

The Entomological Section

President—The Rev. Preb. A. P. WICKHAM, F.E.S., East Brent Vic., Highbridge

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

Asst.-Treasurer—Mr. C. J. PERRENS, 6, Park Road, Bridgwater.

Secretary and Recorder—Mr. H. H. SLATER, Myrtle House, Mark, Highbridge.

ALL members will sympathize with our good Secretary, Mr. H. Slater, to whom more than to any one else the existence and continuation of the Section is due, in the illness which has to a great extent disabled him during the last part of the year. In spite of this he has succeeded in getting together the following records. I have undertaken with great diffidence the task of editing them for the press. If mistakes appear I must shoulder the blame. I am also responsible for this short preface, and for a few small additions to the Lepidoptera records.

The Annual Meeting was held at Taunton Castle on February 4, 1928. There was a small attendance. After the Minutes had been read and confirmed, the 'Treasurers' accounts, showing a balance in hand of £7 8s. 7d., were passed. All the officers were re-elected.

Two field meetings were held, fourteen being present on each occasion—a more encouraging attendance than usual.

At the first meeting, held on June 6th at Shapwick, Dr. Nesbitt Burns, Mr. Robert Burns, Dr. Childs, and Mrs. Childs were elected members. A pleasant feature of the second meeting, held on August 25th, also at Shapwick, was the presence of some of our younger members.

A. P. WICKHAM.

APTERYGOTA

Order Protura

Acerentomon pinus, Wom. Oct. 1926.

A. agrorum, Wom. Brockley Combe, Oct. 1926. .

C. fragilis. Locality and date not supplied.

PSOCOPTERA

Psocus variegatus, Latr. Weston Big Wood, Portishead, May 1927.

Ectopsocus briggsi, McLach. Leigh Woods, Dec. 1927.

Thanks are due for the above records in the case of the Protura to Mr. H. Womersley and that of the Psocoptera to Mr. J. V. Pearman.

TRICHOPTERA

Phryganea grandis, Linn. ♂ ♀ Shapwick, 13.VI.28.

Limnophilus luridus, Curt. Mark, 22.VI.28.

COLEOPTERA

68. *Stenolophus teutonius*, Schr. Shapwick, 6.VI.28 (R. Beck).
 2123. *Elatер balteatus*, L. Shapwick, 6.VI.28 (R. Beck).
 2428. *Cryptocephalus parvulus*, Müll (*nigroceruleus*, Goeze).
 Shapwick, 6.VI.28 (R. Beck).
 2672. *Melandrya caraboides*, L. Shapwick, 6.VI.28 (R. Beck).

ICHNEUMONIDÆ

Ichneumoninae

18. *Protichneumon laminatorius*, Fb. Woods, Weston-s.-M.
 N.D. (Col. T. Jermyn, the late).
 20. *Coelichneumon cyaniventris*, Wesm. Shapwick, 17.VII.28.
 38. *Stenichneumon trilineatus*, Gr. Shapwick, 11.V.23.
 41. *St. ochropis*, Gm. Weston-s.-M., 24.V.14 (T.J.).
 52. *Cratichneumon fabricator*, Fab. 14.V.14 (T.J.).
 55. *C. fugitivus*, Gr. Shapwick, 11.V.23.
 58. *C. albilarvatus*, Gr. Weston-s.-M., 24.V.14 (T.J.).
Melanichneumon monstagon, 3.VII.20.
 74. *Barichneumon gemellus*, Gr. Burnham, 3.VII.23.
 98. *Ichneumon sarcitorius*, L. Bridgwater, 16.VIII.22.
 111. *I. bucculentus*, Wesm. 7.VII.20 (Capt. Troup).
 122. *I. gracilentus*, Wesm. Bleadon, Weston-s.-M., 21.IV.21
 (T.J.).

130. *I. gracilicornis*, Gr. Weston-s.-M., 14.v.23 (T.J.).
 141. *I. raptorius*, Gr. Weston-s.-M., 25.viii.14 (T.J.).
 173. *Amblyteles palliatorius*, Gr. Weston-s.-M., 30.viii.16
 (T.J.).
 189. *A. armatorius*, Fst. Caves, Banwell, 24.vii.14.
 220. *Platylabus albinus*, Gr. Wembdon, 14.vii.20 (Capt.
 Troup).

Cryptinae

443. *Hemiteles similis*, Gm. Shapwick, 25.viii.28.
H. sp., hyperparasite on *Angitia*, sp.
 531. *Pezomachus instabilis*, Fst. Nailsea, 24.7.23.
 557. *Attractodes exilis*, Hal. Shapwick, 28.6.28.

Pimplinae

649. *Perithous mediator*, Fab. Woods, Weston-s.-M., 10.v.23
 (T.J.).
 650. *P. varius*, Gr. Wembdon, 11.vii.20 (Capt. Troup).
 659. *Pimpla similis*, Bdg. Woods, Weston-s.-M., 21.vii.21
 (T.J.).
 660. *P. robusta*, Morl. Shapwick, 1.viii.23.
 681. *P. aethiops*, Curt. Woods, Weston-s.-M., 6.ix.12 (T.J.).
 684. *P. maculator*, Fab. Woods, Weston-s.-M. (T.J.). N.D.
 740. *Glypta evanescens*, Rtz. Shapwick, 28.vi.28.
 780. *Lissonota nigridens*, Thms. Crewkerne, 28.ii.27 (A. R.
 Hayward).
 781. *L. errabunda*, Hlgrs. Shapwick, 28.vi.28.
 787. *Meniscus pimplator*, Ztt. Shapwick, 11.v.28.
 789. *Alloplasta murina*, Gr. Woods, Weston-s.-M., 20.v.

Tryphoninae

918. *Homocidus cinctus*, Gr. Berrow, 28.vii.28.
 921. *H. pectoratorius*, Gr. Shapwick, 11.v.23.
 924. *H. biguttatus*, Gr. Shapwick, 11.v.23.
 1081. *Euryproctus atomator*, Müll. Ashcott, 15.vi.19.
 1119. *Euceros crassicornis*, Gr. Shapwick, 30.iv.15 (T.J.).

Ophioninæ

1235. *Campoplex pugillator*, Linn. Woods, Weston-s.-M.,
18.vi.16 (T.J.).
1310. *Spudastica Kriechbaumeri*, Bdg. Woods, Weston-s.-M.,
21.vii (T.J.).
1453. *Ophion distans*, Th. Highcliff, Weston-s.-M., 15.iv.14
(T.J.).
1461. *O. obscurus*, Fab. Highcliff, Weston-s.-M. N.D. (T.J.)
1462. *O. minutus*, Kr. Woods, Weston-s.-M., 26.v.14 (T.J.).
1468. *Henicospilus ramidulus*, Linn. Shapwick, 5.viii.16
(T.J.).
1478. *Paniscus testaceus*, Gr. Highcliff, Weston-s.-M. N.D.
(T.J.).
1479. *P. gracilipes*, Th. Shapwick. N.D. (T.J.)

LEPIDOPTERA

There is little, in spite of a sunny summer, to record amongst the Lepidoptera. The visitors have been to the fore. It has been a great *Edusa* year. The only record sent of ♀ var. *Helice* has been by Mr. G. B. Coney, who took three on Creech Hill, August 31st and September 2nd. Of *Cardui* I saw a shabby female in the spring—probably from the continent, so expected it would be common later, as it was. But butterflies have been plentiful on the whole, though *C. album* was no commoner than usual; I saw about four altogether. Among the *Heterocera* the following County records have been reported. *Acentropus niveus*. Two specimens taken by Mr. G. B. Coney at Batcombe, August 30, 1928.

Grapholitha obtusana. Four specimens by Mr. A. R. Hayward at Haselbury Park, 29.v.21, in addition to one reported as taken there by him in May 1927.

Paedisca sinuana, Hb. Haselbury Park, 19.vii.28, by Mr. A. R. Hayward, who writes: 'This species has been separated from *P. solandriana* by Pierce and Metcalfe in their *Genitalia of the Tortricidae*. Meyrick, however, treats them as synonymous in his new Handbook.'

Acrolepia pygmaeana, Haw. (Tineid)—by Mr. A. R. Hayward, Haselbury Park, 25.iv.28.

DIPTERA

Since the publication of Part VI of the Diptera of Somerset the following species, new to the county, have been recorded.

MYCETOPHILIDAE

Platyura nemoralis, Mg. Leigh Woods, 22.v.27 (H. Audcent).

CERATOPOGONIDAE

Dasyhelea versicolor, Winn. Brockley Combe, 21.vii.28 (bred by H. Womersley).

LIMNOBIIDAE

Rhypholophus bifurcatus, Goet. Leigh Woods, 12.ix.28 (H.A.).
Geranomyia unicolor, Hal. Clevedon, Portishead, Weston-s.-M. (H. Womersley).

EMPIDIDAE

Hilara longivittata, Ztt. (*bivittata*, Strobl.). Nailsea, 22.iv.27 (H.A.).

PIPUNCULIDAE

Pipunculus rufipes, Mg. Clevedon, 14.v.27 (H.A.).

ANTHOMYIDAE

Phorbia intersecta, Mg. (*neglecta*, Mde.). Backwell, 21.iv.27 (H.A.).
Hyetodesia trigonalis, Mde. (*palpata*, Stein.). Clevedon, 14.v.27 (H.A.).

TACHINIDAE

Myiobia montana, B. & B. Tickenham, 24.vi.26 (H.A.).
Macquartia praefica, Mg. Sharpham, 3.viii.23 (H.A.).
Brachycoma devia, F. Dunster, viii.16 (H.A.).
Demoticus plebeius, Flin. Sharpham, 22.iv.24 (H.A.).

CHLOROPIDAE

Oscinella nitidissima, Mg. (*atricilla*, Ztt.). Sharpham, 22.VIII.22
(H.A.).

Galls of the following Diptera have been found by Miss J. M. Roper, F.L.S.

CECIDOMYIDAE

Clinodiplosis thalictricola, Bit.

On *Thalictrum minus*, L. Cheddar Gorge, 28.VII.25.

Oligotrophus reaumerianus, Lw.

On *Tilia intermedia*, Dc. Leigh Woods, 27.VI.23.

ANTHOMYIDAE

Chortophila signata, Brischke.

On *Lastrea filix-mas*, Presl. Sandford Hill, 22.VIII.16.

On *Lastrea dilatata*, Presl. Banwell Hill, 30.V.18.

On *Athyrium filix-femina*, Roth. Blackdown, 21.VII.21 ;
Charlcombe Bay, 22.VIII.18.

TRYPETIDAE

Urophora cardui, L.

On *Cnicus arvensis*, Hoffm. Long Ashton, 6.IX.03.

Urophora macrura, Lw.

On *Senecio vulgaris*, L. Barrow Gurney, 2.VIII.28.

HENRY SLATER.

The Ornithological Section

President and Chief Recorder—The Rev. F. L. BLATHWAYT, M.B.O.U.,
Melbury Osmund Rectory, Dorchester, Dorset.

Vice-Presidents—Colonel J. W. GIFFORD and Mr. E. W. HENDY.

Secretary and Treasurer—Mr. H. ST. GEORGE GRAY, Taunton Castle, Taunton.

THE 1928 Annual Meeting of the Section was held in the Wyndham Lecture Hall, Taunton Castle, on 22 March, when the President, the Rev. F. L. Blathwayt, occupied the chair ; there was a very fair attendance.

The Treasurer presented the financial statement for 1927, which showed a balance in hand on 31 December of £9 9s. 2d. On the other hand there was the liability of the cost of the Report for that year to be taken into consideration. There was also on deposit at the bank the sum of £20 14s. 0d. ; this was set aside chiefly as the Somerset Egg Cabinet Fund, but £8 16s. 6d. of these savings was spent in 1927 for completing the Section's set of *British Birds*.

All the Officers of the Section were re-elected, and thanked for their services.

The Fourteenth Report on Somerset Birds (1927), edited by the President, was sent out to the members early in March. The present income of the Section did not allow of an increase in the size of the report, but a Publication and Illustration Fund had been started, to which members were earnestly invited to contribute, for without extra assistance it would be quite impossible to include any pictures.

It was reported that the Somerset County Council had submitted a new draft order to the Home Office which would add a number of species to the protected lists, and also included a list of birds whose eggs would be protected. In the meantime it had been arranged to have the land leased to the National Trust carefully watched by a number of voluntary workers.

That land included not only the Winsford district but also most of the N.E. portion of Exmoor down to the sea. The bye-laws of the National Trust forbade the taking or attempting to take any birds' eggs in that district. It was intended to bring this bye-law to the notice of the police and to prosecute any one discovered contravening it.

The autumn meeting of the Section was held at the same place on 11 October, and was well attended. Twelve new candidates were elected, bringing the Section up to about 110 members.

At this meeting Mr. E. W. Hendy presented a further report on the subject of Wild Birds Protection, and he said the Somerset County Council had made a new order, dated 8 May 1928. They now for the first time had an order protecting birds' eggs all over Somerset, instead of as before only in certain districts.

In the afternoon Mr. Bernard W. Tucker, F.Z.S., M.B.O.U., gave a lecture entitled 'Observations on some Migratory Waders and Water Birds in Somerset', and he brought some stuffed specimens from Oxford for illustrating his remarks.

H. ST. GEORGE GRAY.

The Botanical Section

President—Dr. W. WATSON, A.L.S.

Committee—Dr. H. DOWNES, F.L.S., Mr. N. G. HADDEN,
Miss I. M. ROPER, F.L.S., and Mr. H. S. THOMPSON.

Secretary and Treasurer—Mr. W. D. MILLER, Audrey, Burnham-on-Sea.

THE annual general meeting of the above Section was held at the Museum, Taunton Castle, on Wednesday, December 21, 1927, Dr. W. Watson, President, in the chair. There was a poor attendance. The accounts were passed, showing a balance in hand of £6 3s. 7d. It was decided to pay over to the parent society the sum of £4 to be added to the deposit, and to subscribe 10s. towards the upkeep of the Sharpham Moor Plot. The Committee's report for 1927 was presented, and a part of it was read to the meeting. Mr. Miller read a paper on 'Recent Extinctions', and a short discussion, led by the President, followed.

On June 13 twenty-five members and friends, including boys from Taunton School, travelling by rail and car, met at Uphill Station at 12.30. The rocky limestone eminence of Purn Hill, with its profuse and interesting flora, was first visited. Here lunch was taken, sitting on the short turf in brilliant sunshine, with the Brean flats spread out below, and Brean Down and Steep Holm full in view. Afterwards a move was made to the great Uphill quarry, where, in addition to many of the Purn Hill plants, four or five other treasures are to be found. A small salting near the base of the quarry provides an entirely different plant association. Tea at Uphill village concluded a very pleasant expedition. On the whole plant life was backward, but among the many species seen in bloom were *Ranunculus Baudotii*, *Cerastium pumilum*, *Helianthemum polifolium*, *Hippocrepis comosa*, *Trinia vulgaris*, *Aster Linosyris*, and *Koeleria vallesiana*.

A field day was held at Lilstock on Saturday, July 7, when nearly thirty members and friends from widely separated places enjoyed a short examination of the interesting flora of the coast under ideal weather conditions. The country showed signs of a shortage of rain, and the clovers and small plants were dried up, but the hedgerows and larger plants were luxuriant enough. An afternoon does not give much time, and the area covered was small. Among the more interesting plants noticed were a number of stunted bushes of *Atropa Belladonna*, which have survived in the shingle for at least a hundred years, *Sedum dasyphyllum* (hardly native, but frequent and well established in the neighbourhood), *Rosa micrantha* (several bushes very typical on the shingle ridge) and *Zannichellia pedicellata*. *Alisma lanceolatum*, recorded with reservation by the Rev. E. S. Marshall in 1914, was not observed. *Trifolium maritimum* was seen beside the road at least half-a-mile from the sea. An excellent tea was provided at Lilstock Farm, and not the least of the pleasures of the meeting were the beautiful views of the Bristol Channel and almost the whole length of the Somerset coast enjoyed en route. Some pupils from Bishop Fox's School were a welcome addition to the party.

A field day took place on July 26 to the west end of the Quantock Hills, a dozen members taking part. A careful but unsuccessful search was made for *Vaccinium Vitis-Idaea*, which appears to be irrevocably lost. Plants of bog and heath were studied, and the results of recent rambles were examined and discussed. *Sibthorpia europaea* was very abundant. *Verbascum thapsiforme*, discovered by Mr. Marshall in 1919 in Hodder's Combe, can no longer be found there. The party took tea at the picturesque Manor Mill at East Quantoxhead, and after examining the church walked as far as the sea.

By kind invitation of Colonel and Mrs. Gifford, a party, which included several members of the Section, was entertained at Oaklands, Chard, on October 4. The reservoir and its neighbourhood were explored, and an interesting afternoon was spent with the birds and flowers. The narrow-leaved reed-mace (*Typha angustifolia*), the sweet-scented fern (*Lastraea Oreopteris*) and the broad-leaved Helleborine (*Epipactis latifolia* agg.) were the chief plants noticed. After tea the Colonel gave

a lecture on the movements of diatoms, illustrated by the microscope. After inspection of the well-filled laboratory and demonstrations of the uses of some of the apparatus, the party broke up with many expressions of gratitude for their enjoyable and profitable visit.

Though plant life was slow to make a start, the season has been favourable for observations in the field, and much good work has been done. About 130 new stations of comparatively rare species have been added to the card index. A selection of some of the more interesting notes follows :

Myosurus minimus L. (3) Appeared as a garden weed at Bradford-on-Tone. *W. S. Parry.*

Hypericum humifusum L. (3) Leigh Hill above Blagdon. *W. Watson.*

Erodium moschatum L'Hérit. var. *minor* Rouy. (9) A plant from Purn Hill ascribed to this variety has been cultivated for the last two years in a Surrey garden. It has reverted wholly to type *Erodium moschatum*, the seedlings being also large musky plants flowering during the summer. This suggests either that the Purn Hill plant is not the same as Rouy's var. *minor*, or that the variety is only a habitat form.

Vicia gracilis Lois. (2) Lilstock. *E. J. Hamlin.* (3) Orchard Portman. *C. J. Bartlett.* (5) Still at Somerton. *R. W. Pretor Pinney.*

Poterium afficinale A. Gray. (2) Railway bank close to Williton station. *Miss Miller.* Grounds of Cleve Abbey, Washford. *N. G. Hadden* ; new for (2). Considering that this species is distributed almost all over England (except the extreme south-eastern counties), its rarity in Somerset is remarkable. Save a solitary record fifty years old at West Camel, it has previously been confined to the Barle and Exe valleys. Railway side plants are necessarily suspect, and it is difficult to account for the presence of the greater burnet here. The pink *Coronilla varia* is to be seen on the same railway a few miles away.

Peplis portula L. (4) Britty Common. *Miss Miller* ; new for (4). Distribution of this species in Somerset. Exmoor and its borders chiefly on the north side, the north-east side of Quantock, the Mendips and one or two records in the far

- north-east of the county, everywhere sparingly. It so readily catches the eye that it can hardly have been much overlooked. This new record for the Blagdon Hills is particularly interesting.
- Epilobium Lamyi* F. Schultz. (4) Combe St. Nicholas. W. Watson; new for (4).
- Valerianella carinata* Lois. (2) Carhampton. W. Watson; new for (2).
- Chrysanthemum segetum* L. (4) Allotments, West Coker. H. Downes.
- Myosotis palustris* Hill. var. *strigulosa* Reichb. (4) Chard. W. Watson; new for (4).
- Datura Stramonium* L. (4) Garden weed, Martock; rather frequent. H. Downes; new for (4).
- Veronica Anagallis* L. var. *anagalliformis* Bor. (3) Staple-grove. W. Watson. This striking variety has only previously been noted by Miss Roper at Walton-in-Gordano in 1926.
- Scutellaria galericulata* L. (1) Haddeo valley. G. Watts; new for (1).
- Teucrium scorodonia* L. var. nov. *acrotomum* L. R. Hall. (2) Hawkcombe, Porlock. N. G. Hadden. The remarkable variety of wood sage noticed in 1922 has now been cultivated for six years and proves to be quite constant under the most varying conditions. It is described by Mr. Hall in the *Journal of Botany* 1928, 299, and is apparently new to science. The leaves are sub-circular cordate, and the bracts small and truncated. There are other minor differences between this variety and the type.
- Plantago Coronopus* L. (6) Above Blackwater. W. Watson; new for (6). Records of inland stations for this species are accumulating. It is exceedingly prolific and may be spreading. Dr. E. J. Salisbury has proved by cultivation that the so-called variety *pygmaea* of this plant is nothing more than a habitat form.
- Chenopodium ficifolium* Sm. (3) Northmoor, Durston. G. Watts; new for (3).
- Daphne Laureola* L. (1) Highercombe, Dulverton. Mrs. Browning; new for (1).

Sisyrinchium angustifolium Mill. (8) A patch about 3 yds. by 1 yd. appeared and flowered well on a disused golf green at Burnham. On the supposition that it has no claim to be native, further particulars as to its introduction are greatly to be desired. Those who are not hostile to the artificial introduction of rare plants will please note the confusion and trouble caused by such action.

Triglochin palustre L. (3) Old canal near Norton Station. W. Watson.

Among aliens recorded may be mentioned *Rapistrum Linnaeanum* Boiss. and Reut. at Clevedon. Miss Claydon, *Chrysanthemum corymbosum* L. at Somerton. R. W. Pretor Pinney, and *Tribulus terrestris* L. at Portishead Docks. Miss Grignon.

In May 1922 Mr. H. S. Thompson published in the *Journal of Ecology* an article (with three photographs and a map) on 'Changes in the Coast Vegetation near Berrow, Somerset'. He described the rapid spread in the course of a decade of vegetation over many acres of land, previously bare sand and mud, but recently raised by tidal action sufficiently to support a vigorous plant life. At that date the chief plants were *Glyceria maritima*, *Aster Tripolium* (locally), *Triglochin maritimum*, and various species of *Salicornia* including *S. dolichostachya*. Three clumps of *Spartina Townsendi* had also appeared, probably washed down from near Clevedon, where it had been planted. A review to-day reveals a remarkable change, not so much in the extent as in the character of the flora. Roughly the vegetation stretches for 1,100 yds. along the shore, divided from the Marram and other plants of the dunes by a narrow strip of sand. It extends at least 250 yds. out from the shore, though the seaward edge is patchy and irregular, and it narrows gradually towards the northern end. Three main belts are observable, the Cord Grass (*Spartina*) predominating on the sea or western edge, close colonies of *Scirpus maritimus* occupying the landward side, the middle being filled by a dense growth of *Aster*. *Glyceria maritima* is less evident than it was, and except at the borders *Salicornia* has been nearly crowded out. Other species observed include *Typha* sp. (still too young to determine, but possibly *T. angus-*

tifolia), *Alisma Plantago*, *Glaux maritima*, *Juncus glaucus*, *J. articulatus*, and Mr. Thompson, who has also taken a new series of photographs, adds *Scirpus Tabernaemontani*, *Juncus Gerardi* and *Spergularia marginata* in small quantity. It is doubtful whether any of these will be powerful enough to put up a fight with *Spartina*, except possibly *Scirpus maritimus*, the growth of which in the last three years is little short of amazing. The *Glyceria* (of possibly more than one species) will take root in the sand, but all the rest are growing in a most glutinous mud, and at present the whole area is inundated at high spring tides, only the tallest plants avoiding total immersion.

Students are referred to the *Journal of Botany* (Jan. 1928) for Dr. Watson's 'Lichenological Notes', in which mention is made of a new species *Staurothele innata*, and three species new to the British Isles, *Physcia sciastrella* Harm., *Lecidia soredizodes* Lindau and *Bilimbia effusa* Auers, all from Somerset. In the same *Journal* (p. 168) Mr. Arthur Bennett, 'Notes on *Orobanche*', records *Orobanche Picridis* F. Schultz gathered by D. Fry at Burrington in 1894 (teste Professor Beck).

DISAPPEARANCES. *Teesdalia nudicaulis* cannot now be found either at East Chinnock or on Porlock Hill. Unless it appears again, which from a knowledge of its habitats seems very improbable, the species is lost to the county. Peat cutting has rendered it most unlikely that *Andromeda polifolia* will ever again be seen on the peat moor. Fortunately its Mendip station holds its own. Some hours search at its Copley Wood station failed to detect a plant of *Althaea hirsuta* this year. It will however probably continue to turn up sparingly from time to time. *Scirpus setaceus* has probably gone from Weston-super-Mare, and it cannot be more than a few years before the *Equisetums* and other rarities on the station marsh are overwhelmed by the reclamation of land for allotments and poultry runs.

By the kind invitation of the Bristol Naturalists' Society the annual conference of the South-Western Naturalists' Union was held at Bristol, May 25 to 28, under the presidency of Dr. Bidder, F.Z.S. The fine buildings of the University had been placed by the authorities at the service of the Union and an

excellent programme had been arranged. Expeditions to the Fruit Research Station at Long Ashton, to the Avon Gorge and to Cranham woods, Gloucestershire, were of particular interest to botanists, and under expert guidance numbers of rare species were seen. The drive to the Cotswolds in brilliant weather was especially delightful. Among plants noticed were *Pyrola minor*, *Ophrys muscifera*, *Convallaria majalis* and *Carex digitata*. Our members are again invited to join the Union and attend its conferences. The subscription to members of this Section is 5s. per annum, and the Secretary is Mr. H. Womersley, F.E.S., Sunny Meads, West-Town, Bristol.

At the present date there are 68 members of the Section, but a few subscriptions are in arrears.

Microscopical Section

President—Colonel J. W. GIFFORD, F.R.A.S., F.R.M.S., Oaklands, Chard.

Vice-Presidents—Mr. JOSEPH CLARK, F.R.M.S., Dr. C. R. KILLICK, M.B., F.R.M.S.,
Mr. E. M. NELSON, F.R.M.S., and Dr. W. WATSON, A.L.S.

Secretary and Treasurer—Mr. C. M. BEDFORD, Taunton School, Taunton.

A MEETING was held by the kind invitation of Colonel and Mrs. Gifford at Oaklands, Chard, on Thursday, 4 October 1928. The Botanical and Entomological Sections were also invited. The day was exceptionally fine and a walk round the shores of the canal reservoir, over the hill, and through the woods was very much enjoyed. Tea was provided by Mrs. Gifford and thirteen members and friends were present.

An address was given by Col. Gifford on the movements of diatoms. Mr. A. A. C. Eliot Merlin kindly lent photographs taken with a Nelson-Cassegrain illuminator of the ciliary envelope of certain diatoms, and a silver-stained diatom showing the protoplasmic envelope. The photographs gave a very distinct picture of the cilia, but unfortunately no process has yet been devised to enable a mounted slide to show this. Col. Gifford also exhibited a specimen of *Surirella gemma*, which showed very beautifully the dotted appearance. There was also a specimen of *Navicula*, admirably shown, and the 'white dot' and 'black dot' could be brought out by slight alterations of focus. It is a very great advantage to members to be afforded an opportunity of seeing these objects exhibited by a master under most favourable conditions of carefully arranged illumination and good apparatus.

The Annual Meeting was held at Taunton Castle on Thursday, 17 January 1929. Col. Gifford showed a living specimen of the 'glass larva' under dark background illumination. This gnat larva is not found in the West Country, and the specimen was provided by Capt. G. C. C. Damant, who has made a study

of it and has written a pamphlet on its wonderful power of adjusting its specific gravity so as to enable it to float in a horizontal position in the water under varying conditions. The heart or main vessel could be seen with its valvular cavities, and the nerve cords, muscles and other structures could also be plainly seen.

The Secretary gave an account of the Section from its commencement in July 1920, and recorded the serious losses by death and otherwise of valuable members. The object of the Section is to bring together those interested in microscopical work in the county of Somerset, and it is greatly to be hoped that more young and energetic members may be induced to join. Ten members paid their subscriptions for 1928, but some others who are still members are in arrears.

Colonel Gifford consented to remain the President of the Section on the condition that he should be relieved so far as possible of the duties of presiding at meetings. Dr. C. R. Killick, who has been secretary since the commencement, was appointed a vice-president, and Mr. C. M. Bedford secretary. Mr. E. M. Nelson, Mr. Joseph Clark and Dr. W. Watson were asked to remain in the position of vice-presidents. There was a cash balance in hand of £3 5s. 9*d.* at the close of the year.

C. R. KILLICK.