank, High Street, Taunton.

Secretary—Mr. H. H. Slater, Blooke House, Cannington.

WE have to record with much regret, which will be generally shared by our members, the death of Mr. F. Milton, of White Ball, Wellington, an honorary member of the Section for some years, and a most painstaking naturalist, with a wide knowledge of the lives and economy of insects generally. Like a great many of our best British naturalists, his life had been largely spent in the midst of bricks and mortar, rather than, as might have been expected, of woods and fields, for he had lived most of it as a church-worker in East London. The keys to his entomological ability and experience, however, were keen natural interest in the subject,

species at ivy bloom, East Brent, October 21st. Not taken for years.

Ophiodes lunaris was taken at sugar (one example) near Winscombe by Mr. Booker a few years back; a perfect specimen, and apparently only the twelfth recorded to have been taken in Britain.

Ilithyia semi-rubella was taken in some numbers at Butleigh on September 10th. It has not been noticed there before, and the place is more than six miles from the only previous locality where it has occurred in the county, so it seems to be extending its range. Mr. Doidge reports this insect from Thurlbear taken by Miss Phyllis Doidge.

Ornix finitimella, a species recently separated from O. anglicella, was taken in S. Somerset in 1920 by Mr. A. R. Hayward but he does not mention the exact locality or date. This

item reached me just too late for last season's report.

DIPTERA.

Five additions to Somerset Syrphidee.

Chilosia albipila, Mg. Wembdon, March, Capt. Troup.

C. proxima, Ztt. Bleadon, April 29th, Mr. R. Jermyn.

C. vulpina, Mg. Shapwick, June 29th; Ashcott, Aug. 28th, Col. T. Jermyn.

Platychirus tarsalis, Schum. Weston-s.-Mare, May 13th,

Col. T. Jermyn.

Syrphus euchromus, How. Banwell, May 27th, Col. T. Jermyn.

At the meeting of the Section at Max Mill, Winscombe, on September 3rd, Chrysogaster splendens, Mg., was taken by several members in fair numbers.

Criorrhina ranunculi. Nine specimens of this fine fly (six red-tailed \mathcal{J} s, one white-tailed \mathcal{J} , and two white-tailed \mathcal{J} s) were taken on wild cherry blossoms at Backwell on April 7th and 12th by Mr. R. Jermyn.

Correction. In last year's notes, Odontomyia tigrina was recorded in error as N. nigrina. O. tigrina was fairly plenti-

ful at Shapwick during May of this year.

Miss I. M. Roper, f.L.s., 4, Woodfield Road, Redland,

Vol. LXVII (Fourth Series, Vol. VII), Part I.

Bristol, has kindly undertaken to identify and record galls of Cecidomyidæ (Gall midges) for the Section. Specimens sent should be as fresh as possible, and it is hoped that many members will take advantage of Miss Roper's kind offer, and assist in enlarging our list of this extensive and interesting family, which is also of considerable economic importance. The British Cecidomyidæ have been recently revised by Messrs. Bagnall and Harrison (Trans. Ent. Society, 1917), whose list contains about 360 named species; our records, published and unpublished, only include at present about fifty.

HYMENOPTERA.

Dr. C. L. Perkins, f.R.s., has sent the following list of Aculeata not yet recorded by us. and has very kindly offered to identify Aculeata for the Section's records.

Salius exaltatus, F. Isle Brewers. Crabro cetratus. Schuck. Isle Brewers. C. saundersi, Perkins. Wells.

ANTHOPHILA.

Prosopis confusa, Nyl. Isle Brewers.
Sphecodes hyalinatus, Schk. Isle Brewers.
Halictus xanthopus. Kirby. Isle Brewers.
H. fulvicornis, Kirby. Isle Brewers.
H. minutissimus, Kirby. Isle Brewers.
Andrena analis, Panz. W. Somerset.
Nomada obtusifrons, Nyl. W. Somerset.

Odontata (Dragon-flies).

These are usually called, with wonderful unanimity by the natives of Somerset, as of other southern counties, "Horsestingers," though they have nothing resembling a "sting," and are about as much interested in horses as in motor-bicycles. But in their anatomy and life-history they are as well worth study—perhaps more—as any order of insects. Only six species, and these nearly all very common, were recorded in the *Victoria County History* (1903). Colonel

Jermyn, F.E.S., worked them for some time and brought the Somerset list up to sixteen species, but he has this year handed them over to the writer, who had been collecting for him previously, and who is now adding five more species to the list; these were obtained with the kind help of Capt. Troup, who is elevating the capture of dragon-flies with a net at the end of a salmon rod to the level of a fine art. The following are this year's (1921) additions,

Cordylia aenea. Nailsea Ponds, May 24th.

Orthetrum cancellatum. Bridgwater Canal, June 15th; King's Sedge Drain (R. Cary), June 30th.

Anax imperator. King's Sedge Drain, July 21st.

Platycnemis pennipes. King's Sedge Drain, June 30th.

Agrion mercuriale. Blackdown Hills, July 25th.

The last has been supposed to be confined to the rivers on the Beaulieu side of the New Forest, though one example was taken by Mr. Dale at Wootton Glanville (Dorset) many years ago, where it no longer occurs. Capt. Troup, who is good enough to catch and keep for me the dragon-flies he meets with, was hunting lepidoptera on Maiden Down, near Burlescombe (Devon), and brought some Odontata back for me, amongst which I found a male mercuriale, the only small blue one he saw. So a few days later we went up to the Blackdowns, a few miles from the Devon spot, and took one more in Somerset, with abundance of Orthetrum coerulescens, of which the record had been one female which I caught for the Colonel at Culmhead seven years ago.

Another of the Colonel's records is Agrion pulchellum, taken by him on King's Sedge Drain (i.e. the transformed River Cary) on July 16th, 1914. It is not uncommon there, but has

not been found yet elsewhere in Somerset.

Another of his records is a male of Sympetrum fonscolombii, at the capture of which I also assisted. It was noticed on a small pond amongst the sandhills near Berrow, by Messrs. Doidge, Macmillan and the writer, and we stopped to take it, which took us some time, as it was excessively active and shy. Only four or five occurrences in Britain are known, but once in considerable numbers.

Mr. T. F. Hewer of Bristol has taken Calopteryx splendens

in some abundance at Saltford-on-Avon (in 1919, I believe). It has not been actually taken elsewhere in Somerset, though I saw a male on the opposite side of the canal at Bridgwater on June 24th.

Particular attention is invited to the genus Aeschna, of which only one species, Æ. Cyanea, has occurred in Somerset, though three others are not uncommon in adjacent counties. There are ten more "possibles," in the way of species, but not quite all of them are "probables."

We are fortunate enough to have found a gentleman (now an honorary member) working at the Mallophaga, or bird-lice. The difficulty is to get them collected for us. Will the Ornithological Section try and do what they can in this way? The present writer will give any members of it any help he can, as to how to do it—and it does not require much trouble.

HENRY SLATER.

The Drnithological Section.

President and Recorder—The Rev. F. L. BLAYTHWAYT, Melbury Osmund Rectory, Dorchester.

Vice-Presidents—Lt. Colonel J. W. GIFFORD and Lt.-Colonel A. E. LASCELLES. Secretary and Treasurer—Mr. H. St. George Gray, Taunton Castle, Taunton.

THE 1921 Annual Meeting of the Section was held at the Somerset County Museum on April 7th, when the Rev. F. L. Blathwayt, President, was in the chair.

The Treasurer presented the financial statement for 1920, which showed a balance in hand on December 31st of £9 9s. 5d. There was also on deposit at the bank the sum of £21 14s. 7d. set aside as the Somerset Egg Cabinet Fund.

The Seventh Report on Somerset Birds (1920), consisting of eleven folio pages, typewritten, was sent out to the members of the Section in March, 1921.

The officers of the Section were re-elected at the April Meeting, when it was announced that seven Assistant-Recorders had been appointed since the Annual Meeting in May, 1920, as follows:—

Taunton and Part of West Somerset, Col. A. E. Lascelles (Holway) and Mr. C. J. Pring (North Curry); West Somerset (Minehead and Porlock), Mr. N. G. Hadden (W. Porlock); South Somerset, Mr. J. H. Symes (Coat, Martock); The Mendip Area, Mr. Stanley Lewis (Hillfield, Cheddar); North Somerset, Mr. H. Vicars Webb (58, Belmont Road, St. Andrew's, Bristol); East and N.E. Somerset, Dr. David Price (Castle Cary). No definite boundaries of the districts have yet been defined.

As will be seen by the accounts of the Parent Society the sum of £27 2s. 6d. was realized by the sale of such of the Wiglesworth Books as were not required for the Society's Library. The money will be expended from time to time on Ornithological books recommended for purchase by the Ornithological Section. Two works have already been acquired. The Section is now subscribing annually for "British Birds" for the Library at Taunton Castle.

At the Annual Meeting on May 18th, 1920, the President was asked to examine the manuscripts on Birds left behind by the late Dr. Wiglesworth, and Mr. Blathwayt's report is printed as a paper in Part II of this volume. He has made a list of the Eggs contained in Dr. Wiglesworth's cabinets, which would be available for the Curator's use. The stuffed birds which the doctor bequeathed have been renovated by Mrs. Gray and listed in *Proceedings*, vol. LXVI, p. lxxxiii.

We regret to report that Mr. W. K. Petherick, the Society's taxidermist, died on March 12th, 1921. He expressed a wish that three stuffed birds in his possession should be handed over to the Somerset County Museum. These included a Nutcracker, probably of the thick-billed variety, killed in Glamorganshire, c. 1915,—a very rare visitor to Britain.

On September 28th a general meeting of the Section was held at Taunton Castle in the morning, for the purpose of receiving the report of the sub-committee appointed on April 7th to examine the collection of miscellaneous ornithological specimens bequeathed to the Society by Dr. Wiglesworth with the books, bird cases and two cabinets of eggs. Mr. C. J. Pring, who had drafted the report jointly with Mr. B. W. Tucker after the meeting of the sub-committee, read the same at the general meeting, when it was adopted. Several of the

specimens would be retained for the Museum, whilst others would be sold at the next annual meeting of the Section. The bird skins, some of which were in bad condition, were, with one exception, to be handed over to Mr. Laurence Whish, who undertook to set up the Glaucous Gull for the Museum in exchange for all the others.

At this meeting the Rev. F. C. R. Jourdain, M.A., M.B.O.U., honoured the Section by allowing himself to be elected an

honorary member.

In the afternoon Mr. Jourdain lectured at Taunton Castle to a joint meeting of the Taunton Field Club and the Ornithological and Botanical Sections on "The Oxford University Expedition (1921) to Bear Island and Spitzbergen." There was a good attendance, and the interesting lecture was listened to with rapt attention. On the following day the Ornithological and Botanical Sections had a joint excursion to Brean Down and Burnham which was also well attended.

H. ST. GEORGE GRAY.

The Botanical Section.

President-Mr. J. W. WHITE, F.L.S.

Committee—Miss I. M. Roper, f.L.s., Mr. H. S. Thompson, f.L.s., Dr. H. Downes, f.L.s., Dr. W. Watson, a.L.s., Mr. N. G. Hadden.

Secretary and Treasurer-Mr. W. D. MILLER, Cheddon Fitzpaine, Taunton.

A S proposed at the general meeting held in December, 1920, a joint meeting with the Microscopical Section was held at Taunton Castle on March 19th, when a number of instruments were provided. Dr. Watson gave a short address on the subject of Algae, and many interesting slides were exhibited.

On July 7th, a Field Day and General Meeting were held at Highbridge. The long drought had affected the flora noticeably, but some twenty members and friends did useful work both on the peat-moors and the Berrow sandhills. Among the plants noticed were the following:—Pinguicula

vulgaris, P. lusitanica, Drosera longifolia, Peucedanum palustre, Galium Vaillantii, Lepidium ruderale, L. latifolium, Sparganium minimum, Galeopsis speciosa, Poa trivialis, var. glabra, Agrostis alba, var. maritima, and Spartina Townsendi. large number of other typical peat-moor plants were new to several of those present. On the sand-dunes ephemeral and small plants were not noticed; even the dominant mosses were practically invisible owing to the drought. Tea was taken at the Railway Hotel, Highbridge, and a general meeting was held as advertised to consider and, if thought advisable, to proceed to the election of a President. Dr. Watson was voted to the chair, and the following resolution was unanimously passed :- "That the Secretary be desired to write to Mr. J. W. White of Clifton to ask him, if willing, to become President of the Section." Members will be gratified to learn that Mr. White has found it possible to accept.

On September 28th, by invitation of the Taunton Field Club and the Ornithological Section, a meeting was held at the Castle, Taunton, when the Rev. F. C. R. Jourdain, M.B.O.U., gave a graphic account of the Oxford University Expedition to Spitzbergen. This group of islands appears to be remarkably barren in flowering plants and the only ones mentioned were Saxifraga oppositifolia, Silene acaulis, and some Drabas. The following day a joint Field Day with the Ornithological Section was held, some thirty members and friends taking part in a walk from Uphill Station to Burnham viá the Axe Ferry, Brean Down and the Berrow Sand Hills. A quantity of advanced seedlings were observed, the result of the early flowering of plants, the subsequent showers having caused precocious germination. Some attention was given to the Salicorniae on the Axe salt marshes, and the newly formed Gore Sands area. Salicornia dolichostachya, and S. europaea, var. procumbens were among the species noted. This summer Mr. Thompson has given considerable time and care to a survey and to photography among the plants of this changing shoreline. Tea at Burnham concluded a very pleasant day.

Despite the resolute non-co-operation of a large number of members, much good field work has been done during the season, and several hundred notes have been sent in, from which the following is a selection:— Ranunculus Lingua, L. (9) The Mineries, Charterhouse. H. J. Gibbons.

Viola sylvestris, Kit., var. punctata, Greg. (3) Pitminster; W. Watson. (9) Wraxall Hill; Miss I. M. Roper. Cheddar Wood; W. Watson.

Viola lutea, Huds. (1) Great Staddon, near Exford; Mrs. Browning. Between, but quite distinct from the two previously recorded stations.

Polygala calcarea, F. Schultz. (10) Combe Hay; at least 4-mile from the recorded station. "Over several acres of a hilly rough pasture at about 300 ft."; H. S. Thompson.

Cerastium arvense, L. (9) Limestone outcrop, edge of

Limeridge Wood, Tickenham; C. and N. Sandwith.

Smyrnium Olusatrum. L. (3) Milverton; G. B. Milne-Redhead (1911). Lyng; W. D. Miller. Dr. Watson writes, "Inland plants are often only casuals. Over ten years ago I found it in Taunton, but have not seen it since."

Sambucus Ebulus, L. (1) Hedge, Winsford; W. D. Miller.

(9) Between Banwell and Christon; Miss I. M. Roper.

Senecio sarracenicus, L. (10) Stoke Lane valley, Edford. Miss I. M. Roper.

Symphytum orientale, Bieb. (9) Waste ground, Clevedon. Miss Livett.

Cuscuta epithymum, Murr. (10) Ursleigh Hill, Pensford. Miss I. M. Roper.

Cuscuta trifolii, Bab. (3) Thurlbear. Chiefly on Poterium sanguisorba; W. Watson. (10) Holweli; on Plantago media; G. B. Milne-Redhead. Dr. Watson also noted as hosts Lotus corniculatus, Galium verum, Rubus caesius and other plants.

Sibthorpia europaea, L. (2) Acmead Bog, at 1350 ft. N. G.

Hadden.

Euphrasia minima, Jacq. (confusa, Pugsley). (2) Stony pasture adjacent to the moor, Porlock Hill; N. G. Hadden. This confirms Mr. Marshall's note in Supp. Fl. Som., the station being in all probability Mr. Salmon's station of 1898.

Galeopsis speciosa, Mill. (8) Roadside, immediately south of Shapwick Station; N. G. Hadden. The plant was discovered in Sept., 1920, by C. and N. Sandwith between Ashcott Station and Glastonbury (cf. J. of Bot., Jan., 1921, p. 21).

Littorella uniflora, Aschers. (3) Wet place on lane side, Smoky, Staplegrove. W. Watson.

· Salicornia dolichostachya, Moss. (8 and 9) Berrow flats; H. S. Thompson. (9) St. George's Wharf, Pill; Miss I. M. Roper.

Polygonum minus, Huds. (9) In two spots on the moors between Nailsea and Kenn. C. and N. Sandwith.

Juniperus communis, L. (8) Above Street. Rev. E. Ellman. Neottia nidus-avis, Rich. (4) Golden Hill Copse; Preb. J. Hamlet. (10) Postlebury Wood, near Frome; G. B. Milne-Redhead.

Polygonatum multiflorum, All. (1) Wood at Winsford. W. D. Miller.

Sparganium neglectum, Beeby. (9) Tickenham Moor. C. and N. Sandwith.

Wolffia arrhiza, Wimm. (Michelii, Schleid.). (9) In two pools by the railway near Kenn. C. and N. Sandwith.

Potamogeton panormitanus, Biv. Bernh. (9) Cattle trough, Tyntesfield, Flax Bourton. Miss I. M. Roper.

Carex pulicaris, L., var. montana, Pugsley. (9) North shoulder of Crook's Peak at 800 ft.; "gathered in quantity," June, 1915. H. S. Thompson.

Carex riparia, Curt., var., gracilis, Coss and Germ. (9) This variety was discovered in 1915 by Miss Roper on Tickenham Moor. Miss Roper writes, "It was not recognized as British until it was recorded in the Kew Bulletin No. 4, 1920, from Cornwall, the Isle of Wight, and the above locality in Somerset."

Spartina Townsendi, H. and J. Groves. (8) Berrow Flats. Recorded independently by Dr. Watson and Mr. H. S. Thompson. No doubt tide-borne from near Clevedon.

Botrychium lunaria, Sw. (10) Between Tad Hill and Leigh-

on-Mendip. F. Samson.

Equisetum sylvaticum, L. (1) By River Exe, 2 m. below Exford; W. D. Miller. (2) Hurdle Down, near Alderman's Barrow, Exmoor; N. G. Hadden. In both cases the 'small form' recorded by Mr. Marshall from Simonsbath.

Lycopodium alpinum, L. (1) Near top edge of Punchbowl on Winsford Hill; Mrs. Jenner (per Lady Davy). Previously

only recorded from Dunkery.

It may be noted that for the purposes of this report few records are included which have been published elsewhere, but those interested will find in the *Journal of Botany*, in Dr. Druce's Report of the Botanical Society of the British Isles, and in the Bristol Naturalists' Society's annual reports much information concerning Somerset plants. Mr. Noel Sandwith's paper quoted above under note on *Galeopsis speciosa* is of special interest.

Mr. Cowan has continued his very valuable work at the Herbarium, which is now in excellent order. Even in its present incomplete state it offers much assistance for comparative study, and members are again urged to take note of the many plants, common and rare, still required, and to

help in filling up the gaps.

The seven folio parts of "British Hieracia," 1889-1896,

F. J. Hanbury, have been presented to the library.

A paper on "The Earliest English Herbal" (Turner's) by Miss I. M. Roper, F.L.S., appears in the current number of the Proceedings.

The number of members is at present 58. The Secretary will be glad to hear of any who are interested in the County flora, and are willing to join the Section and take a part in its work.

W. D. M.

IN MEMORIAM. CEDRIC BUCKNALL.

ONE of the most exact workers in systematic European botany has been taken from us by the sudden death on December 12th of Cedric Bucknall, Mus. Bac. Oxon., for forty-five years the respected organist and choir-master of All Saints, Clifton. Although taking high rank as a musician and composer, lecturing on harmony and counterpoint in Bristol University, he had devoted himself for many years to the study of Fungi and the more difficult genera of Phanerogamia, publishing essays on Symphytum, Euphrasia, etc., and a detailed account of nearly 1500 species of Fungi detected in the Bristol district. Many of these were new to science. His discovery of Stachys

alpina, a new British plant, at Wotton-under-Edge, aroused general interest, and his notes on the plants of North Somerset were highly valued by writers on the county flora.

J. W. W.

The Microscopical Section.

President—H. Downes, M.B., F.L.S., F.G.S., F.R.M.S., Ditton Lea, Ilminster.

Secretary and Treasurer—C. R. Killick, M.B., Tower Hill, Williton.

THE Botanical and Microscopical Sections held a joint meeting at the Museum on March 17th. Dr. W. Watson kindly gave an interesting address on Algae, illustrating the subject by means of specimens, living and mounted for the microscopes; members brought specimens and Dr. Watson answered questions and demonstrated points of interest. The meeting was well attended and afforded a glimpse of the great field of work open to any microscopist who wishes to utilize the abundance of material which can be collected without difficulty.

An attempt on the part of Mr. H. Slater, Secretary of the Entomological Section, to organize a field day near Bridgwater fell through, partly because the British freshwater sponge which was to have been one of the objects collected had not reappeared in its usual habitats, and partly because the difficulty of travelling was then acute. Mr. Slater had intended to interest some of the members in the smaller forms of insect life; in September, however, a meeting was arranged at Williton, the subject being the Hive Bee with special relation to Isle of Wight disease. The writer gave an outline of the importance of the subject both scientifically and commercially, and demonstrated the ease with which an examination can be made of the dead bee to ascertain whether the alleged cause of the infection is present; material was distributed and more can be supplied on application. Rather more than a year ago Dr. Rennie of Aberdeen published his discovery of a mite which had hitherto escaped observation, and to the

obstruction caused by these mites he attributed some of the chief symptoms of this disease which for many years had been baffling scientific investigation; the origin and full history of the mite is still unknown. Col. T. Jermyn brought for exhibition at the meeting, and gave a short address on, a collection of British wild bees, together with a collection of flies closely resembling the bees in appearance and frequenting their hives or nests. Up to the present time the mite has not been found in any insect except the Honey Bee, but more workers are required to extend investigation.

On November 3rd Col. J. W. Gifford very kindly entertained the members of the Section at his house at Chard, showed them his telescopes and gave them an address on the elementary principles of optics; dry bones became clothed with flesh, as he gave in simple language an account of what is known of the ultimate structure of matter and its bearing on the transmission, refraction and dispersion of light. Col. Gifford took the members into his laboratory and exhibited his large spectroscope and mercury vapour lamp; members much appreciated the opportunity of seeing the scientific apparatus. There was an interesting microscopical exhibit, and by special request Col. Jermyn again exhibited his collection of bees and flies.

There are 23 members of the Section, and the Secretary will be pleased to receive suggestions and assistance.

C. R. KILLICK.