

NOTES

In addition to those on the editorial staff of the Bulletin, the following persons have assisted the editors, either by refereeing papers or by advising concerning papers offered for publication in the present volume: Professors E. T. Bell, B. A. Bernstein, Daniel Buchanan, R. D. Carmichael, E. W. Chittenden, L. E. Dickson, Arnold Dresden, Arnold Emch, H. J. Ettliger, W. C. Graustein, T. R. Hollcroft, Louis Ingold, Dunham Jackson, J. R. Kline, E. P. Lane, C. H. Langford, Mayme I. Logsdon, C. N. Moore, R. L. Moore, F. D. Murnaghan, G. Y. Rainich, Arthur Ranum, Virgil Snyder, E. B. Stouffer, J. M. Thomas, R. L. Wilder, W. A. Wilson, R. M. Winger. The editors desire publicly to recognize this service.

The Annual Meeting of the Society will be held in New York City, in conjunction with meetings of the Mathematical Association of America and the American Association for the Advancement of Science, on December 27–31, 1928. On Friday morning, December 28, the Bôcher Prize will be awarded, and Professor W. F. Osgood will speak on the life and work of Bôcher. On Friday afternoon, at the usual joint session with other organizations, Professor Dunham Jackson will deliver his retiring address as vice-president of Section A of the A. A. A. S.; and Professor J. L. Coolidge, at the joint invitation of the A. M. S. and the M. A. A., will present a paper entitled *The heroic age in geometry*. Later on Friday afternoon, the sixth Josiah Willard Gibbs Lecture will be given by Professor G. H. Hardy of the University of Oxford, on the topic *An introduction to the theory of numbers*. The meetings on Monday, December 31, will consist of a symposium on *Wave mechanics*, in joint session with the American Physical Society.

A regular meeting of the Society will be held at the University of Cincinnati on Friday and Saturday, November 30–December 1, 1928. This is the first fall meeting under the new program of three Western meetings a year. The arrangements are in charge of a special committee consisting of Professor C. N. Moore (chairman), Henry Blumberg, P. P. Boyd, Louis Brand, H. T. Davis, and M. H. Ingraham. At the invitation of this Committee, Professor G. D. Birkhoff will speak on *The mathematical bases of art*; Professor E. R. Hedrick will speak on *Recent developments in the theory of non-analytic functions of a complex variable*; and Professor Archibald Henderson will deliver an address. In the interval between this meeting and the Annual Meeting in New York, Professor Hedrick will be on leave of absence, and will visit and speak at several institutions.

The July, 1928, number of the *Annals of Mathematics* (series 2, volume 29, No. 3) contains the following papers *On Rayleigh's principle in the theory of differential equations of mathematical physics and on Euler's method in calculus of variations*, by N. Bogoliouboff and N. Kryloff; *On various*

conceptions of correlation, by F. M. Weida; *Kernels of positive type*, by C. Seely; *The Tschirnhaus transformation*, by R. Garver; *On the factoring of Fredholm minors*, by H. T. Davis; *A set of necessary and sufficient conditions for the Cesàro summability of double series*, by G. M. Merriman; *Certain configurations on cubics*, by F. C. Ogg; *On four mutually orthogonal circles*, by N. Altshiller-Court; *A general theorem on the expression of a determinant in terms of its sub-determinants*, by W. M. Flexner; *Quadratic fields in which cyclotomic polynomials are reducible*, by L. Weisner; *On irreducible cuts of the plane between two points*, by W. A. Wilson; *Collineations of projectively related affine connections*, by M. S. Knebelman; *The discriminant of the m -ary quadratic in the Galois fields of order 2^n* , by A. D. Campbell.

The International Mathematical Congress which met at Bologna during the first ten days of September, was concluded by a meeting held at the Palazzo Vecchio in Florence. This was made the occasion for a celebration and pageant, participated in by trumpeters, soldiers, and heralds in ancient costumes. Greetings were exchanged between the meeting of the Congress and the meeting of this Society at Amherst. A report of the Congress will appear in a later issue of this Bulletin.

The Deutsche Mathematiker-Vereinigung held its annual meeting in Hamburg on September 16–23, 1928.

At the third general assembly of the International Astronomical Union, held at Leiden, July 5–13, 1928, under the presidency of Professor W. de Sitter, the following officers were elected: Sir Frank Dyson, president; Dr. Frank Schlesinger, Professor H. Andoyer, Dr. G. Abetti, Professor N. E. Nörlund, and Professor F. Nušl, vice-presidents. The next congress will be held in the United States.

The New Zealand Institute has awarded its Hector medal and prize for 1928 to Professor D. M. Y. Sommerville, of Victoria University College, Wellington, for his mathematical work as a whole and for his investigations in non-euclidean geometry.

The Royal Academy of Belgium has awarded its De Potter prize in mathematics for the period 1925–27 to Maurice Lecat, for his work entitled *Coup d'œil sur la théorie des déterminants dans son état actuel*.

Dr. Max Planck, professor of physics at the University of Berlin, celebrated his seventieth birthday April 23, 1928. To commemorate this occasion his friends and colleagues have founded a gold medal to be awarded for distinguished work in theoretical physics.

Professor T. von Kármán, of the Aerodynamical Institute of the Aachen Technical School, has been elected a foreign member of the Turin Academy of Sciences.

The University of Edinburgh has conferred the honorary degree of doctor of laws on Professor Niels Bohr, of Copenhagen.

Professor G. H. Hardy, of Oxford, has been elected a foreign member of the Göttingen Society of Sciences.

Dr. E. A. Miller, professor of applied mathematics at the University of Manchester, has been elected the first Rouse Ball professor of mathematics at the University of Oxford.

Mr. H. P. Mullholland, of Queen's College, Cambridge, has been appointed lecturer in mathematics at the University of Newcastle-on-Tyne.

Professor H. S. Carslaw, of Sydney, Australia, has been elected to a Supernumerary Fellowship at Emmanuel College, Cambridge, of which he was formerly a Fellow, and he proposes to spend the whole of next year in residence there, while on leave of absence from the University of Sydney.

At its commencement exercises in June, Dartmouth College conferred the honorary degree of doctor of science on Professor Charles N. Haskins of the department of mathematics. This was an expression of appreciation for his work in connection with the building of the new Baker Memorial Library dedicated at that time.

Dr. H. A. Bender, of the University of Illinois, has been appointed assistant professor of mathematics at the Municipal University of Akron.

Associated Professor C. C. Bramble has been promoted to a professorship of mathematics in the postgraduate school of the United States Naval Academy.

Associate Professor G. R. Clements, of the United States Naval Academy, has been promoted to a professorship of mathematics.

Dr. N. B. Conkwright, of the University of Iowa, has been promoted to the rank of associate in mathematics.

Dr. A. H. Copeland has been appointed assistant professor of mathematics at the University of Buffalo.

Associate Professor Alexander Dillingham has been promoted to a professorship at the United States Naval Academy.

Professor J. C. Fitterer has been appointed associate professor of mathematics at the Colorado School of Mines.

Dr. Orrin Frink has been appointed assistant professor of mathematics at Pennsylvania State College.

Dr. H. C. Hicks has been appointed assistant professor of mathematics at the University of Oregon.

Associate Professor B. V. Hill, of Phillips University, Enid, Oklahoma, has been promoted to a professorship of mathematics.

Assistant Professor R. A. Johnson of Hunter College of the City of New York, has been promoted to an associate professorship of mathematics.

The Reverend E. C. Phillips, director of the Astronomical Observatory of Georgetown University, has been appointed to the office of Provincial of the Jesuit province of Maryland-New York.

Assistant Professor J. B. Rosenbach, of the Carnegie Institute of Technology, has been promoted to an associate professorship of mathematics.

Dr. S. A. Schelkunoff, of the State College of Washington, has been promoted to an assistant professorship of mathematics.

Dr. L. S. Shively, of Mount Morris College, has been appointed associate professor of mathematics at Ball Teachers College, Muncie, Indiana.

Dr. H. W. Stager has been appointed head of the department of mathematics at Salinas Junior College.

Dr. J. M. Stetson has been appointed professor of mathematics at the College of William and Mary.

Professor Evan Thomas, of the University of Vermont, has retired.

Dr. J. H. Van Vleck has been appointed professor of theoretical physics at the University of Wisconsin.

Assistant Professor W. J. Webber, of the University of Toronto, has been promoted to an associate professorship of mathematics.

Associate Professor Mary E. Wells, of Vassar College, has been promoted to a professorship of mathematics.

Associate Professor C. H. Yeaton, of Oberlin College, has been promoted to a full professorship of mathematics.

The following appointments to instructorships are announced:

Brown University, Mr. H. S. Thurston;

Hunter College, Dr. Marguerite D. Darkow, Dr. Rosa L. Jackson;

Milton College, Miss Fannie Hopkins;

United States Naval Academy, Messrs. F. J. Baier, J. R. Bland, W. F. Kern, G. A. Lyle, H. C. Stotz, H. J. Winslow;

Wittenberg College, Mr. G. S. Harris.

Professor F. S. Carey, retired, of the University of Liverpool, died July 26, 1928, at the age of sixty-eight.

Mr. Frank Castle, lecturer in practical mathematics at the Municipal Technical Institute, Eastbourne, author of text books on practical mathematics, died August 4, 1928, at the age of seventy-one.

Professor W. J. King, of the United States Naval Academy, died January 15, 1928.