NOTES

It has been decided again to increase the size of this BULLETIN, so that the present volume will contain approximately 750 pages. The size of the present number results from this decision.

At the Annual Meeting of the Society, to be held in Philadelphia, December 28–30, 1926, in affiliation with the American Association for the Advancement of Science, Professor G. D. Birkhoff will deliver his retiring presidential address; it will be entitled *A mathematical critique of some physical theories*. The Josiah Willard Gibbs Lecture will be delivered by Professor H. B. Williams, of the College of Physicians and Surgeons of Columbia University, on the subject *Mathematics and the biological sciences*. On Thursday afternoon, Dec. 30, there will be held a joint meeting of this society, The Mathematical Association of America, and Section A of the American Association for the Advancement of Science, at which Professor W. H. Roever will deliver his retiring adderss as Vice-President of Section A on the subject *The weight field of force of the earth*, and Professor F. D. Murnaghan, of the Johns Hopkins University, will speak on the topic *The duty of exposition, with special reference to the Cauchy-Heaviside theorem*. An informal dinner for the mathematicians and their guests will be held at the Aldine Hotel on Wednesday evening.

The reports and addresses that have appeared or are appearing in the present volume of this BULLETIN are now available as separate reprints, and may be ordered at the office of the Society in New York. Those now on hand are: *Properties of unrestricted functions*, by Henry Blumberg, pages 132–148; *Some modern views of space* (The Gibbs Lecture for 1925), by James Pierpont, pages 225–258; *The Borel theorem and its generalizations*, by T. H. Hildebrandt, pages 423–474; *Some recent work in the calculus of variations*, by Arnold Dresden, pages 475–521. These will be sold practically at cost at prices announced on a fly-leaf of this issue; in general the charge will be less than one cent per page.

Professors E. W. Chittenden and E. B. Stouffer have been appointed associate editors of the TRANSACTIONS OF THIS SOCIETY.

The second number of volume 28 of the TRANSACTIONS OF THIS SOCIETY contains the following papers: *New division algebras*, by L. E. Dickson; *The first and second variations of a double integral for the case of variable limits*, by H. A. Simmons; *On extending a continuous (1-1) correspondence of two plane continuous curves to a correspondence of their planes*, by H. M. Gehman; *Systems of equations in an infinity of unknowns, whose solution involves an arbitrary parameter*, by I. M. Sheffer; *Solution of certain functional equations relative to a general linear set*, by M. H. Ingraham; *Combinatorial analysis situs*, by J. W. Alexander; *Geometries of paths for which the equations of the paths admit $n(n+1)/2$ independent linear first integrals*, by L. P. Eisenhart; *Multiply transitive substitution groups*, by G. A. Miller; *An extension of Lagrange's expansion*, by H. Bateman.

The second number of volume 48 of the AMERICAN JOURNAL OF MATHE-MATICS (April, 1926) contains: *The theory of the binary octavic*, by A. M. Whelan; *The Borel summability of Fourier series*, by M. H. Stone; *Self dual space curves*, by T. R. Hollcroft; *Expansions in terms of certain polynomials connected with the gamma-function*, by B. P. Hoover; *On the value of the Napierian base*, by D. H. Lehmer; *On differential inversive geometry*, by F. Morley.

The third number of volume 27, series 2, of the ANNALS OF MATHE-MATICS (March, 1926) contains: *Transformation of the Kummer criteria in connection with Fermat's last theorem*, by H. S. Vandiver; *Algebraic potential curves*, by J. L. Coolidge; *A method of deriving the infinite double products in the theory of elliptic functions from the multiplication theorems*, by G. Mittag-Leffler; *Miscellaneous questions in the theory of differential equations. I. On the method of Frobenius*, by E. Hille; *Non-measurable functions connected with certain functional equations*, by H. Blumberg; *Entire functions defined by certain power series*, by J. T. Colpitts; *Approximation of curves and surfaces by algebraic curves and surfaces*, by P. A. Smith; *Note on matrices in a given field*, by J. H. M. Wedderburn; *On the arithmetical applications of the power series for theta quotients*, by E. T. Bell; *Conditions for self dual curves*, by T. R. Hollcroft; *Semi-parallel maps of surfaces*, by W. C. Graustein; *Projective invariants of affine geometry of paths*, by O. Veblen and J. M. Thomas.

The Faculty of Science of the Imperial University of Tokyo has begun publication of a separate section (Section I) of its JOURNAL, to be devoted to mathematics, astronomy, physics, and chemistry.

The second International Congress for Applied Mechanics was held at Zurich, September 12–18, 1926. The first of this series of congresses was held at Delft in 1924.

An anniversary volume entitled *The Work of the College Entrance Examination Board*, which has just been published by that Board through Ginn and Company, contains a history of mathematical requirements for college entrance since the time (1892) of the famous Committee of Ten. Among members of this Society who have rendered conspicuous service are Professor T. S. Fiske, who has been Secretary of the Board since 1901 when he succeeded President Butler, Professor W. F. Osgood, Professor Dunham Jackson, and members of several committees of this Society, of the Mathematical Association, and of the Board itself. In the twenty-five years covered by this volume, the number of candidates examined in one year has increased from less than one thousand to over twenty thousand.

Professor Maurice Fréchet, of the University of Strasbourg, is preparing Part 3 (*Modern Theoretical Researches*) of Volume 1 of Borel's *Traité du Calcul des Probabilités*. In order to avoid oversights, he requests that notice be sent to him regarding results on probabilities, other than applications, which deserve mention and which have not been noted in Parts 1 and 2 of Volume 1. Precise references, and even brief summaries, would be welcomed, so that the work may be as complete as possible.

Professor W. C. Graustein has presented to the Sociéte Mathématique de Belgique the amount of the prize that he received from the Royal Academy of Belgium for his memoir entitled *Méthodes invariantes dans la géométrie infinitésimale des surfaces* (see this BULLETIN, vol. 32, p. 177), with the request that it be used to found a prize. This prize, which will be known as the Prix Graustein, will be awarded for an important contribution to infinitesimal geometry; competition is restricted to the United States and Belgium. Competing memoirs should be sent to the Société Mathématique de Belgique, rue d'Egmont 11, Brussels, before October 15, 1927.

The Academy of Sciences of Naples announces the following subject for a prize memoir: To expound and coordinate recent researches on the concept of parallelism in a curved space, and to contribute to the theory. Competing memoirs should reach the Academy by May 31, 1928.

The Royal Society of Edinburgh has awarded its Keith Prize for the period 1923–25 to Professor H. W. Turnbull, of St. Andrews, for his papers on hyper-algebra, invariant theory, and algebraic geometry, published in the PROCEEDINGS OF THE ROYAL SOCIETY OF EDINBURGH.

Cambridge University has awarded its Mayhew Prize in applied mathematics jointly to J. A. Gaunt, of Trinity College, and A. H. Wilson, of Emanuel College.

The medal of the American Society of Mechanical Engineers has been awarded to Professor R. A. Millikan, of the California Institute of Technology.

Professor N. E. Nörlund, of the University of Copenhagen, has been elected corresponding member of the Paris Academy of Sciences in the section of geometry, as successor to the late C. Guichard.

The Bavarian Academy of Sciences has elected as corresponding members Professor Harald Bohr, of the Copenhagen Technical Institute, and Professor Niels Bohr, of the University of Copenhagen.

Professors G. H. Hardy and C. V. L. Charlier have been elected corresponding members of the Vienna Academy of Sciences.

Sir Ernest Rutherford, Professor H. A. Lorentz, and Dr. H. LeChatelier have been elected foreign members of the Académie Polonaise des Sciences.

Professor Paul Langevin, of the Collège de France, has been elected president of the French Association for the Advancement of Science.

Professor Salvatore Pincherle has been elected president of the Unione Matematica Italiana.

Professors Niels Bohr, Max Planck, and Arnold Sommerfeld have been elected foreign members of the Royal Society of London.

Cambridge University conferred the degree of doctor of science on Sir Ernest Rutherford, on the occasion of the celebration by Trinity College of the Bacon Tercentenary.

The University of St. Andrews has conferred an honorary doctorate on Professor E. T. Whittaker, of the University of Edinburgh.

Columbia University, Yale University, and the University of Wisconsin have conferred honorary doctorates on President Max Mason, of the University of Chicago.

Columbia University has conferred an honorary degree on Dr. W. S. Adams, director of Mount Wilson Observatory.

Dr. William Bowie, of the United States Coast and Geodetic Survey, has been elected a member of the Norwegian Academy of Sciences.

Professor R. A. Millikan has been elected a foreign member of the Göttingen Academy of Sciences.

Professor M. I. Pupin, of Columbia University, has received an honorary degree from Rutgers University.

The University of Wisconsin has conferred an honorary degree on Professor A. N. Whitehead, of Harvard University.

National Research Fellowships in mathematics have been awarded as follows: at the January, 1926, meeting to C. E. Hille, B. O. Koopman, G. M. Merriman, D. E. Richmond, D. V. Widder; at the April, 1926, meeting to R. W. Barnard, L. R. Ford, Orrin Frink, R. G. Lubben, C. F. Roos, P. A. Smith, Louis Weisner.

Dr. Louis Antoine has been promoted to a professorship of calculus at the University of Rennes.

Dr. René Milloux has been appointed *maître de conférences* in mathematics at the University of Strasbourg.

Professor M. Riesz, of Stockholm, has been appointed to a professorship at the University of Lund.

Dr. Rudolph Weyrich, of the University of Marburg, has been appointed professor of mathematics at the German Technical School at Brunn.

Dr. Paul Zühlke has been appointed honorary professor of the teaching of mathematics at the University of Marburg.

The late W. W. Rouse Ball, of Trinity College, has bequeathed the sum of £25,000 to Cambridge University to endow a professorship or readership in mathematics, expressing the hope that incumbents of this professorship or readership should include in their lectures historical and philosophical aspects of the subject.

Dr. W. E. H. Berwick, of the University of Leeds, has been appointed professor of mathematics at the University of North Wales, Bangor.

Dr. E. L. Ince, of the University of Liverpool, has been appointed professor of pure mathematics at the Egyptian University of Cairo.

Dr. J. P. Ballantine, of Columbia University, has been appointed assistant professor of mathematics at the University of Washington.

Mr. J. E. Burnam has been appointed professor of mathematics at Simmons College, Abilene, Texas.

Assistant Professor G. M. Conwell, of the New York State College for Teachers, has been promoted to a full professorship of mathematics.

Dr. Tobias Dantzig has been appointed assistant professor of mathematics and mechanics at the University of Maryland.

Professor J. E. Davis, of Pennsylvania State College, has been appointed associate professor of mathematics at Drexel Institute.

Professor L. S. Dederick, of the University of British Columbia, has been appointed professor of mathematics at St. Stephen's College.

Professor W. C. Eells, of Whitman College, has been granted leave of absence for the academic year 1926–27 to serve as research assistant in educational measurements at Stanford University.

Mr. Ira Gwinn has been appointed to an assistant professorship at Morningside College.

Dr. R. W. Hartley has been appointed professor of mathematics at Southwestern College, Memphis.

Assistant Professor Gertrude A. Herr, of Iowa State Teachers College, has been promoted to an associate professorship of mathematics.

Dr. G. W. Hess has been appointed associate professor of mathematics at Howard College, Birmingham.

Professor R. A. Johnson, of Hamline University, has been appointed assistant professor of mathematics at Hunter College.

Associate Professor A. F. Kovarik has been promoted to a full professorship of physics at Yale University.

Dr. K. W. Lamson, of Columbia University, has been appointed assistant professor of mathematics at Lehigh University.

Dr. B. Z. Linfield has been appointed associate professor of mathematics at the University of Virginia.

Dr. W. L. Machmer, of the department of mathematics at the Massachusetts Agricultural College, has been made dean of that College.

Professor F. W. Owens, of Cornell University, has been appointed head of the department of mathematics at Pennsylvania State College.

Dr. B. C. Patterson has been appointed assistant professor of mathematics at Washington and Jefferson College.

Professor Georgia E. Robinson, of Shorter College, has been appointed professor of mathematics at Jefferson City Junior College.

Mr. H. A. Robinson has been appointed head of the department of mathematics at Agnes Scott College.

Miss Jessie M. Short has been promoted to an assistant professorship of mathematics at Reed College.

Dr. W. G. Simon has been promoted to a full professorship of mathematics at Adelbert College, Western Reserve University.

Associate Professor L. L. Smail, of the University of Texas, has been appointed associate professor of mathematics at Lehigh University.

Dr. W. H. Taylor has been appointed head of the department of mathematics at Hamline University.

Professor H. S. Uhler, of Gettysburg College, has been appointed associate professor of physics at Sheffield Scientific School, Yale University.

Assistant Professor J. K. Whittemore has been promoted at an associate professorship of mathematics at Yale University.

The following appointments to instructorships are announced: Cornell University, Mr. W. T. MacCreadie; New York University (Washington Square College), Dr. Fay Farnum; Rutgers University, Mr. M. G. Galbraith; Vassar College, Miss Julia W. Bower; State College of Washington, Mr. S. A. Schelkunoff; Yale University, Dr. H. M. Gehman.

Professor Giovanni Frattini, of the Technical Institute and the Military College at Rome, died in 1925 at the age of seventy-three.

Dr. J. T. Bottomley, of the University of Glasgow, died May 18, 1926. at the age of eighty-one.

Professor W. J. Lewis, of Cambridge University, known for his work in geometrical crystallography, died April 16, 1926, at the age of seventy-nine.

Professor V. A. Stekloff, of the University of Leningrad, died May 30, 1926, at the age of sixty-three.

Professor B. E. Carter, of Colby College, died June 11, 1926, at the age of sixty. Professor Carter had been a member of the American Mathematical Society since 1906.

Colonel H. H. Ludlow, U. S. A., died August 14, 1926. Colonel Ludlow had been a member of the American Mathematical Society since 1896, and was a life member.

Professor Gertrude W. Mendenhall, of the North Carolina College for Women, died in April, 1926. Professor Mendenhall was a member of the American Mathematical Society.