production of new species. The valuable feature of the program was the forcible way in which the opposing evidence and ideas of species formation were presented by the several participants. Professor Johannsen, of Copenhagen, who has so strikingly expounded the principles of pure lines and genotypes in the study of inheritance, sent a most suggestive paper to be read before the symposium.

PUBLICATION OF PAPERS

The address of the president and all papers read before the society will appear in series in the forthcoming numbers of *The American Naturalist*

The importance and scope of the papers read are shown by the following titles:

- H. J. Webber, Cornell University, "What is a Genotype or Biotype?"
- H. S. Jennings, Johns Hopkins University, "Pure Lines in the Study of Genetics in Lower Organisms."
- E. M. East, Bussey Institute, "The Genotype Hypothesis and Hybridization."
- W. Johannsen, University of Copenhagen, "The Genotype Conception of Heredity."
- Geo. H. Shull, Carnegie Institution, "The Genotypes of Maize."
- T. H. Morgan, Columbia University, "The Application of the Conception of Pure Lines to Sexlimited Inheritance and to Sexual Dimorphism."
- J. Arthur Harris, Carnegie Institution, "The Biometric Proof of the Pure Line Theory."
- R. A. Emerson, University of Nebraska, "Some Genetic Correlations in Maize and their Relation to the Formation of New Genotypes through Hybridization."
- R. Pearl, Maine Agricultural Experiment Station, "The Inheritance of Fecundity in the Domestic Fowl."
- W. E. Castle, Harvard University, "Are Unit Characters Subject to Modification by Selection?"
- F. B. Sumner, United States Fisheries, "Some Effects of Temperature upon Growing Mice and the Persistence of such Effects in a Subsequent Generation."
- J. H. Gerould, Dartmouth College, "Polymorphism and Inheritance in Colias Philodice."
- S. Hatai, Wistar Institute, "On the Mendelian Ratio and Blended Inheritance."
- M. F. Guyer, University of Cincinnati, "The Nucleus and Cytoplasm in Inheritance."

Many of the papers were followed by interesting discussion, but unfortunately the program proved to be too long to allow full time for this desirable feature.

Several valuable demonstrations were displayed by members of the society.

NEW MEMBERS

The following were elected members of the Naturalists: J. F. Abbot, Washington University; R. A. Emerson, University of Nebraska; A. W. Gilbert, Cornell University; L. Griggs, Dartmouth College; A. Gulick, University of Toronto; J. A. Harris, Carnegie Institution; S. Hatai, Wistar Institute; H. E. Jordan, University of Virginia; A. E. Lambert, Massachusetts State Normal School; C. C. Little, Bussey Institute; H. H. Love, Cornell University; S. O. Mast, Goucher College; G. T. Moore, Washington University; J. C. Phillips, Bussey Institute; R. E. Sheldon, University of Pittsburgh; A. F. Shull, Columbia University; W. J. Spillman, U. S. Department of Agriculture; H. B. Torrey, University of California; G. Wagner, University of Wisconsin; H. J. Webber, Cornell University; E. N. Wentworth, Iowa State College; D. D. Whitney, Wesleyan University.

The following officers were elected for 1911: President—Professor H. S. Jennings, Johns Hopkins University.

Vice-president and Chairman of Eastern Branch
—Dr. Geo. H. Shull, Carnegie Institution.

Treasurer—Professor E. M. East, Bussey Institute.

Secretary—Professor C. R. Stockard, Cornell University Medical School.

Additional Members of Executive Committee—Professor W. L. Tower, University of Chicago, and Dr. B. M. Davis, Cambridge, Mass.

CHAS. R. STOCKARD, Secretary

THE AMERICAN CHEMICAL SOCIETY

THE forty-third general meeting of the American Chemical Society, held at Minneapolis, December 28-31, was attended by 275 members and guests and, like all recent meetings of the society, was simply an echo of the general enthusiasm that pervades its membership.

Owing to the fact that over 175 papers were presented, it was necessary to hold meetings of all of the divisions and the meetings of the Division of Agricultural and Food Chemistry, Division of Fertilizer Chemistry, Division of Pharmaceutical Chemistry, Division of Industrial Chemists and Chemical Engineers, Division of Physical and Inorganic Chemistry and Division of Organic Chemistry, were well attended.

A point especially worthy of note was the

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. Sixtythree of the society's one hundred and seventyfive 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