

magnetic perturbations, by Selim Lemström. 'On the construction of magnets of constant intensity under changes of temperature,' by J. E. Ashworth. 'Antrag auf Massnahmen zur systematischen Erforschung der Secularvariationen der erdmagnetischen Elemente,' von Dr. Ad. Schmidt in Gotha. 'On magnetic observatories at Funafuti,' by Captain Creak. 'Some remarks on the construction of magnetic observatories,' by Dr. Snellen.

In joint discussion with Section A there was read a report of the committee on comparing and reducing magnetic observations, and in joint discussion with Sections A and G on the magnetic and electrolytic actions of electrical railways. Communications on this subject were made by C. A. Schott, Professor A. W. Rücker, Drs. von Eschenhagen and von Bezold, W. H. Preece, Signor Palazzo and Professor Fleming.

The results of the deliberations of the Conference were embodied in the report to be made to the International Meteorological Conference at its next meeting, and publication may be looked for by that organization and in part in the Proceedings of the Bristol Meeting. It is conceded by those who took an active part in the deliberations that this, the first international magnetic conference, has been most satisfactory in its results, and it is hoped that its fruits will show that the labor spent at Bristol was well directed.

Too much praise cannot be bestowed upon the effective manner in which the sessions of the Conference were presided over, which in no small degree contributed to the success of the meeting, nor will the members ever forget the cordiality of reception and generous hospitality extended to them by their President, the British Association and the Chamber of Commerce of the city of Bristol.

C. A. SCHOTT.

WASHINGTON, D. C., October 7, 1898.

THE TENTH ANNUAL MEETING OF THE ASSOCIATION OF ECONOMIC ENTOMOLOGISTS, BOSTON, MASS., AUGUST 19 AND 20, 1898.

THE Association was convened in the lecture hall of the building of the Society of Natural History, corner of Berkeley and Boylston Streets, and was attended by some 25 active members and a number of entomologists and other zoologists not members of the Association.

The following new active members were elected: Edward M. Ehrhorn, Mountain View, Cal., Horticultural Commissioner of Santa Clara County. W. M. Scott, Atlanta, Ga., State Entomologist. W. F. Fiske, Durham, N. H., Assistant Entomologist. J. L. Phillips, Blacksburg, Va., Assistant Entomologist. H. T. Fernald, Harrisburg, Pa., State Zoologist. E. Dwight Sanderson and Franklin Sherman, Jr., College Station, Md., Assistant Entomologists. A. L. Quaintance, State Entomologist, Florida Experiment Station. E. D. Ball, Assistant Entomologist, Colorado Experiment Station. F. H. Mosher, of the Gipsy Moth Commission.

The following new foreign members were also elected: V. Vermorel, Director of the Station of Viticulture and Vegetable Pathology at Ville France, France. Chas. T. Musson, F.L.S., F.R.H.S., Lecturer on Botany and Vegetable Pathology and Zoology, etc., at Hawkesbury Agricultural College, Richmond, New South Wales.

The reading of papers was preceded by the annual address of President Osborn, on 'The Duty of Economic Entomology.'

The following papers were presented in the order given during the four regular sessions of the Association, Friday and Saturday, August 19th and 20th. The papers in full, with the discussions which they elicited, will be published as a bulletin by the Division of Entomology of the U. S. Department of Agriculture, as has been the custom in former years.

LIST OF PAPERS.

- 'Two Beneficial Insects introduced from Europe,'
L. O. Howard.
- 'Notes on some of the Insects of the Year in the State of New York,' E. P. Felt.
- 'The Brown-tail Moth (*Euproctis chrysorrhæa*),'
C. H. Fernald.
- 'The Distribution of the San José or Pernicious Scale in New Jersey,' J. B. Smith.
- 'Hydrocyanic Acid Gas as a Remedy for the San José Scale and other Insects,' W. G. Johnson.
- 'Some Notes on Observations in West Virginia,'
A. D. Hopkins.
- 'Notes on House Flies and Mosquitoes,'
L. O. Howard.
- '*Pulvinaria acericola* (W. and R.) and *P. innumerabilis* Rathv.' L. O. Howard.
- 'An Abnormal Coccinellid,' A. F. Burgess.
- 'Notes on some Massachusetts Coccidæ,'
R. A. Cooley.
- 'Notes on Spruce Bark Beetles,'
C. M. Weed and W. F. Fiske.
- 'A Review of the Work in Economic Entomology in Pennsylvania,' H. T. Fernald.
- 'Experiments with Insecticides for the Gypsy Moth and Brown-tail Moth,' A. H. Kirkland.
- 'Notes on the Life History of the Woolly Aphis of Apple (*Schizoneura lanigera* Haussman),'
W. B. Alwood.
- 'On the Life History of *Protoparce carolina*,'
W. B. Alwood.
- 'Notes on the Fertilization of Muskmelons by Insects,' F. W. Rane.
- 'Notes on Tent Caterpillars,' C. M. Weed.
- 'Recent Work of the Gypsy Moth Committee,'
E. H. Forbush.
- 'The San José Scale in Connecticut' (read by title only) W. E. Britton.
- 'Insect Injury to Broom Corn' (read by title only),
F. H. Chittenden.
- 'Entomological Ethics' (read by title only),
T. D. A. Cockerell.
- 'Vernacular Names of Insects' (read by title only),
E. W. Doran.
- 'A New Squash Bug' (read by title only),
F. H. Chittenden.
- 'Notes from Maryland on the Principal Injurious Insects of the Year' (read by title only),
W. G. Johnson.
- 'On the Life History of *Thrips tritici*' (read by title only), A. L. Quaintance.
- 'Notes on Insecticides' (read by title only),
C. L. Marlatt.
- 'Insects of the Year in Ohio' (read by title only),
F. M. Webster and C. W. Mally.

An hour was given on Saturday morning to a joint meeting with the Society for the Promotion of Agricultural Science when the papers presented before this Society on entomological subjects were read.

By the courtesy of the Gypsy Moth Commission of the State Board of Agriculture, Massachusetts, an excursion was given to the members of the Association to the districts about Malden where work is being prosecuted against the gypsy moth, opportunity being afforded the members to make an examination of the methods of work followed and the results obtained.

The following officers were elected for the ensuing year: President, C. L. Marlatt; First Vice-President, Lawrence Bruner; Second Vice-President, C. P. Gillette, and Secretary-Treasurer, A. H. Kirkland.

In accordance with the established custom the next session will be held on the two week days preceding the general sessions of the American Association for the Advancement of Science, and at the place selected by the latter body.

C. L. MARLATT,
Secretary.

NOTES ON INORGANIC CHEMISTRY.

In a paper read before the Chemical Section of the British Association at the Bristol meeting Professor Ramsay describes more fully the isolation and properties of the new element neon. Eighteen liters of argon were liquefied and then fractionally distilled. After three fractionations the lightest fraction had a density of 9.76. This gas no longer liquefies at the temperature of liquid air boiling at 10 mm. and consists chiefly of neon with the admixture of small quantities of argon and nitrogen. Pure neon seems to have a density of 9.6, and, as the ratio between specific heat at constant pressure and constant volume is 1.655, the element is, like helium and argon, monatomic, and its atomic weight therefore 19.2,