JULY 26, 1907]

W. S. M.

SCIENTIFIC JOURNALS AND ARTICLES

THE June number (volume 13, number 9) of the Bulletin of the American Mathematical Society contains the following articles: Report of the April Meeting of the American Mathematical Society, by F. N. Cole; Report of the March Meeting of the Chicago Section, by H. E. Slaught; "On a Limit of the Roots of an Equation that is Independent of All but Two of the Coefficients," by R. E. Allardice; "On the Distance from a Point to a Surface," by Paul Saurel; "The Calculus in Our Colleges and Technical Schools" (Presidential Address), by W. F. Osgood; "Notes"; "New Publications."

The July number, concluding the volume, contains: "Modular Theory of Group Characters," by L. E. Dickson; "On the Shortest Distance between Consecutive Straight Lines," by Joseph Lipke; "Note on the Commutator of Two Operators," by G. A. Miller; "A Theorem in the Theory of Numbers," by D. N. Lehmer; "Projections of the Globe Appropriate for Laboratory Methods of Studying the General Circulation of the Atmosphere," by Cleveland Abbe; Shorter Notices (Fazzari's Breve Storia della Matematica dai tempi antichi al medio evo, by D. E. Smith; Vessiot's Leçons de Géométrie supérieure, by C. L. E. Moore; Liebmann's Nichteuklidische Geometrie, by E. B. Cowley; Fisher's Introduction to the Infinitesimal Calculus, by E. L. Dodd; Baire's Fonctions discontinues, by W. D. A. Westfall; Campbell's and Cohen's Differential Equations, by C. R. MacInnes; James's Kinematics of a Point and Rational Mechanics of a Particle, and Andoyer's Cours d'Astronomie, by K. Laves; Föppl's Mechanik, third edition, and Gauss's Works, volume 7, by E. B. Wilson); "Notes"; "New Publications"; "Annual List of Published Papers"; Index of the volume.

SOCIETIES AND ACADEMIES

AMERICAN SOCIETY OF BIOLOGICAL CHEMISTS

THE recently organized American Society of Biological Chemists¹ had its first special session in Washington, D. C., May 8 and 9, 1907. Four meetings were held, one of which was in affiliation with the American Physiological Society² and another in affiliation with the Washington Section of the American Chemical Society.⁸

Members present at one or more meetings— John J. Abel, A. E. Austin, Lewellys F. Barker, S. P. Beebe, H. D. Dakin, Edward K. Dunham, Otto Folin, William J. Gies, C. A. Herter, Holmes C. Jackson, Joseph H. Kastle, Arthur S. Loevenhart, Graham Lusk, A. B. Macallum, John A. Mandel, John Marshall, Lafayette B. Mendel, Alfred N. Richards, Philip A. Shaffer, Herbert E. Smith, Torald Sollmann, Alonzo E. Taylor, Victor C. Vaughan, George B. Wallace, H. Gideon Wells, C. G. L. Wolf.

Scientific Programs⁴

First meeting

George Washington Medical College. Wednesday morning, May 8.

Presiding officer: The Vice-President, John J. Abel.

JOHN J. ABEL: "On the Behavior of Frog's Muscle toward Acids."

JOSEPH H. KASTLE and H. L. AMOSS: "A New Reagent for the Recognition and Estimation of Free Hydrochloric Acid in Gastric Contents."

JOSEPH H. KASTLE: "Phenolphthalin as a Reagent for Oxidases and Other Oxidizing Substances in Plant and Animal Tissues."

PHILIP A. SHAFFEB: "Protein Metabolism in Exophthalmic Goitre."

C. A. HERTER: "On the Bacterial Production of Skatol and its Occurrence in the Human Intestinal Tract."

H. GIDEON WELLS: "The Chemical Composition of the Liver in Acute Yellow Atrophy."

G. VOEGTLIN (by invitation): "The Appear-

¹ SCIENCE, 1907, XXV., p. 139.

² Science, 1907, XXV., p. 861.

⁸ Science, 1907, XXV., p. 969.

⁴Abstracts of the communications appeared in the Journal of Biological Chemistry, 1907, III., p. vii. ance of Millon's Reaction in the Urine, in the Absence of Proteins, as a Criterion in the Tuberculin Reaction."

LAWRENCE J. HENDERSON and CHARLES T. RYDER: "A Method for the Direct Determination of Heats of Reaction."

ALONZO E. TAYLOR: "On the Conversion of Glycogen into Glucose."

JACQUES LOEB: "On the Influence of the Concentration of the Hydroxyl Ions of a Salt Solution upon the Physiological Effects of its Cations."

HOLMES C. JACKSON and L. K. BALDAUF: "Fatty Transformation in the Liver."

J. GEORGE ADAMI and OSCAR KLOTZ: "The Existence of Cholesteryl Esters of the Fatty Acids in Gall Stones and their Bearing upon the Formation of Cholesterin Gall Stones."

Second meeting

George Washington Medical College. Wednesday afternoon, May 8.

Presiding officer: The Vice-President, John J. Abel.

ALEXANDER LAMBERT and C. G. L. WOLF: "The Metabolism of Nitrogen and Sulphur in Pneumonia."

JOHN MARSHALL: "A Brief Note on a Source of Error in the Use of a Certain Petroleum Ether as an Extracting Medium."

HERMAN M. ADLER (by invitation): "A Clinical Method for Determining the Alkalinity of the Blood."

A. E. AUSTIN: "Calcium Metabolism in a Case of Myositis Ossificans."

J. A. MANDEL and P. A. LEVENE: "Hydrolysis of Spleen Nucleoprotein."

HENRY L. WHEELER and TREAT B. JOHNSON: "A Color Test for Uracil and Cytosin."

OSWALD SCHREINER and HOWARD S. REED (by invitation): "The Rôle of the Oxidizing Power of Roots in Soil Fertility."

OSWALD SCHREINER and M. X. SULLIVAN (by invitation): "The Products of Germination affecting Soil Fertility."

RAYMOND H. POND: "Solution Tension and Toxicity in Lipolysis."

WILLIAM H. WELKER: "On the Cause of a Red Coloration in the Iodoform Test for Acetone when Applied to Distillates obtained from Urine Preserved with Thymol."

R. F. RUTTAN (by invitation): "On the Glycol Fats and the Chemical and Physical Relationship of Cross Fats."

Third meeting

George Washington Medical College. Thursday morning, May 9. Joint session with the American Physiological Society.

Presiding officers: The President of the American Physiological Society, William H. Howell, and the Vice-President of the American Society of Biological Chemists, John J. Abel.

WALTER JONES and C. R. AUSTRIAN: "On the Occurrence of Ferments in Embryos."

C. G. L. WOLF and PHILIP A. SHAFFER: "Protein Metabolism in Cystinuria."

C. G. L. WOLF: "Protein Metabolism in the Dog."

A. B. MACALLUM: "On the Glomerular Excretion under Certain Conditions."

C. C. BENSON: "On the Composition of the Hourly Excretion of Urine."

S. P. BEEBE: "The Inhibition of Tetany Parathyreopriva by Extracts of the Parathyroid Gland."

VICTOR C. VAUGHAN: "Proteid Susceptibility and Immunity."

A. D. EMMETT and WILLIAM J. GIES: "On the Chemical Relation between Collagen and Gelatin."

LAFAYETTE B. MENDEL: "Embryo-chemical Studies—The Purin Metabolism of the Embryo." REID HUNT: "Notes on the Thyroid."

WALDEMAR KOCH: "The Distribution of Sulphur and Phosphorus in the Human Brain."

Fourth meeting

Cosmos Club. Thursday evening, May 9. Joint session with the Washington Section of the American Chemical Society.

Presiding officers: The President of the Washington Section of the American Chemical Society, Peter Fireman, and the Secretary of the American Society of Biological Chemists, William J. Gies.

JOSEPH H. KASTLE: "Chemical and Bacteriological Standards now in Use in Water Analysis."

H. C. SHERMAN, WILLIAM N. BERG, L. J. COHEN and W. G. WHITMAN: "Ammonia in Milk and its Development during Proteolysis under the Influence of Strong Antiseptics."

H. C. GORE: "Studies on Apple Juice."

HUGH MCGUIGAN: "Sugar Metabolism."

OSWALD SCHREINER and EDMUND C. SHOREY: "The Presence of Secondary Decomposition Products of Proteids in Soils."

P. A. LEVENE and W. A. BEATTY: "On Lysylglycin." JACOB ROSENBLOOM and WILLIAM J. GIES: "Some Azolitmin Compounds of Mucoids, Nucleoproteins and Other Proteins, with Exhibition of Products."

WALTER E. GARREY: "Negative Evidence of the Adaptation of Dog's Salivary Secretion to meet the Digestive Requirement of the Diet."

CLABENCE E. MAY and WILLIAM J. GIES: "On the Quantitative Determination of Mucoid in Urine, Blood and Tissue Extracts."

WILLIAM J. GIES (by invitation): "On the Nature and Objects of the American Society of Biological Chemists." (See SCIENCE, 1907, XXV., p. 139.)

Executive Proceedings

Charter members.-The roll of charter members, as announced by the council and ratified by the society, was the following: John J. Abel, J. George Adami, Carl L. Alsberg, Samuel Amberg, Henry P. Armsby, James P. Atkinson, A. E. Austin, Lewellys F. Barker, W. A. Beatty, S. P. Beebe, Francis G. Benedict, C. C. Benson, William N. Berg, Orville H. Brown, Russell Burton-Opitz, Russell H. Chittenden, H. D. Dakin, A. L. Dean, Edward K. Dunham, Cyrus W. Field, Otto Folin, Nellis B. Foster, C. Stuart Gager, Walter E. Garrey, Robert B. Gibson, William J. Gies, H. S. Grindley, John T. Halsey, H. D. Haskins, Shinkishi Hatai, Robert A. Hatcher, Philip B. Hawk, Lawrence J. Henderson, C. A. Herter, Reid Hunt, Holmes C. Jackson, Walter Jones, Joseph H. Kastle, Waldemar Koch, William F. Koelker, P. A. Levene, Jacques Loeb, Arthur S. Loevenhart, John H. Long, Graham Lusk, Francis H. McCrudden, Hugh McGuigan, J. J. Mackenzie, A. B. Macallum, J. J. R. Macleod, John A. Mandel, John Marshall, Albert P. Mathews, Lafayette B. Mendel, Gustave M. Meyer, C. H. Neilson, Frederick G. Novy, W. R. Orndorff, Thomas B. Osborne, William H. Parker, Raymond H. Pond, Franz Pfaff, Alfred N. Richards, Herbert M. Richards, William Salant, Philip A. Shaffer, H. C. Sherman, Charles E. Simon, Herbert E. Smith, Torald Sollmann, Lyman B. Stookey, Alonzo E. Taylor, Frank P. Underhill, Victor C. Vaughan, Alfred J. Wakeman, George B. Wallace, William H. Welker, H. Gideon Wells, Henry L. Wheeler, R. A. Witthaus, C. G. L. Wolf.

Time and place of the next meetings.—On recommendation by the council it was decided to hold the next meetings in Chicago, during convocation week, 1907–8.

Resolutions regarding federal supervision of matters pertaining to public health.—At the joint meeting of the American Physiological Society and the American Society of Biological Chemists (May 9) the following resolutions were adopted by unanimous vote:

"We approve of the movement represented by the Committee of One Hundred of the American Association for the Advancement of Science to increase and coordinate the present activities of the federal government in matters pertaining to public health.

"We therefore urge upon the President of the United States and members of congress the favorable consideration of such legislative measures as are best adapted to secure this result."

Copies of these resolutions were immediately forwarded to President Roosevelt, to members of congress, to the Committee of One Hundred of the American Association for the Advancement of Science and to the permanent secretary of the American Association for the Advancement of Science.

> WILLIAM J. GIES, Secretary

THE BIOLOGICAL SOCIETY OF WASHINGTON

THE 431st meeting was held May 4, 1907, President Stejneger in the chair.

Professor W. W. Cooke gave a résumé of the present migration season. He said the spring of 1907 at Washington, D. C., has been characterized by extremes in temperature. The last week in March and the first few days in April were the warmest ever known for the time of year. This excessively warm spell was followed by the coldest April in thirty-five years. It is interesting to note how these variations from normal temperature were reflected in the times of arrival of the birds. Spring opened normally and the birds arrived as usual until the first warm spell of late March, when the Brown Thrasher appeared seventeen days early, and the Bluegray Gnatcatcher, sixteen days. During the warm days of early April the Ruby-crowned Kinglet was seen six days ahead of the average date. At the end of the hot wave, April 6, all the birds due were present except the purple martin, due March 28, and not seen until April 5-the latest date for the past seven years. The severe cold spell lasted from April 6 to April 24. During this time only seven species appeared of the twenty species due; one, the spotted sandpiper, a single day late, the others an average of seven days late. During the cold weather, the house wren appeared at several places three days early and a single wandering wood thrush was seen six days ahead of time.

A large wave of migration occurred during the nights of April 25 and 26. Fourteen new species appeared and three more reported the following day very probably arrived a day earlier than they were seen. Thus about one sixth of all the species of migrant land-birds usually seen here during the spring arrived in two days. These arrivals were from two to nine days late. They included all the missing birds except the grasshopper sparrow and the black-throated green warbler, each of which was diligently sought in favorite haunts, but not seen until much later. This pronounced bird wave also brought with it some birds ahead of time, e. g., the kingbird and the scarlet tanager each four or five days early.

After April 27 for the rest of the migration season of 1907 the weather conditions were nearly normal and the arrival dates were quite close to the average; eighteen species averaged three days late, sixteen species three days early and three species were seen on the average date. The average dates referred to have been deduced from more than thirty years records of arrivals in the files of the Bureau of Biological Survey.

Dr. Barton W. Evermann gave a lantern slide lecture on "The Golden Trout and the Southern High Sierra." The investigations which resulted in the discovery of two undescribed species of golden trout of great beauty and value were undertaken by the Bureau of Fisheries at the instance of President Roosevelt, to whom had been represented their threatened extermination. The speaker and his party in the summer of 1904 entered the Kern River region, the native habitat of the golden trout, by pack train, and explored the Kern River basin, obtaining collections of the fishes, particularly the trout. The artist of the expedition made water color paintings of the principal trouts, including the two handsome new species Salmo roosevelti and S. whitei. Four species of trout of the rainbow series inhabit the Kern River basin. Chiefly in Kern River occurs abundantly S. gilberti, a trout without golden colors but from which the three golden trout have descended. The latter have lost the rainbow hues and in part the black spots of the Kern River species and taken on the characteristic golden and allied bright colors. Their separation from the parent stock and from each other is a result of their isolation in tributaries of the Kern, by the formation of impassable waterfalls and by barriers due to volcanic action. The most interesting and strikingly colored speciesthe most brilliant of its family-the Roosevelt trout, is found only in Volcano Creek. It, together with its congeners of the region, will be exterminated in a few years unless measures are taken to protect it. Fish culture and legal restrictions should combine to perpetuate it. In accordance with the recommendations resulting from the investigations a close season for two years has been established, with continuing restrictions thereafter, and a movement is under way to extend the Giant Forest Reservation to include Volcano Creek.

The 432d meeting and last of the season was held May 18, 1907, President Stejneger in the chair. The evening was chiefly taken up with an exhibition of projection apparatus with short descriptions by members of objects brought by them for illustration. The apparatus combined ordinary, micro, vertical and opaque projection, and lantern slides, microscopical preparations, living fishes and other opaque objects were shown on the screen.

> M. C. MARSH, Recording Secretary