tion regarding the aims, the achievements and procedures of animal experimentation. We deplore the persistent misrepresentation of these aims, achievements and procedures by those who are opposed to this scientific method. We protest against the frequent denunciations of self-sacrificing, high-minded men of science who are devoting their lives to the welfare of mankind in efforts to solve the complicated problems of living beings and their diseases.

Executive Committee of the Federation for the Year 1914.-W. B. Cannon, A. J. Carlson, the Physiological Society; G. Lusk, P. A. Shaffer, the Biochemical Society; T. Sollmann, J. Auer, the Pharmacological Society; R. M. Pearce, G. H. Whipple, the Pathological Society; G. Lusk, Chairman; P. A. Shaffer, Secretary.

A. J. CARLSON,

Secretary of the Executive Committee, 1913 UNIVERSITY OF CHICAGO,

January 10, 1914

THE AMERICAN SOCIETY OF BIOLOGICAL **CHEMISTS**

THE eighth annual meeting of the American Society of Biological Chemists was held at Philadelphia on December 29, 30, 31, 1913, in affiliation with the American Physiological Society and the American Society for Pharmacology and Experimental Therapeutics, as the first meeting of the Federation of American Societies for Experimental Biology. The meetings of the society were well attended and highly successful. The joint meetings, as in past years, were of great interest to the members of all of the societies, and these, together with the cooperation in the arrangement and printing of programs, emphasized the advantages of the closer relations between the societies made permanent by the formation of the federation. The scientific programs are appended.

First Session.—December 29, 9 A.M., at the Jefferson Medical College. Joint session with the American Physiological Society and the American Society for Pharmacology and Experimental Therapeutics, as the first session of the federation. Presiding officer, S. J. Meltzer, president of the American Physiological Society and chairman of the federation.

Presidential address, "Theories of Anesthesia," by S. J. Meltzer. "Phlorhizin Glycosuria before and after Thy-

roidectomy," by Graham Lusk.

"Studies in Diabetes: (1) The Effect of Different Compounds on Glycogenesis''; (2) ''The Mechanism of Antiketogenesis,'' by A. I. Ringer

and E. M. Frankel (by invitation). "Some Problems of Growth: (a) The Capacity to Grow; (b) The Rôle of Amino Acids in Growth," by L. B. Mendel and T. B. Osborne.

"Further Studies in the Comparative Biochem-

istry of Purine Metabolism,'' by Andrew Hunter. ''Changes in Fats during Absorption,'' by W. R. Bloor.

"Immunization against the Anti-coagulating Effect of Leech Extract," by Leo Loeb. (By title.)

"Anaphylaxis in the Cat and Opossum," by C. W. Edmunds.

"Vividiffusion; Report on Preliminary Results," by J. J. Abel, L. G. Rowntree and B. B. Turner.

"A Method of Dialyzing Normal Circulating Blood and Some of Its Applications," by C. L. V. Hess (by invitation) and H. McGuigan.

"A Biological Test for Iodine in the Blood,"

by A. Woelfel and A. L. Tatum (by invitation). "Further Studies of the Excretion of Acids," by L. G. Henderson and W. W. Palmer (by invitation).

Second Session .- December 29, 2:30 P.M. at the Jefferson Medical College. Presiding officer, President A. B. Macallum.

Presidential address, "The Physics of Secretion and Excretion," by A. B. Macallum. "The So-called Vegetable Proteoses and their Biological Reactions," by H. G. Wells and T. B. Osborne.

"Some Anaphylactic Reactions," by H. C. Brad-

'The Mode of Action of Soy Bean Urease,'' by D. D. Van Slyke and Glen E. Cullen (by invitation).

"Glycol Aldehyde in Phlorhinized Dogs," ky R. T. Woodyatt. (By title.)

"Trikresol as a Substitute for Toluene in Enzyme Work," by P. A. Kober and S. S. Graves (by invitation).

"A Study of the Metabolism in Osteitis Deformans," by J. C. DaCosta, E. H. Funk, Olaf Bergeim (by invitation) and P. B. Hawk.

"Metabolism in Diabetes Insipidus," by S. Bookman. (By title.)

"Some Metabolic Effects of Bathing in the Great Salt Lake," by H. I. Mattill (by invitation) and H. A. Mattill. (By title.) "Absorption of Antitoxin from Solutions Con-

taining Different Percentages of Protein," 1 by W. H. Park, E. J. Banzhaf and L. W. Famulener.

Third Session.-December 30, 9 A.M., at the University of Pennsylvania. Presiding officer, President A. B. Macallum.

"The Carbohydrate Tolerance of Feeble-minded Children, especially of the Mongolian Type," by A. W. Peters and M. E. Turnbull (by invitation).

¹ Transferred from the Pharmacological Society.

"Protein Metabolism in Individuals with Exfoliative Conditions of the Skin," by A. I. Ringer and G. W. Raiziss (by invitation).

"The Oxygen Requirements of Shell Fish," by P. H. Mitchell.

"The Metabolic Relationship of the Acetone Bodies," by W. McK. Marriott.

"Phenomena of Narcosis of Leaves of the Wild Indigo (*Baptisia tinctoria*) and Consequent Prodeduction of a New Phenol," by E. D. Clark. (By title.)

"A Hitherto Unknown Constituent of Nerve Cells," by A. B. Macallum and J. B. Collip (by invitation).

"A Note on the Chemical Constituents of the Cerebrospinal Fluid in Certain Cases of Insanity," by H. M. Adler and B. H. Ragle (by invitation). (By title.)

"On the Estimation of Minute Quantities of Phosphorus," by A. E. Taylor and C. W. Miller (by invitation).

(by invitation). "Formation of Glucose from Citric Acid in Diabetes Mellitus and in Phlorhizin Glycosuria," by I. Greenwald.

"Further Results upon the Electrolysis of Peptides and Amino Acids," by J. P. Atkinson. (By title.)

"Researches on the Heptoses," by George Peirce (by invitation).

"The Nerve Control of the Thyroid Gland." By C. G. Fawcett (by invitation) and J. A. Rahe (by invitation). (Presented by S. P. Beebe.) Fourth Session.—December 30, 2 P.M., at the

Fourth Session.—December 30, 2 P.M., at the medical laboratory of the University of Pennsylvania. Joint meeting with the American Physiological Society and the American Society of Pharmacology and Experimental Therapeutics. Presiding officer, President S. J. Meltzer.

Presentation of Demonstrations

The Influence of the Vagi on Renal Secretion, by R. G. Pearce.

Stimulation of the Semi-circular Canals, by F. H. Pike.

Demonstration of Vividiffusion, by J. J. Abel, L. G. Rowntree and B. B. Turner.

The Determination of Blood Sugar, by P. A. Shaffer.

Intestinal Peristalsis in Homarus, by F. R. Miller.

Methods for Studying the Pharmacology of the Circulation, by C. Brooks.

The Contour of the Intraventricular and the Pulmonary Arterial Pressure Curves by Two New

Optically Recording Manometers, by C. J. Wiggers. Some Time-saving Laboratory Methods, by C. C. Guthrie.

A Graphic Method for Recording the Coagulation of Blood, by W. B. Cannon and W. L. Mendenhall (by invitation).

Some Mutual Relations of Oxalates, Salts of Magnesium and Calcium; Their Concurrent and Antagonistic Actions, by F. L. Gates and S. J. Meltzer. A Method of obtaining Successive Contrast of the Sensations of Hunger and Appetite, by A. J. Carlson.

Further Observations on the Pyramidal Tracts of the Raccoon and Porcupine, by S. Simpson.

A New Apparatus for Demonstration of the Dioptrics of the Eye and the Principles of Ophthalmoscopy and Retinoscopy, by A. Woelfel.

Simple Experiments on Respiration for the Use of Students, by Y. Henderson.

Convenient Modification for Venous Pressure Determinations in Man, by R. D. Hooker.

Device for Interrupting a Continuous Blast of Air, Designed Especially for Artificial Respiration, by R. A. Gesell and J. Erlanger.

A Simple Liver Plethysmograph, by C. W. Edmunds.

An Artificial Circulation Apparatus for Students, by W. P. Lombard.

A Simplified and Inexpensive Oxadase Apparatus, by H. H. Bunzel.

An Improved Form of Apparatus for Perfusion of the Excised Mammalian Heart, by M. Dessbach.

Fifth Session.—December 31, 9 A.M., at the University of Pennsylvania. Presiding officer, President A. B. Macallum.

"Biological Oxidizability and Chemical Constitution," by H. H. Bunzel.

"Albuminuria Following Phenolphthalein Ingestion," by J. L. Hydrich (by invitation).

"'The Determination of Fats in Small Amounts of Blood," by W. R. Bloor.

"Creatine Determination in Muscle," by L. Baumann.

"A Respiration Chamber for Small Animals," by A. C. Kolls (by invitation) and A. S. Loevenhart.

"A Respiration Incubator for the Study of Metabolism in New-born and Prematurely Born Infants," by J. R. Murlin.

"The Specific Rôle of Foods in Relation to the Composition of the Urine," by N. R. Blatherwick (by invitation). "Creatinine and Creatine-free Foods," by Rita

"Creatinine- and Creatine-free Foods," by Rita K. Chestnut (by invitation). (Presented by A. B. Macallum.)

"Experimental Hydrochloric Acid Intoxication," by S. Bookman. (By title.)

"The Effects of Water gas Tar on Oysters," by P. H. Mitchell. (By title.)

"The Effect of Glucose on Autolysis: A Possible Explanation of the Protein-sparing Action of Carbohydrates" (preliminary note), by P. A. Shaffer.

"The Passage of Organic Substances from Plant to Medium," by M. X. Sullivan. (By title.)

"Studies on Chicken Fat VI. The Factors Influencing the Acidity of the Crude Fat," by M. E. Pennington, J. S. Hepburn (by invitation) and E. L. Connolly (by invitation).

By Title:

"The Influence of Restricted Rations on Growth," by E. B. Hart and E. V. McCollum.

"Production of Ammonia by Herbivora as a Protection Against Acidosis," by E. B. Hart and E. V. Nelson (by invitation).

"The Influence of Restricted Rations on Re-production," by E. B. Hart, E. V. McCollum and H. Steenbock.

"Further Studies on the Quantitative Chemical Composition of Urinary Calculi," by J. Rosenbloom.

"On the Quantitative Chemical Composition of Gall Stones," by J. Rosenbloom.

"Metabolism Studies in a Case of Family Periodic Paralysis," by J. Rosenbloom and T. Diller (by invitation).

"Calcium Metabolism in Thyroparathyroidectomy," by F. T. Stewart (by invitation), Olaf Bergeim (by invitation), and P. B. Hawk. "Variations in the Hydrogen Ion Concentration

of the Urine of Man Accompanying Fasting and the Low and High Protein Regeneration Periods," by P. E. Howe and P. B. Hawk.

The following papers submitted in the American Society of Biological Chemists were transferred with the authors' consent and in accordance with the principles of the Federation, to the program of one of the other societies:

Presented before the American Physiological Society:

"The Maximum Surface Tension in Striated

Muscle," by W. N. Berg. (By title.) "Sources of Surface Tension in Muscle," by W. N. Berg. Striated

"Transfusion of Blood in Severe Diabetes Mellitus," by R. T. Woodyatt and B. O. Raulston (by invitation).

Presented before the American Society for Pharmacology and Experimental Therapeutics:

"The Production of Glycosuria by Zine Salts," by W. Salant and M. Kahn. "Further Observations of Caffeine Glycosuria,"

by W. Salant and M. Kahn.

"Studies Upon the Long-continued Feeding of Saponine," by C. L. Alsberg and C. S. Smith.

New Members .- Dr. Shiro Tashiro, University of Chicago, Chicago, Ill.; Dr. E. K. Marshall, Jr., Johns Hopkins Medical School, Baltimore, Md.; Professor R. S. Lillie, Clark University, Worces-ter, Mass.; Dr. K. G. Falk, Harriman Research Laboratory, Roosevelt Hospital, New York; Dr. F. C. Cook, Bureau of Chemistry, Department of Agriculture, Washington, D. C.; Dr. W. H. Eddy, Columbia University, New York; Professor R. F. Buttan, McGill University, Montreal, Canada; Dr. H. B. Lewis, University of Pennsylvania, Philadelphia, Pa.; Dr. C. J. West, Rockefeller Institute, New York; Dr. E. C. Kendall, St. Luke's Hospital, New York; Dr. G. W. Raiziss, Polyclinic Hospital, 1818 Lombard Street, Philadelphia Pa.; Professor A. D. Hirschfelder, University of Minnesota, Minneapolis, Minn. Officers Elected.—The following officers were

elected for the year 1914:

President: Graham Lusk.

Vice-president: C. L. Alsberg.

Secretary: P. A. Shaffer.

Treasurer: D. D. Van Slyke.

Additional Members of the Council: J. J. Abel, A. B. Macallum, T. B. Osborne.

Nominating Committee .- S. R. Benedict, H. S. Bradley, Otto Folin, W. J. Gies, J. H. Kastle, J. B. Leathes, P. A. Levene, L. B. Mendel, H. G. Wells.

The society voted its formal approval of the establishment of the Federation of American Societies for Experimental Biology, comprising the American Physiological Society, American Society of Biological Chemists and the American Society for Pharmacology and Experimental Therapeutics. The society also voted in favor of admitting to the federation the newly organized American Society for Experimental Pathology.

A unanimous vote of thanks was extended by the society to the individual members of the "local committee," to the University of Pennsylvania and to the Jefferson Medical College for the hospitality which the society enjoyed.

The following members were present at one or more of the sessions of the meetings: J. J. Abel, C. L. Alsberg, S. Amberg, L. Baumann, S. P. Beebe, W. N. Berg, W. R. Bloor, H. C. Bradley, H. H. Bunzel, R. Burton-Opitz, E. D. Clark, F. C. Cook, H. D. Dakin, Willey Denis, W. H. Eddy, Otto Folin, W. J. Gies, I. Greenwald, Shinkishi Hatai, R. A. Hatcher, P. B. Hawk, L. J. Hender-son, P. E. Howe, W. H. Howell, R. Hunt, A. Hunter, N. W. Janney, W. Jones, I. S. Kleiner, P. A. Keher, I. B. Latt A. P. A. Kober, J. B. Leathes, J. Loeb, A. S. Loeven-hart, Graham Lusk, A. B. Macallum, J. J. Mae-leod, W. deB. NacNider, W. McK. Marriott, E. K. Marshall, J. Marshall, E. V. McCollum, F. H. Mc-wedder, H. McGuirer, J. D. Marshall, D. Marshall, J. Matshah, J. Matshah, E. V. McCouldi, F. H. McCuiden, H. McGuigan, L. B. Mendel, P. H.
Mitchell, J. R. Murlin, V. C. Myers, T. B. Osborne, A. W. Peters, G. W. Raiziss, A. N. Richards, A. I. Ringer, E. W. Rockwood, L. G. Rowntree, Wm. Salant, F. H. Scott, P. A. Shaffer, T. Sollmann, Shiro Tashiro, A. E. Taylor, F. P. Underhill, D. D. Van Slyke, C. Voegtlin, G. B. Wallace, H. G. Welle, R. T. Woodrott H. G. Wells, R. T. Woodyatt.

Abstracts of the papers will be published in the Journal of Biological Chemistry.

P. A. SHAFFER,

Secretary

WASHINGTON UNIVERSITY MEDICAL SCHOOL,

ST. LOUIS, MISSOURI

THE AMERICAN ASSOCIATION OF ECO-NOMIC ENTOMOLOGISTS

THE 26th annual meeting of the association was held in the Atlanta Medical College, Atlanta, Ga., December 31, 1913, to January 2, 1914, under the presidency of Professor P. J. Parrott, Geneva, N. Y.