

fresh carcinomata. "A Note on the Estimation of Purin Nitrogen in Urine," by Stanley R. Benedict and Tadasu Saiki. Preliminary addition of acetic acid to urine makes the Krüger-Schmid method more accurate. "On the Neutrality Equilibrium in Blood and Protoplasm," by Lawrence J. Henderson. An answer to Robertson (*Journ. Biol. Chem.*, VI, p. 313, 1909). "Observations on the Influence of Lactic Acid Ferments upon Intestinal Putrefaction in a Healthy Individual," by Helen Baldwin. Addition of lactobacilline, bacillac or zoolak to diet did not diminish urinary evidence of intestinal putrefaction. "The Catalytic Action of Amino-acids, Peptones and Proteins in Effecting Certain Syntheses," by H. D. Dakin. Condensation (*in vitro*) of furfural and malonic acid to furfuralacrylic acid may be accomplished by the catalytic action of glyccoll. A number of similar reactions are described. "Note on the Urorosein Reaction," by H. D. Dakin. Criticism of work of Ciusa and Terni. "Notes on the Action of Sodium Benzoate on the Multiplication and Gas Production of Various Bacteria," by C. A. Herter. Sodium benzoate in a concentration of 0.1 per cent. only slightly or moderately inhibits intestinal bacteria. Gas-production may be considerably diminished. Inhibition of the *B. coli* group is greater than that of coccal forms.

THE AMERICAN MATHEMATICAL SOCIETY

THE sixteenth annual meeting of the society was held at Boston on Tuesday, Wednesday and Thursday, December 28-30, 1909, in affiliation with the American Association for the Advancement of Science. Tuesday afternoon was devoted to a joint session with Sections A and B of the association. A joint session was held with Section A on Wednesday morning, the program consisting of Professor Keyser's vice-presidential address "On the Thesis of Modern Logistic," a report by Professor D. E. Smith on "The Work of the International Commission on the Teaching of Mathematics," and the first two papers in the list below. Separate sessions of the society were held on Wednesday afternoon and on Thursday morning and afternoon. On Tuesday evening several members took advantage of an invitation to attend the dinner and smoker of the Association of Math-

ematics Teachers in New England. The annual dinner of the society took place on Wednesday evening, forty-seven members gathering for this agreeable occasion. Much credit for the success of the meeting must be given to the local committee on arrangements, Professors Tyler, Bartlett and Bouton.

The total attendance at the annual meeting included sixty-one members of the society. Ex-president H. S. White and Professor E. W. Brown occupied the chair alternately during the several sessions. The following persons were elected to membership: Professor R. M. Barton, Dartmouth College; Dr. J. R. Conner, Johns Hopkins University; Miss Eva M. Smith, London, England. Nine applications for membership were received.

The reports of the treasurer, auditing committee and librarian will be published in the Annual Register, now in press. The membership of the society has increased during the past year from 601 to 618, including at present 58 life members. The number of papers presented at all meetings during the year was 149. The total attendance of members at the meetings was 311. The treasurer's report shows a balance of \$8,003.78, of which \$3,581.70 is credited to the life-membership fund. Sales of the society's publications during the year amounted to \$1,748.90. The library has increased to nearly 3,300 volumes. A separate catalogue of the library, corrected to January 1, 1910, will soon be issued.

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

Vice-Presidents—L. E. Dickson, J. I. Hutchinson.

Secretary—F. N. Cole.

Treasurer—J. H. Tanner.

Librarian—D. E. Smith.

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

Members of the Council (to serve until December, 1912)—D. R. Curtiss, L. P. Eisenhart, J. C. Fields, P. F. Smith.

The following papers were read at this meeting:

F. L. Griffin: "Certain tests comparing areas and other geometrical magnitudes."

G. A. Miller: "Groups generated by two operators s_1, s_2 satisfying the equation $s_1 s_2^2 = s_2 s_1^2$."

H. M. Sheffer: "Total determinations of deductive systems with special reference to the algebra of logic."

R. G. D. Richardson: "The Jacobi criterion in

the calculus of variations and the oscillation of solutions of m linear differential equations of the second order with m parameters."

J. V. McKelvey: "The groups of birational transformations of algebraic curves of genus five."

J. L. Coolidge: "The representation by means of circles of the imaginary elements of a three-dimensional domain."

L. C. Karpinski: "Jordanus Nemorarius and John of Halifax."

H. H. Mitchell: "The subgroups of the collineation group of the finite plane, $PG(2p)$."

W. H. Jackson: "Differential and integral equations arising out of the theory of radiation."

G. D. Birkhoff: "The stable solutions of the problem of three bodies."

W. D. Cairns: "The solution of the Lagrange equation in the calculus of variations by means of integral equations."

Arthur Ranum: "On the line geometry of riemannian space."

H. F. MacNeish: "Linear polars of quantics which are completely reducible to the product of linear forms."

E. V. Huntington: "An elementary explanation of the precession of a gyroscope."

C. J. Keyser: "Relational groups."

Edward Kasner: "Thomson and Tait's theorem on conservative forces."

Edward Kasner: "Note on Lamé's families connected with dynamics."

Arthur Ranum: "On Clifford parallels and Clifford surfaces in riemannian space."

The Chicago Section of the society held its twenty-sixth regular meeting at the University of Chicago on Friday and Saturday, December 31-January 1, the program including twenty-five papers. The next meeting of the society falls on Saturday, February 26. The San Francisco Section will meet on the same day at Stanford University.

F. N. COLE,
Secretary

SOCIETIES AND ACADEMIES

THE SOCIETY FOR EXPERIMENTAL BIOLOGY AND MEDICINE

The thirty-sixth meeting was held at the Rockefeller Institute for Medical Research on December 15, 1909, with President Lee in the chair.

Members present: Atkinson, Auer, Banzhaf, Beebe, Brodie, Cole, Famulener, Gay, Gies, Harris, Jackson, Joseph, Kast, Lamar, Lee, Levene, Levin, Lewis, Lusk, Mandel, Maury, Meltzer, Mor-

gan, Murlin, Morse, Opie, Pearce, Rous, Shaffer, Shaklee, Van Slyke, Wallace, Wolf.

Members elected: Stanley R. Benedict, Alfred F. Hess, A. W. Hewlett, J. F. McClendon, Raymond Pearl, A. I. Ringer, A. O. Shaklee, Sutherland Simpson and Hugh A. Stewart.

Scientific Program

"The Conglutination Reaction as a Method of Serum Diagnosis in Acute Infections," F. P. Gay and W. P. Lucas.

"Analysis of the Cleavage Products of the Nucleoprotein of the Mammary Glands," John A. Mandel.

"Respiration by Continuous Intra-tracheal Insufflation of Air" (a demonstration), S. J. Meltzer and J. Auer.

"Demonstration of Animals whose Thoracic Organs have been Operated upon," A. Carrel.

"The Mutual Life-saving Antagonistic Action of Barium and Magnesium" (a demonstration), D. R. Joseph and S. J. Meltzer.

"Acute Anaphylactic Death in Guinea-pigs: Its Cause and Possible Prevention" (a demonstration), J. Auer and P. A. Lewis.

"Anaphylactic Shock in the Dog," R. M. Pearce.

"The Cause of Serum Anaphylactic Shock and some Methods of Alleviating it," J. F. Anderson and W. H. Schultz.

"A Model Illustrating the Mode of Action of the Glomerulus," J. G. Brodie.

"The Influence of Glycerin on Gastric Secretion," L. Kast.

"The Summation of Stimuli," Frederic S. Lee and Max Morse.

"The Action of Magnesium Salts: (a) In Relation to Motor Nerve Impulses, (b) In Relation to Sensory Stimulation," A. H. Ryan and F. V. and C. C. Guthrie.

"The Effects of Direct Application of Magnesium Salts: (a) To Motor and Sensory Nerves, (b) To Cardio-inhibitory Nerves," C. C. and F. V. Guthrie and A. H. Ryan.

"The Survival and Growth of Subcutaneously Engrafted Ovarian and Testicular Tissue," C. C. Guthrie.

"The Survival of Engrafted Thyroid and Renal Tissue," C. C. Guthrie.

"The Effect of Anemia and of Double Hyperemia on Hyperplastic Goiter," C. C. Guthrie.

"A Method for the Determination of Amino-nitrogen and its Applications," Donald D. Van Slyke.

"Note on the Production of Glycosuria by Pan-