

NOTES

The third number of volume 24, series 2, of the ANNALS OF MATHEMATICS contains: *On the potential of a homogeneous spherical cap, of a magnetic shell, and of a steady current*, by C. De Jans; *On cyclic-harmonic curves*, by Harold Hilton; *Multiple integrals in n -space*, by Philip Franklin; *On symmetric forms in n variables*, by Arnold Dresden; *Algebraic fields*, by J. H. M. Wedderburn; *A theorem concerning certain unit matrices with integer elements*, by H. R. Brahana.

At the annual meeting of the American Association for the Advancement of Science, held at Cincinnati December 27, 1923, to January 2, 1924, Dr. J. McKeen Cattell, editor of SCIENCE, was elected president. Vice-presidents were elected as follows: mathematics, Professor J. C. Fields; physics, Dr. E. F. Nichols; astronomy, Professor J. A. Miller; historical and philological sciences, Professor L. C. Karpinski. Professor T. H. Hildebrandt was elected as member of the Committee for Section A (mathematics). Professor G. A. Miller delivered his address as retiring vice-president of Section A before the joint session of that section with the American Mathematical Society and the Mathematical Association of America; the address was on *American mathematics during three-quarters of a century*. At this session Professor L. E. Dickson delivered, at the request of the program committee of the American Mathematical Society, an address on *Algebras and their arithmetics*, for which (together with his two other papers read before sessions of this Society) he was awarded the Association's prize for the most valuable contribution to science presented during the meeting (see this BULLETIN, vol. 30, Nos. 1-2, p. 90. Professor Dickson's address appears in full in the present issue of this BULLETIN on pages 247-257. A review of his book of the same title appears on pages 263-270.

Professor H. L. Rietz has been elected president of the Mathematical Association of America, and Professors J. L. Coolidge and Dunham Jackson vice-presidents.

Professor W. H. Young has been elected president of the London Mathematical Society, Professors L. N. G. Filon, Harold Hilton, and A. E. Joliffe vice-presidents, Dr. A. E. Western treasurer, and Professors G. H. Hardy and G. N. Watson secretaries.

The fiftieth anniversary of the founding of the Société Française de Physique was celebrated at Paris in December, 1923. On this occasion a general meeting of the International Union of Physics was held, on December 10.

The International Mathematical Congress to be held in Toronto on August 11-16, 1924 has been organized into the sections listed below. An Editorial Committee has been appointed, of which Professor J. C. Fields in the general chairman, and of which the American members for the several sections appear under the section heading below.

SECTION I: *Algebra, Theory of Numbers, Analysis.*

Professors D. R. Curtiss and A. J. Kempner.

SECTION II: *Geometry.*

Professors A. B. Coble and L. P. Eisenhart.

SECTION III: (a) *Mechanics, Mathematical Physics.*

(b) *Astronomy, Geophysics.*

Professors G. D. Birkhoff and F. R. Moulton.

SECTION IV: (a) *Electrical, Mechanical, Civil, and Mining Engineering.*

(b) *Aeronautics, Naval Architecture, Ballistics, Radiotelegraphy.*

Professors E. R. Hedrick and A. E. Kennelly.

SECTION V: *Statistics, Actuarial Science, Economics.*

Professors T. M. Putnam and H. L. Rietz.

SECTION VI: *History, Philosophy, Didactics.*

Professors R. C. Archibald and L. C. Karpinski.

The general Organizing Committee (Professor J. C. Fields, *Chairman*; Professor J. C. McLennan, *Acting chairman*; Professor J. L. Synge, *Secretary*) will welcome abstracts of papers offered for presentation before the Congress; these should be sent to Professor Synge in care of the Royal Canadian Institute, Toronto. Among the noted Europeans who have indicated an intention of attending the Congress are Borel, de la Vallée Poussin, Eddington, Enriques, Fréchet, Hadamard, Koenigs, Marconi, Parsons, Pincherle, Sierpinski, Villat, Volterra, Young, Yule.

The Paris Academy of Sciences announces the award of the following prizes for 1922: the Bordin prize to Professor Emile Gau, of the University of Grenoble, for a memoir on partial differential equations of the second order integrable by Darboux's method (see this BULLETIN, vol. 27, p. 239); the Francœur prize to the Abbé Gaston Bertrand, for his work in integral equations and the theory of tides; the Montyon prize in mechanics to Henri Chipart; the Poncelet prize in mechanics to the late Auguste Boulanger; prizes in navigation to Commandant Charles Lafon for his work *Etudes sur le Ballon captif et les Aéronefs marins*, and to Captain Stanislas Millot for his memoir on *Amarrage, remorquage et mouillage des navires*; the Hebert prize in physics to Professor Edmond Bauer, of the University of Strasbourg, for his work entitled *La Théorie de Bohr*; the Montyon prize in statistics to Alfred Barriol for his statistical work, including his *Théorie et Pratique des*

Opérations financières, and an honorable mention to H. E. Soper for his work entitled *Frequency Arrays*; the Binoux prize for history and philosophy of sciences to Dr. Robert Bouvier, for his work entitled *La Pensée d'Ernst Mach*; the Petit d'Ormy prize to Professor Elie Cartan, for his mathematical work; the Estrade-Delcros prize to Professor René Baire, for his mathematical work; the Gustave Roux prize to Professor Georges Giraud for his work in automorphic functions; a prize from the Gegner foundation to Professor Augustin Boutaric for his work entitled *La Vie des Atomes*; a prize from the Hirn foundation to Gustave Eiffel for his work in aerodynamics. The Damoiseau prize was not awarded, and the subject, on developments of the work of Poincaré and Liapounoff on figures of equilibrium of a rotating fluid mass (see this BULLETIN, vol. 27, p. 239) was withdrawn.

The scientific prize of the Lasserre Foundation has been awarded to Professor Gaston Julia, of the University of Paris.

The Royal Academy of Madrid announces the following subject for a prize, for which competing memoirs should be presented by October 31, 1924: *A study of the complex collineation in the plane, and its real representation*. The competition is open only to Spanish, Portuguese, and Spanish-American mathematicians.

The Royal Society of London has received a gift from Sir Alfred Yarrow which will be used to endow research professorships, to be awarded only to men of proved ability for independent research. The initial awards of these professorships were to Professor A. Fowler, professor of astrophysics at the Imperial College of Science and Technology, and to Mr. G. I. Taylor, fellow and lecturer in mathematics at Trinity College, Cambridge.

The Cambridge Philosophical Society announces that it will publish shortly, as separate supplements to its PROCEEDINGS, the series of papers by Dr. Niels Bohr, *On the Application of the Quantum Theory to Atomic Structure*, Part I of which has already appeared in volume 13 of the ZEITSCHRIFT FÜR PHYSIK. The translation of Part I will be closely followed by a similar translation of Part II, which it is hoped will appear simultaneously with the German version.

Professor Aimé Cotton, of the Sorbonne, has been elected a member of the Paris Academy of Sciences in the section of general physics, as successor to the late Professor Jules Violle.

Professors Einstein and von Laue have been elected honorary members of the Royal Institution, London.

Professor W. F. Osgood, of Harvard University, has been elected a member of the Leopoldinisch-Carolinische Deutsche Akademie der Naturforscher in Halle.

Dr. Horace Lamb, of Trinity College, Cambridge, has been appointed to give the first Rouse Ball lecture on some subject related to mathematical science (see this BULLETIN, vol. 28, p. 320).

Mr. R. H. Fowler, of Trinity College, Cambridge, has been appointed university lecturer in mathematics.

Dr. C. E. Weatherburn, of Ormond College, Melbourne, has been appointed professor of mathematics at Canterbury University College, Christchurch, New Zealand.

Dr. Ganesh Prasad, dean of the Faculty of Science in the Benares Hindu University, has been appointed Hardinge professor of higher mathematics in the Calcutta University, in succession to Professor C. E. Cullis.

Professors G. D. Birkhoff, of Harvard University, and R. C. Archibald, of Brown University, will lecture at the University of California in the summer of 1924.

Professor H. F. Blichfeldt, of Stanford University, will lecture at Columbia University during the summer session.

Professor Earl Church, of the Pennsylvania Military College, has resigned to take charge of the computation and least squares adjustment of the geodetic survey of the Hawaiian Islands.

Dean James N. Hart, of the University of Maine, who has been head of the department of mathematics for the past thirty years, has been granted a year's leave of absence.

Professor F. W. Owens, of Cornell University, has been granted leave of absence for the second semester of the year 1923-24, and will spend the time in Europe.

Professor C. W. Strom, of Luther College, Decorah, Iowa, has been granted leave of absence for the current year and is studying at the University of Iowa.

Mr. C. C. Wagner, of Allegheny College, has been appointed assistant professor of mathematics at Pennsylvania State College, and is now acting head of the department.

Mr. H. A. Simmons, instructor in mathematics in the University of Michigan, has been appointed assistant professor of mathematics at the University of Pittsburgh.

Associate Professor H. H. Dalaker, of the University of Minnesota, has been promoted to a full professorship of mathematics.

At Fairmount College, Wichita, Kansas, Professor A. J. Hoare has resumed his work as head of the department, having become adjusted to a serious impairment of vision which he suffered four years ago.

Mr. C. S. Whitney has been appointed professor of mathematics and head of the department at the State School of Mines, Miami, Oklahoma.

Professor J. A. Whitted has resigned his position at Hedding College and has been appointed professor of mathematics at Ohio Northern University.

At Simmons College, Abilene, Texas, Professor A. E. Chandler has been made bursar, and Associate Professor J. E. Burnam has been promoted to a full professorship.

Professor Emma K. Whiton, of the University of Redlands, has been appointed professor of mathematics at Mills College.

Professor Auguste Boulanger, directeur des études at the Ecole Polytechnique, died in 1923, at the age of fifty-seven.

Dr. Alexander Gleichen, known for his work in optics, died October 21, 1923, at the age of sixty-one.

The death is announced of Gustaf Eneström, of Stockholm, founder and for eighteen years editor of the *BIBLIOTHECA MATHEMATICA*.

Professor C. B. Williams, of Kalamazoo College, and Mrs. Williams were guests at the Grand Hotel in Yokohama on the day of the great earthquake. As nothing has been heard from them since that day, the American Embassy reports that they are believed to have lost their lives in the collapse of that hotel. Professor Williams had been a member of the American Mathematical Society since 1895.

Professor J. M. Willard, of Pennsylvania State College, died December 10, 1923, at the age of fifty-eight. Professor Willard had been a member of the American Mathematical Society since 1892.

Professor James Harkness, of McGill University, acting dean of the faculty of arts of that university, died December 7, 1923, at the age of fifty-nine years. Professor Harkness had been a member of the American Mathematical Society since 1891 and had held office as vice-president.

Professor Joseph Lipka, of the Massachusetts Institute of Technology, died January 15, 1924, at the age of forty. Professor Lipka, who received his doctorate from Columbia in 1912, had been on the mathematical staff of the Institute since 1908, with the rank of assistant professor since 1917. He had been requested by the program committee to give a talk at the May meeting of this Society.