

success of the Biological Section under the chairmanship of Dr. Carl L. Alsberg, of Washington, D. C. Forty-four papers were presented before this section of a strictly chemical nature bearing upon biochemical problems.

The meeting of the Section of Chemical Education, held at a time when all the industrial chemists could meet with them, proved decidedly interesting and the discussion was general.

On the first day of the meeting the chemists all gathered in general session to listen to eight general addresses as follows:

"The Lost Arts of Chemistry," W. D. Richardson.

"The Basis of Industrial Efficiency," A. D. Little.

"Synthetic Metals from Non-metallic Elements," Herbert N. McCoy.

"Progress in Food Chemistry," H. E. Barnard.

"Mechanism of Cell Activity," Carl L. Alsberg.

"Waste Wood and some of its By-products," Geo. B. Frankforter.

"The Formation of Carbohydrates in the Vegetable Kingdom," Wm. McPherson.

"The Efficiency of the College Graduate in the Chemical Industry," Chas. F. Burgess.

The address of the retiring president, Wilder D. Bancroft, on "A Universal Law," was an exposition of the general application of the theorem of LeChatelier to all kinds of natural phenomena as well as those of a chemical nature.

Possibly the complimentary smoker in the rooms of the Commercial Club was as thoroughly enjoyed as any one feature of the meeting, for an unusually witty program had been arranged and original songs bearing upon individual chemists and chemical phenomena were thoroughly enjoyed; also the mementoes furnished to the visiting chemists were pleasing to all. This, however, was not the only social function of the meeting, for several receptions and teas were arranged for the ladies and the banquet on Friday night, which was attended by some two hundred members, was also graced by their presence.

Excursions to the following places and works were taken by the members: Russell-Miller Milling Co., Pillsbury Flour Mills Co., Washburn-Crosby Co., Consolidated Milling Co., Minnesota Linseed Oil and Paint Co., Archer-Daniels Co., Midland Linseed Oil Co., St. Anthony Falls Water Power Co., Cream of Wheat Co. and International Stock Food Co.

On Saturday afternoon a large number were treated to a sight-seeing trip covering both the

cities of Minneapolis and St. Paul. A number of the chemists also had the privilege of viewing the wonderful paintings of La Farge in the state capitol of Minnesota.

The announcement of the election of Alexander Smith as president of the society and of Louis Kahlenberg, Frank K. Cameron, Geo. B. Frankforter and E. C. Franklin and E. G. Love as councilors-at-large met with hearty approval and applause.

M. C. Whitaker was elected editor of the *Journal of Industrial and Engineering Chemistry*, and the report of a committee recommending a decided broadening of the policy of that journal was adopted.

The secretary announced a net gain of 550 members for the year, the society now having a membership of over 5,100.

CHARLES L. PARSONS,
Secretary

THE TWENTY-THIRD ANNUAL MEETING
OF THE AMERICAN PHYSIOLOGICAL
SOCIETY, NEW HAVEN, CONN.,
DECEMBER 27-30, 1910

For the first time in many years the physiologists of the country, together with the biochemists and the pharmacologists, met apart, not only from the American Association for the Advancement of Science, but also from the group of societies associated with the naturalists. Sixty-three of the society's one hundred and seventy-five members were present. The meeting was successful in point of attendance as well as in the number of communications of high merit and in able discussions. An important factor in the success of the meeting was the splendid arrangements made for us by the local committee (the biologists of the Sheffield Scientific School, the Yale Medical School and the Connecticut Agricultural Experiment Station) and the cordial hospitality extended by this committee to the visiting members.

The following papers and demonstrations were presented and discussed during the six scientific sessions (two of these being joint sessions with the biological chemists).

E. B. Meigs, "The Osmotic Properties of Smooth Muscle."

Gertrude F. Barbour and P. E. Stiles, "Localized Activity in Skeletal Muscle."

C. J. Wiggers, "Pulse Pressure Variations in the Pulmonary Circuit."

G. W. Fitz, "A Preliminary Report of Work

with the Shadow Pupillometer in Determining the Constants of Pupillary Reactions."

G. H. Parker, "The Olfactory Sense in Fishes."

F. C. Becht and A. B. Luckhardt, "On the Source of the Immune Bodies in the Lymphs."

J. R. Murlin and J. R. Greer, "The Heart Action in Relation to the Respiratory Metabolism."

W. B. Cannon and C. W. Leib, "The Receptive Relaxations of the Stomach."

S. Simpson, "Are the Parathyroids Capable of Replacing the Thyroids Physiologically?"

L. Loeb, "The Function of the Corpus Luteum."

T. B. Osborne and L. B. Mendel, "Feeding Experiments with Mixtures of Isolated Food Substances."

Elizabeth Cooke and S. P. Beebe, "Autolysis of Liver as Affected by Thyroid Administration."

J. Loeb, "Further Experiments on the Antagonistic Action of Salts."

O. Schreiner and M. X. Sullivan, "Biological Analyses in Soil Oxidation."

S. J. Meltzer, "The Migration of Solutions in Animal Bodies Deprived of their Cardiac Circulation."

G. N. Stewart, "Measurement of the Blood Flow in Man."

W. H. Howell, "The Action of Pure Thrombin."

G. W. Fitz, "A Shadow Pupillometer for the Accurate Study of Pupillary Reactions."

S. Simpson, "A Modification of Schäfer's Frog-heart Plethysmograph."

Y. Henderson, "A Quantitative Pneumograph."

E. D. Jackson, "An Automatic Shellacking Device."

A. J. Carlson, "The Mechanisms of Automaticity, Coordination and Conduction in the *Limulus* Heart." (Demonstration.)

A. B. McCallum, "Some Illustrations in Animal and Vegetable Cells of the Gibbs-Thomson Law of Surface Condensation of Solutes."

H. Cushing, E. Goetsch and C. Jacobson, "The Hypophysis and its Relation to Carbohydrate Tolerance."

H. C. Jackson, "Changes in the Blood and Tissues following Double Nephrectomy and Urethral Ligation."

J. Auer, "The Causation of Acute Anaphylactic Death in the Rabbit."

J. R. Murlin and L. H. Mills, "The Influence on Metabolism of Oils given Subcutaneously and Intravenously."

A. B. Luckhardt and F. C. Becht, "The Relation of the Spleen to the Fixation of Antigens and the Production of Immune Bodies."

P. A. Grant, Eleanor Van Alstyne and S. P. Beebe, "The Absorption of Protein through the Intact Intestinal Epithelium."

F. Wills and P. B. Hawk, "The Stimulation of the Gastric Secretion under the Influence of Water-drinking with Meals."

V. E. Henderson, "The Effect of Temperature upon the Heart."

J. S. Miller, D. D. Lewis and S. A. Matthews, "The Effects of the Intravenous Injection of Extracts of the Different Parts of the Hypophysis."

W. B. Cannon, "Observations on the Nature of Gastric Peristalsis."

F. H. Pike, "The Mechanism of the Asphyxial Rise of Blood Pressure in the Spinal Animal."

J. A. E. Eyster, "The Effects of the Intravenous Injection of Extracts of the Pineal Body."

D. R. Joseph and S. J. Meltzer, "Inhibition of the Duodenum Coincident with the Movements of the Pyloric Part of the Stomach."

A. J. Carlson, J. R. Rooks and J. R. McKie, "Attempts to Produce Experimental Hyperthyroidism in Different Animal Groups" (with demonstrations).

Owing to the absence of the authors the following papers were read by title only:

W. Koch and C. C. Todd, "The Nature of the Chemical Combinations of Potassium in the Tissues."

A. Hunter and M. H. Givens, "The Allantoin and Purin Metabolism in the Monkey."

T. G. Brodie, "The Gaseous Metabolism of the Heart."

G. Lusk, "A Method of Removing the Glycogen in the Human Subject."

P. B. Hawk, "The Activity of the Pancreas during Moderate and Copious Water Drinking with Meals."

W. M. Hattrem and P. B. Hawk, "On the Intestinal Putrefaction during Copious and Moderate Water-drinking with Meals."

Clara Jacobson, "On the Mechanisms of Inhibition of the Parathyroid Tetany in Mammals by Calcium Salts."

W. Jones, "A Specific Nuclease for Guanylic Acid."

The society appropriated \$100 to the *American Journal of Physiology* towards defraying the cost of the index volume.

The following new members were elected:

Harvard University: J. H. Pratt, W. J. V. Osterhaut, A. Forbes.

University of California: T. B. Robertson, S. S. Maxwell.

Washington University: W. E. Garrey, D. E. Jackson.

University of Pittsburgh: C. Brooks, R. E. Sheldon.

Cornell University: J. R. Greer, E. Sachs, J. F. McClendon.

Columbia University: W. G. MacCallum.

Western Reserve University: D. Marine.

Yale University: L. L. Woodruff.

The following officers were elected for the year 1911:

President—S. J. Meltzer.

Secretary—A. J. Carlson.

Treasurer—W. B. Cannon.

Members of the Council—J. Erlanger, F. S. Lee, A. J. CARLSON,

Secretary

UNIVERSITY OF CHICAGO

THE AMERICAN MATHEMATICAL SOCIETY

THE seventeenth annual meeting of the American Mathematical Society was held at Columbia University on Wednesday and Thursday, December 28-29, 1910, extending through the usual morning and afternoon sessions on each day. Sixty-two members were in attendance. President Maxime Böcher took the chair at the opening session, yielding it to Professor Kasner, Ex-president Osgood, and at the morning session on Thursday to the president-elect, Professor H. B. Fine. The council announced the election of the following persons to membership in the society: Professor Percy Hodge, Columbia University; Mr. C. G. P. Kuschke, University of California; Professor Marion B. White, University of Kansas. Eight applications for membership in the society were received.

On Wednesday evening thirty of the members gathered at the annual dinner, which has for many years been a pleasant adjunct to the regular sessions.

It was decided to hold the summer meeting of the society at Vassar College in 1911, and at the University of Pennsylvania in 1912. A committee, consisting of Professors H. S. White, P. F. Smith and the secretary, was appointed to make the necessary arrangements for the summer meeting of 1911.

At the annual election, which concluded on Thursday morning, the following officers and other members of the council were chosen:

President—Professor H. B. Fine.

Vice-presidents—Professors G. A. Bliss and W. E. Story.

Secretary—Professor F. N. Cole.

Treasurer—Professor J. H. Tanner.

Librarian—Professor D. E. Smith.

Committee of Publication—Professors F. N. Cole, E. W. Brown and Virgil Snyder.

Members of the Council (to serve until December, 1913)—Professors H. F. Blichfeldt, J. L. Coolidge, C. J. Keyser and J. W. Young.

The total membership of the society is now 642, including 60 life members, an increase of 24 during the past year. The total attendance at all meetings of the year was 317; the number of papers presented was 145; 202 votes were cast at the annual election. The treasurer's report shows a balance of \$8,124.53, a slight increase over last year, although the university subventions for the *Transactions*, amounting to \$500 per annum, have been discontinued and the society has paid an installment of 1,000 francs of its contribution toward the publication of the works of Euler. The income from sales of the society's publications during the year was \$1,660.21. The life-membership fund now amounts to \$3,901.83. The library shows the normal increase, the total number of books on the shelves being now 3,508.

During the past sixteen years the society has expended for printing the *Bulletin*, *Transactions* and other publications \$42,473.57. The total returns from publications have been in the same period \$15,375.20. The stock of publications on hand may be fairly valued at about \$10,000. The university subventions have amounted to \$3,100. Editorial and administrative expenses during the sixteen years have been \$11,739.14. The society is about to undertake the publication of the Princeton Colloquium Lectures and the republication of Klein's Evanston Lectures.

The following papers were read at the annual meeting:

S. Chapman: "A note on the theory of summable integrals."

H. H. Mitchell: "Concerning a rotation group in six-space."

Virgil Snyder: "An application of a (1-2) quaternary correspondence."

A. S. Hawkesworth: "Three new dimension theorems."

W. R. Longley: "Singular points on the discriminant locus of an ordinary differential equation."

R. G. D. Richardson: "Theorems of oscillation for two self-adjoint linear differential equations of the second order with two parameters."

Maxime Böcher: "A simple proof of a funda-