psychical response is not essential between the sexes in mating.

Some Notable Cases of Radical Variation and Regeneration in Starfishes and Ophiurans: ADDISON E. VERRILL, Yale University. (Read by title.)

The following demonstrations were exhibited:

- Some Maturation Stages of the Mouse Egg: J. A. LONG (by E. L. Mark).
- Preparations showing the Maturation, Fertilization, and Cleavage of the Eggs of the Mouse and Rat: Wesley R. Coe and W. B. KIRKHAM.
- The Organ of Claus in the Copepod Eucalanus: C. O. ESTERLY (by E. L. Mark).
- Photographs of Triplet Calves: RAYMOND PEARL.
- Photographs of Wing of Fowl with Three Extra Digits: GILMAN A. DREW.
- A Series of Embryos of the Loggerhead Turtle: DAVENPORT HOOKER.
- Model of a Portion of the Lumen of the Spermatophoric Gland of the Squid: L. W. WILLIAMS.
- Color Variations of Litorina palliata: F. B. SUMNER and J. W. UNDERWOOD.
- Morphological Variation during the Life-Cycle of Infusoria: LORANDE LOSS WOOD-RUFF.

LORANDE LOSS WOODRUFF,

Secretary

YALE UNIVERSITY

THE AMERICAN SOCIETY OF BIOLOGICAL CHEMISTS

THE first annual session of the American Society of Biological Chemists was held at the University of Chicago during convocation week, from December 30, 1907, to January 2, 1908, inclusive. Four meetings were held, with the scientific programs indicated below:

First Meeting

Physiology Building. Monday afternoon, December 30, 1907.

Presiding officer: The president, Russell H. Chittenden.

Program

"The Rate of Oxidation of the Sugars in an Acid Medium," by H. H. Bunzel (by invitation).

"On the Efficiency of Thymol and Refrigeration for the Preservation of Urine, as shown by Comparative Analyses for the Various Nitrogenous Constituents at the End of 24, 48, 72 and 96 hours," by P. B. Hawk and H. S. Grindley.

"Comparative Tests of Spiro's and Folin's Methods for the Determination of Ammonia and Urea," by Paul E. Howe and P. B. Hawk.

"A Study of the Relative Therapeutic Value of Antitoxic Globulin Solution and the Whole Serum," by Edwin J. Banzhaf (by invitation).

"The Quantitative Changes during Immunization in the Blood of Horses and the Relation of the Serum Globulin to Diphtheria and Tetanus Antitoxin Content," by Edwin J. Banzhaf and Robert B. Gibson.

"The Compressibility of Gelatin Solutions and of Muscle," by Lawrence J. Henderson and F. N. Brink.

"The Efficiency of the Neutrality Regulation in the Animal Organism," by Lawrence J. Henderson. "On Glycosuria," by Hugh McGuigan.

"A Comparison of Waymouth Reid's and Schenck's Methods for the Estimation of Sugar in Blood," by J. J. R. Macleod.

"Eosinophilia and Indicanuria," by C. H. Neilson.

Second Meeting

Physiology Building. Tuesday morning, December 31, 1907. Joint session with the American Physiological Society.

Presiding officers: The president of the American Society of Biological Chemists, Russell H. Chittenden, and the president of the American Physiological Society, William H. Howell.

Program

"Protein Metabolism in Fasting," by Otto Folin. "Experimental Glycosuria," by J. J. R. Macleod.

"Further Observations on the Parenteral Utilization of Carbohydrates," by Lafayette B. Mendel. "Preliminary Report of Certain Investigations as to the Nature of Peptones," by Howard D. Haskins.

"The Spontaneous Oxidation of Some Cell Constituents," by Albert P. Mathews, O. Riddle and S. Walker.

"The Fats and Lipoids of Malignant Renal Hypernephromas," by H. Gideon Wells.

"Protein Metabolism in the Dog. II. The Influence of Low Caloric Values of Nitrogen on Metabolism," by Emil Osterberg and Charles G. L. Wolf.

"Further Communication on the Effect of Vagus Inhibition on the Output of Potassium from the Heart," by W. H. Howell and W. W. Duke.

"On the Chemical Study of Mental Disorders," by Waldemar Koch.

"Concerning the Pharmacological Action of Potassium Iodide," by L. B. Stookey and V. Gardner.

"On the Composition of Normal Lymph from the Neck Lymphatics of the Horse," by J. R. Greer (by invitation).

"The Presence of Glucose in Saliva," by J. G. Ryan (by invitation).

"The Antagonistic Action of Calcium upon the Inhibitory Effect of Magnesium," with a demonstration, by S. J. Meltzer and John Auer.

Third Meeting

Kent Chemical Building. Wednesday morning, January 1, 1908. Joint session with the Biological Section of the American Chemical Society in affiliation with Section C (Chemistry) of the American Association for the Advancement of Science.

Presiding officers: The president of the American Chemical Society, Marston Taylor Bogert, and the president of the American Society of Biological Chemists and chairman of the Biological Section of the American Chemical Society, Russell H. Chittenden.

Program

President's Address: "Some of the Present-day Problems of Biological Chemistry," by Russell H. Chittenden. (Published in SCIENCE, XXVII., p. 241, 1908.) "On the Passage of Substances into the Human System by Osmosis," by Louis Kahlenberg.

"The Isolation and Toxic Properties of an Organic Soil Constituent," by Oswald Schreiner and Edmund C. Shorey.

"Toxic Substances Arising during Plant Metabolism," by Oswald Schreiner and M. X. Sullivan.

"Bacterial Growth and Chemical Changes in Milk Kept at Low Temperatures," by M. E. Pennington.

"The Chemical and the Physiological Properties of a Solution of Hydrochloric Acid and Sodium Chloride," by Amos W. Peters.

"Endo and Ekto Invertase of the Date," by A. E. Vinson.

"Glycocoll as a Product of Uricolysis," by L. B. Stookey.

"A Study of the Influence of Potassium Cyanide on the Excretion of Nitrogenous Substances in the Urine of Dogs," by William H. Welker.

"A Demonstration of a Method (with apparatus) of showing the Electric Charges of Colloids," by A. B. Macallum.

"The Protein of Tumors," by S. P. Beebe.

"Iodic Determination in the Thyroid Gland," by S. P. Beebe and L. W. Riggs.

"On the Action of Nitric Acid on Nucleic Acids," by Walter Jones.

"On the Occurrence of a Phytin Splitting Enzyme in Animal Tissues," by E. V. McCollum and E. B. Hart.

"Nitrogen in Protein Bodies," by Thomas B. Osborne and C. A. Brantlecht.

Fourth Meeting

Physiology Building. Thursday morning, January 2, 1908.

Presiding officers: The president, Russell H. Chittenden, and the vice-president and president-elect, John J. Abel.

Program

"The Extraintestinal Origin of Hydrobilirubin," by A. E. Austin and Mabel D. Ordway.

"On the Alleged Formation of Bile Pigments and Bile Acids by the Action of Trypsin on Hemoglobin," by Frederick S. Hollis (by invitation).

"On the Excretion of Hexamethylentetramin in the Bile and Pancreatic Juice," by S. J. Crowe (by invitation).

"The Digestive Gland of the Crawfish," by H. C. Bradley (by invitation).

"On the Effect of Certain Conditions upon Postmortem Autolysis," by Holmes C. Jackson. "The Peroxidase Reaction of Milk," by J. H. Kastle and M. B. Porch.

"The Effect of Castration on Metabolism," by Francis H. McCrudden.

"Experiments upon the Metabolism of Phosphorus in Man," by H. C. Sherman.

"On Turgor Pressure in Wounded Plant Tissues," by Herbert M. Richards.

"The Probability of a Radiotropic Response," by C. Stuart Gager.

"A Further Study of Solution Tension and Toxicity in Lipolysis," by Raymond H. Pond.

"Notes on the Chemical Nature of Egg Cases of Two Species of Sharks," by Louis Hussakof and William H. Welker.

"A Comparative Study of the Hydrolysis of Different Proteins in Pepsin-acid Solutions," by William N. Berg.

"Further Observations on Protein Salts," by William J. Gies.

"Further Studies on the Application of Folin's Creatin and Creatinin Methods to Meats and Meat Extracts," by A. D. Emmett and H. S. Grindley.

"The Determination of Ammonia in Meat and Meat Products," by F. W. Gill and H. S. Grindley.

"The Blood Clot of Limulus," by Carl L. Alsberg.

"On the Decomposition of Nucleic Acids by Nuclease," by Walter Jones.

Names of the Members Present at One or More of the Meetings.—John J. Abel, Carl L. Alsberg, Henry P. Armsby, A. E. Austin, Edwin J. Banzhaf, Silas P. Beebe, Harold C. Bradley, Russell H. Chittenden, Otto Folin, Robert B. Gibson, William J. Gies, H. S. Grindley, Howard D. Haskins, Philip B. Hawk, Lawrence J. Henderson, Reid Hunt, Holmes C. Jackson, Waldemar Koch, William F. Koelker, Arthur S. Loevenhart, John H. Long, Graham Lusk, Hugh McGuigan, A. B. Macallum, J. J. R. Macleod, Albert P. Mathews, Lafayette B. Mendel, Frederick G. Novy, Thomas B. Osborne, Mary E. Pennington, Oswald Schreiner, Victor C. Vaughan, Ralph W. Webster, H. Gideon Wells.

Abstract of the Executive Proceedings

Constitution.—A constitution, issued from the secretary's office several months prior to the meeting, and which had been provisionally approved by a vote of the members taken by correspondence, was formally ratified, and supersedes the articles of agreement originally adopted for the government of the society.

New members—Edwin J. Banzhaf, Harold C. Bradley, Albert C. Crawford, Mary E. Pennington, Oswald Schreiner, Carl Voegtlin, Ralph W. Webster, Harvey W. Wiley.

Officers for the Year 1908-9:

President-John J. Abel.

Vice-president-Otto Folin.

Treasurer-Lafayette B. Mendel.

Secretary-William J. Gies.

Additional Members of the Council-A. B. Macallum, Albert P. Mathews, Frederick G. Novy.

Nominating Committee—S. P. Beebe, Francis G. Benedict, Reid Hunt, P. A. Levene, A. S. Loevenhart, John H. Long, Graham Lusk, Thomas B. Osborne, H. Gideon Wells.

Time and place of the next annual meeting were referred to the council, with instruction to determine both.

Report of the Committee on Protein Nomenclature. See "recommendations" to be printed in SCIENCE.

> WILLIAM J. GIES, Secretary

SCIENTIFIC BOOKS

In Wildest Africa. By C. G. SCHILLINGS. Translated by Frederic Whyte. With over 300 photographic studies direct from the author's negatives, taken by day and night, and other illustrations. Pp. xvi + 716. New York and London, Harper & Brothers. 1907.

It is safe to say that all who read Herr Schillings's first book on the African wilderness, called "With Flashlight and Rifle," or in its American edition "Flashlights in the Jungle," hoped to see more of his "nature documents," and to hear more of his unique experiences on the great velt of German East Africa. It is also safe to say that they will not be disappointed in the attractive volume "In Wildest Africa," which has recently appeared. In this work the author has added many side lights as well as "flashlights" to his theme—the vanishing fauna of the Dark Continent.

Herr Schillings's first volume, which I reviewed at some length in these columns,¹ was ¹SCIENCE, Vol. XXIII., April 6, 1906.