## NOTES

The April, 1928, number of the Transactions of this Society (volume 30, No. 2) contains the following papers: The foundations of a theory in the calculus of variations in the large, by M. Morse; Topological invariants of knots and links, by J. W. Alexander; On the expansion of analytic functions in series of polynomials and in series of other analytic functions, by J. L. Walsh; Primitive groups which contain substitutions of prime order p and of degree 6p or 7p, by M. J. Weiss; Generalized Lagrange problems in the calculus of variations, by C. F. Roos; On Jacobi's arithmetical theorems concerning the simultaneous representation of numbers by two different quadratic forms, by J. V. Uspensky; On relative content and Green's lemma, by H. L. Smith; On Bell's arithmetic of Boolean algebra, by W. A. Hurwitz; A theorem on orthogonal functions with an application to integral inequalities, by L. L. Dines; A theorem on orthogonal sequences, by L. L. Dines.

The April, 1928, number of the American Journal of Mathematics (volume 50, No. 2) contains: A theorem on correspondences on algebraic curves, by S. Lefschetz; Concerning the structure of a continuous curve, by G. T. Whyburn; Compound statements on four classes, by F. E. Baker; A memoir on the invariants of biternary quantics, by O. E. Glenn; Transitive substitution groups containing regular subgroups of lower degree, by F. E. Johnston; Generalized Green's functions for compatible differential systems, by W. W. Elliott; An expansion involving p inseparable parameters associated with a partial differential equation, by C. C. Camp; On the asymptotic evaluation of functions defined by contour integrals, by D. M. Wrinch; Generalized quaternion algebras and the theory of numbers, by L. W. Griffiths.

It is announced by the Chairman, Professor J. C. Fields, that the Proceedings of the Mathematical Congress held at Toronto in 1928 will be published while this issue of this Bulletin is in press. There will be two volumes aggregating nearly 2000 quarto pages, bound in cloth. Among other things, there will be found in the first volume a group photograph of the Congress, and the *procès verbal* of the meeting of the International Mathematical Union held during the Congress. In addition to the eight lectures printed in the first volume, the Proceedings will include about one hundred fifty communications printed in full, and over fifty abstracts. There are about one hundred eighty authors, representing twenty-six countries. The price of the entire Proceedings will be five dollars plus postage to registered members of the Congress, and ten dollars plus postage to others; orders may be sent to the University of Toronto Press. Separate copies of the group photograph may be had at fifty cents each.

The papers read at the bicentenary Newton celebration held in New York under the auspices of the History of Science Society (see this Bulletin, vol. 34, p. 247) have been published in book form with the title *Sir Isaac* 

Newton, 1727-1927, A Bicentenary Evaluation of his Work. The book was prepared for publication by F. E. Brasch, and has an introduction by D. E. Smith; it is published by Williams and Wilkins, of Baltimore.

In response to a request by G. Albini, Senator, Rector of the University of Bologna, and President of the Organization Committee of the International Congress of Mathematicians, the American Mathematical Society has named the following six persons as its representatives: Professors Archibald, Birkhoff, Blichfeldt, Kasner, Snyder, Veblen. If a chairman be necessary, Professor Birkhoff will act.

The French Association for the Advancement of Science will meet at La Rochelle, July 23–28, 1928. Professor L. G. Du Pasquier, of the University of Neufchatel, is president of the section of mathematics.

The Louisiana Academy of Sciences held its first annual meeting at Louisiana College, Pineville, May 5, 1928. Professor I. Maizlish, of Centenary College, is president, and Professor H. L. Smith, of Louisiana State University, vice-president. Professor H. A. Wilson, of Rice Institute, delivered the principal address, entitled *Recent theories of atomic structure*. Mathematical papers were read by Professors J. A. Hardin, C. D. Smith, and H. L. Smith, and Mrs. Yetta V. Maizlish. The next annual meeting will be held at the Southwestern Louisiana Institute, Lafayette.

The Belgian Academy of Sciences has awarded its prize for a contribution to the resolution of problems with axial symmetry in general relativity (see this Bulletin, vol. 32, p. 402) to Maurice Nuyens, of the University of Brussels, for his memoir entitled Champ gravifique dû à un électron animé d'un mouvement de rotation.

A prize in honor of U. Dini will be conferred by the University of Pisa for a manuscript or printed work in pure mathematics, mathematical physics, celestial mechanics, or theoretical geodesics; only graduates or students of the University of Pisa, and graduates of other universities who have studied at the University of Pisa since their graduation, are eligible. The competition closes in December, 1928.

Competition for the first award of the Lazzario Fubini prize of the Unione Matematica Italiana (see this Bulletin, vol. 31, p. 282) closes December 31, 1928; memoirs should be sent to Professor E. Bortolotti, of the University of Bologna, before that date. This prize is to be awarded every two years and is restricted to Italian graduates of Italian universities who received their degrees within six years of the closing date.

Dr. Paul Koebe, professor of mathematics at the University of Leipzig, has been awarded the international mathematics prize of the King of Sweden, on recommendation of the Swedish Academy of Sciences, for his memoir Allgemeine Theorie der Riemannschen Mannigfaltigkeiten (konforme Abbildung und Uniformisierung).

Cambridge University has awarded Smith prizes to W. L. Edge, of Trinity College, for an essay on Ruled surfaces of the fourth, fifth and sixth orders, and to A. H. Wilson, of Emmanuel College, for an essay on The

two-centre problem in wave mechanics. Rayleigh prizes have been awarded to J. A. Gaunt, of Trinity College, for an essay on The foundation of the Debye-Hückel ionization theory with application to gases, and to W. H. M'Crae, of Trinity College, for an essay on The quantum theory and the specific heat of gases.

Dr. W. Nernst, professor of physical chemistry in the University of Berlin, has been awarded the Franklin medal of the Franklin Institute.

The Louis Edward Levy medal of the Franklin Institute has been awarded to Dr. Vannevar Bush, professor of electric power transmission at the Massachusetts Institute of Technology, for two papers on the product integraph, an instrument developed under Dr. Bush's direction.

Dr. W. H. Wright, astronomer of the Lick Observatory, has been awarded the Henry Draper medal of the National Academy of Sciences, for his researches on nebulae, new stars, and planetary atmospheres.

Professor Paul Alexandroff, of the University of Moscow, has been elected a corresponding member of the Göttingen Scientific Society.

Professor Harry Bateman, of the California Institute of Technology, has been elected a fellow of the Royal Society of London.

The Montanistische Hochschule in Leoben has conferred an honorary doctorate on Professor E. Doležal, of Vienna.

Professor G. Kowalewski has been elected a member of the Saxon Academy of Sciences.

Professor Louis Roy, of the Faculty of Sciences of Toulouse, has been elected a correspondent of the Paris Academy of Sciences in the section of mechanics.

Professor Albert Einstein has been elected an honorary member of the British Physical Society.

Dublin University has conferred an honorary doctorate on Professor A. S. Eddington, of Cambridge.

The University of Liverpool has conferred an honorary doctorate of science on Professor J. E. Littlewood, of Cambridge.

Professor J. D. Tamarkin, of Brown University, has been elected a member of the American Academy of Arts and Sciences.

Dr. K. Menger, of the University of Vienna, has been promoted to an associate professorship.

Dr. Leopold Vietoris, of the University of Vienna, has been appointed to an associate professorship at the University of Innsbruck.

At the University of Paris, the chair of the theory of groups and the calculus of variations has been changed to a chair of the theory of functions and the theory of transformations, to which Professor E. Vessiot has been appointed; Professor R. Garnier succeeds him in his former chair.

At the University of Besançon, Professor J. Haag, of the University of Clermont, has been appointed to the chair of rational and applied mechanics, as successor to Professor J. Andrade, retired.

At the University of Dijon, the chair of pure mathematics has been changed to a chair of the differential and integral calculus to which Dr. Lagrange, of the faculty of sciences of Aix-Marseille, has been appointed.

Professor Georges Cerf, of the University of Dijon, has been appointed to the professorship of general mathematics at the University of Strasbourg.

Dr. Adolph Fraenkel, professor of mathematics at the University of Marburg, has been called to the University of Kiel.

Dr. A. Hammerstein, of the University of Berlin, has been promoted to an associate professorship.

Associate Professor Friedrich Hartogs, of the University of Munich, has been promoted to a full professorship.

Professor Otto Hölder, of the University of Greifswald, has retired.

- Dr. K. Reinhardt, of the University of Leipzig, has been promoted to a professorship.
- Dr. G. Pólya has been appointed to a professorship at the Zurich Technical School, as successor to Professor F. Rudio, retired.
- Dr. R. K. Butchart, lecturer in mathematics at the University College, Dundee (the University of St. Andrews) has been appointed professor of mathematics at Raffles College, Singapore.

The electors of the newly established Rouse Ball professorship of mathematics at the University of Cambridge have elected J. E. Littlewood, fellow of Trinity College and Cayley lecturer, to the professorship.

Professor Constantin Carathéodory of the University of Munich, Professor G. C. Evans of the Rice Institute, and Professor H. B. Phillips of the Massachussetts Institute of Technology, will lecture at the University of California during the summer of 1928.

Professor Herman Weyl, of the Zurich Technical School, has been appointed to the Thomas D. Jones research professorship of mathematical physics at Princeton University.

At Princeton University, Associate Professors J. W. Alexander, S. Lefschetz, C. R. MacInnes, and J. H. M. Wedderburn have been promoted to full professorships of mathematics.

Professor Daniel Buchanan, head of the department of mathematics at the University of British Columbia, has been appointed Dean of the Faculty of Arts and Science at that university.

At the University of Syracuse, Associate Professor Alan D.Campbell has been promoted to a professorship of mathematics.

Professor G. W. Gorrell has been made head of the department of mathematics at the University of Denver.

Assistant Professor Charles Duncan Gregory, of William and Mary College, has been promoted to an associate professorship of mathematics.

Dr. C. E. Hille of Princeton, and Dr. Alfred Errera of Belgium, will lecture at Stanford University during the summer session.

At Yale University, Professor W. R. Longley has been appointed to the Colgate professorship, as successor to Professor Luquiens; and Dr. L. T. Moore has been promoted to an assistant professorship of mathematics.

On account of blindness, Professor T. E. McKinney, of the department of mathematics at the University of South Dakota, will retire from active service at the end of the present academic year.

Dr. Max Mason, president of the University of Chicago and formerly professor of mathematical physics at the University of Wisconsin, has resigned to accept an appointment as director of the newly created division of sciences of the Rockefeller Foundation.

At Columbia University, Associate Professor G. W. Mullins, of Barnard College, has been promoted to a full professorship of mathematics; Dr. R. G. Archibald and Dr. B. O. Koopman have been promoted to assistant professorships of mathematics; and Dr. Lulu Hofmann has been appointed to a lecturership in mathematics.

Dr. C. H. Richardson, of Georgetown College, Kentucky, has been appointed head of the department of mathematics at Bucknell University, as successor to Professor W. C. Bartol, who has retired after forty-seven years of service.

Professor J. E. Rowe, of the College of William and Mary, has resigned to accept the presidency of the Clarkson Memorial Institute of Technology at Potsdam, N. Y.

At the University of California at Los Angeles, Assistant Professor H. M. Showman has been made Recorder of the University but will remain a member of the department of mathematics, and Assistant Professor Myrtie Collier has withdrawn; Dr. Raymond Garver of the University of Rochester, and Professor W. M. Whyburn, formerly of the Texas Technological College, and recently National Research Fellow, have been appointed to assistant professorships of mathematics.

Dr. D. J. Struik has been appointed assistant professor of mathematics at the Massachusetts Institute of Technology.

Assistant Professor J. D. Tamarkin, of Brown University, has been promoted to a full professorship of mathematics.

The following appointments to instructorships are announced:

Albion College, Mr. Watson M. Davis.

The University of Arkansas, Mr. Harvey A. Wright.

Columbia University, Mr. M. S. Demos.

The University of Chicago, Dr. B. W. Jones.

Dartmouth College, Dr. F. W. Perkins.

Harvard University, Dr. M. M. Slotnick (National Research Fellow), A. C. Berry, A. B. Brown, A. H. Fox, G. A. Hedlund, J. J. Hinrichsen, J. K. Peterson, G. B. Price, G. Saute, and Charles Wexler.

St. Olaf's College, Mr. Clarence Carlson.

Professor Henri Bosmans, of the Jesuit College of Saint-Michel, Brussels, died February 3, 1928, at the age of seventy-six. He was known for his work in the history of mathematics.

Professor L. Schleiermacher, of the Technical School at Darmstadt, died November 10, 1927.

Professor Emil Waelsch, of the German Technical School at Brunn, died June 5, 1927.

Professor Giuseppe Sforza died December 17, 1927.

Professor Emilio Veneroni, president of the Royal Technical School at Piacenza, and docent in geometry at the University of Padova, died June 18, 1927.

Professor W. S. Aldis, of Auckland College, New Zealand, died March 7, 1928, at the age of eighty-nine.

Mr. W. B. Croft, formerly of the department of mathematics at Winchester College, died March 23, 1928, at the age of seventy-six.

Dr. J. B. Chittenden, professor of mathematics at the Brooklyn Polytechnic Institute, died March 20, 1928, at the age of sixty-four.

Professor Gaetano Lanza, emeritus professor of theoretical and applied mechanics at the Massachusetts Institute of Technology, died March 21, 1928, at the age of seventy-nine.

Dr. F. S. Luther, emeritus president and formerly professor of mathematics at Trinity College, Hartford, died January 4, 1928, at the age of seventy-seven.