

DR. J. RALPH HARRIS (Washington, D. C.): 'A Comparison of Human and Orang Hearts,' with lantern slides.

DR. DANIEL G. REVELL (Hull Laboratory of Anatomy, Chicago): 'An Anomaly of the Vena Cava Inferior.'

One afternoon was given over to demonstrations. This proved an especially attractive and instructive feature of the meeting.

The following demonstrations were made:

DR. CHARLES R. BARDEEN: (a) The effect of fatigue on muscle nuclei (P. K. Tilman); (b) nerve and muscle preparations; (c) students' charts made during dissection.

DR. ROSS G. HARRISON: (a) Specimens illustrating the differentiation of muscular tissue when removed from the influence of the nervous system; (b) specimens illustrating the development of the lateral line and wandering of the skin in the amphibian embryo.

DR. G. CARL HUBER: (a) Models of sudoriparous and allied glands; (b) photograph of a new apparatus for making wax plates for reconstruction after the method of Born.

DR. WILLIAM KEILLER: Specimens illustrating the state of preservation of material injected by formalin and carbohc acid solutions, also wet and dry museum preparations.

DR. HENRY MCE. KNOWER (Secretary of the editorial board of *American Journal of Anatomy*): A demonstration on illustrations for anatomical publications.

DR. WILLIAM S. MILLER: (a) Models illustrating the terminal arrangement of the bronchi in the cat; (b) specimens illustrating pancreatic bladder in the cat; (c) the lymphatics of the lung of *Necturus*.

DR. BURTON D. MEYERS (Anatomical Laboratory, Johns Hopkins University): Specimens illustrating the partial decussation of the optic fibers in the chiasm of some mammals, and the commissures on the floor of the third ventricle.

DR. FLORENCE R. SABIN (Anatomical Laboratory, Johns Hopkins University): Gross and microscopic preparations of developing lymphatics.

DR. EDWARD A. SPITZKA: Drawings and plaster models, illustrating the anatomy of the human insula in its relation to the speech-centers.

DR. MERVIN T. SUDLER (Cornell University): Photographs of the lymphatic system and topo-

graphical dissections as made in the anatomical course of the Cornell University Medical College.

DR. ABRAM T. KERR (Cornell University): Corrosion preparations.

G. CARL HUBER,
Secretary.

THE ASSOCIATION OF ECONOMIC ENTOMOLOGISTS.

THE fifteenth annual meeting of the association met in the Natural History Room of the Columbian University, Washington, D. C., Friday and Saturday, December 26 and 27, 1902. The attendance throughout was quite large and the meeting was one of the most successful in the history of the association. The following papers were presented:

W. B. ALWOOD, Blacksburg, Va.: 'Injury by Seventeen-year Locust.'

W. E. BRITTON, New Haven, Conn.: 'The Lime, Sulfur and Salt Wash in Connecticut.'

A. F. BURGESS, Columbus, Ohio: 'Economic Notes on the Coccinellidæ.'

F. H. CHITTENDEN, Washington, D. C.: (1) 'Notes on the Larger Sugar-beet Leaf Beetle, *Monoxia puncticollis* (Say)'; (2) 'Notes on Insects that have Recently been Injurious to Truck Crops.'

E. W. DORAN, Champaign, Ill.: 'Vernacular Names of Insects.'

E. P. FELT, Albany, N. Y.: (1) 'The Literature of American Economic Entomology' (presidential address); (2) 'Observations on the Grapevine Root Worm'; (3) 'Results Obtained with Certain Insecticides'; (4) 'Notes on Injurious Insects.'

JAMES FLETCHER, Ottawa, Canada: (1) 'Can the Pea Weevil be Exterminated?'; (2) 'Injurious Insects of the Year in Canada.'

V. L. KELLOGG, Stanford University, Cal.: 'Notes on California Coccidæ, Aleurodidæ and Scolytidæ.'

C. L. MARLATT, Washington, D. C.: 'Economic Entomology in Japan, with Notes on Some of the Principal Insect Pests.'

H. A. MORGAN and J. W. DUPREE, Baton Rouge, La.: 'Life Histories and Hibernation of Mosquitoes.'

HERBERT OSBOEN, Columbus, Ohio: (1) 'Notes on Ohio Insects for Season of 1902'; (2) 'A

Method for Mounting dry Coccidæ for Permanent Preservation.'

J. L. PHILLIPS, Blacksburg, Va.: 'Notes on *Melanoplus femoratus*.'

A. L. QUAINANCE, College Park, Md.: (1) 'Further Notes on the Lime, Sulfur and Salt Wash in Maryland'; (2) 'Entomological Notes from Maryland.'

F. WM. RANE, Durham, N. H.: 'Plant Environment and Insect Depredation.'

C. B. SIMPSON, Washington, D. C.: 'Observations on the Life History of the Codling Moth.'

J. B. SMITH, New Brunswick, N. J.: (1) 'Distribution of Broods of the Periodical Cicada in New Jersey'; (2) 'Notes on Experiments with Mosquito Larvicides'; (3) 'Notes on *Culex sollicitans*, its Habits and Distribution.'

T. B. SYMONS, College Park, Md.: 'On the Position of the Setæ of the San José Scale in the Tissues of Infested Plants.'

F. L. WASHBURN, St. Anthony Park, Minn.: (1) 'Distribution of the Chinch Bug in Minnesota'; (2) 'A Criticism Upon Certain Codling Moth Investigations.'

F. M. WEBSTER, Urbana, Ill.: 'A Partial Insect Fauna of *Elymus Canadensis*.'

CLARENCE M. WEED, Durham, N. H.: 'Notes from New Hampshire.'

The following officers were elected for the ensuing year:

President—Professor M. V. Slingerland, Ithaca, N. Y.

Vice-President—Professor C. M. Weed, Durham, N. H.

Second Vice-President—Dr. Henry Skinner, Philadelphia, Pa.

Secretary and Treasurer—Professor A. F. Burgess, Columbus, Ohio.

A. L. QUAINANCE,
Secretary.

THE BOTANICAL SOCIETY OF AMERICA.

THE Botanical Society of America held its ninth annual meeting at Washington, D. C., December 30, 1902, to January 1, 1903, under the presidency of Dr. B. T. Galloway.

The address of the past president, Dr. J. C. Arthur, 'Problems in the Study of the Plant Rusts,' was given in the medical building, Columbian University, December 31, 1902. This address has been printed

in the *Bulletin of the Torrey Botanical Club* for January, and reprinted as publication 22 of the society. The program of scientific papers was presented on December 31, 1902, and January 1, 1903.

L. M. UNDERWOOD and M. A. HOWE: 'The Distribution of the Genus *Riella*, with Descriptions of New Species from North America and the Canary Islands.'

F. S. EARLE: 'Types of the Linnæan Genera of Fungi.'

L. R. JONES: 'Pressure and Flow of Sap in the Sugar Maple.'

B. M. DUGGAR: 'The Nutrition of Certain Edible Basidiomycetes.' (Illustrated.)

H. DE VRIES: 'Atavistic Variations in *Onagra cruciata* (Nutt.) Small.' (By invitation.)

J. M. COULTER and C. J. CHAMBERLAIN: 'The Embryo of *Zania*.'

K. GOEBEL: 'Regeneration in Plants.' (By invitation.)

W. A. KELLERMAN: 'Uredinous Infection: Suggestions and Experiments.'

F. M. ANDREWS: 'Contribution to the Physiology of the Cell.' (By invitation.)

W. A. MURRILL: 'North American Species of the Genus *Mison*.' (By invitation.)

W. A. MURRILL: 'The Genera of Polyporaceæ.' (By invitation.)

J. C. ARTHUR: 'Cultures of Uredinæ in 1902.'

F. E. CLEMENTS: 'Herbaria Illustrating Plant-formations.'

H. C. COWLES: 'The Relative Importance of Edaphic and Climatic Factors in Determining the Vegetation of Mountains, with Especial Reference to Mt. Katahdin.' (Illustrated.)

H. C. COWLES: 'Two Distinct Types of Rivers from the Point of View of Physiographic Ecology.'

D. M. MOTTIER: '*Podophyllum peltatum* as an Anomalous Dicotyledonous Plant.'

C. MACMILLAN: 'The Fenestration of *Martensia*.'

D. S. JOHNSON: 'The Development of the Embryo-sac in the Genera of the Saururaceæ.'

A. D. SELBY: 'The Etiolation of Seedlings of *Persea gratissima*.'

ARTHUR HOLLOCK: 'A Fossil Petal of *Magnolia* from the Dakota Group of Kansas.'

W. J. GIES: 'Alkaverdin, a Hitherto Unknown Pigment Found in Leaves of *Sarracenia purpurea*.' (By invitation.)

W. J. GIES: 'The Digestive Action Ensuing in the Pitchers of *Sarracenia purpurea*.' (By invitation.)