

NOTES.

At the Chicago meeting of the American Association for the Advancement of Science, Professor E. H. Moore was elected president for the next two years. Dr. R. S. Woodward, ex-president of the Carnegie Foundation and of the American Mathematical Society, was reelected treasurer, and Dr. B. E. Livingston permanent secretary, each for a term of four years. Professor Oswald Veblen was elected chairman of Section A (mathematics), and a vice-president of the Association. The winter meeting of 1921 will be held at the University of Toronto.

At the sixth annual meeting of the Mathematical Association of America, held at Chicago, December 28–29, the following officers were elected: president, Professor G. A. Miller; vice-presidents, Professors R. C. Archibald and R. D. Carmichael; members of the Board of Trustees, to serve until January, 1924, Professors A. A. Bennett, Florian Cajori, H. L. Rietz, and D. E. Smith. Professor C. F. Gummer was chosen to fill the vacancy on the Board caused by the election of Professor Carmichael as vice-president.

On the occasion of the mathematical congress held in Strasbourg in the summer of 1920, the following mathematicians were elected honorary members of the Society of Sciences, Agriculture, and Arts of the Lower Rhine: Professor L. Crelier, of the University of Bern; Professor L. E. Dickson, of the University of Chicago; Professor G. Koenigs, of the Sorbonne; Professor J. Larmor, of Cambridge University; Professor N. E. Nörlund, of the University of Lund; Professor E. Picard, of the Sorbonne; Professor C. de la Vallée Poussin, of the University of Louvain; Professor V. Volterra, of the University of Rome.

Announcement has just been made that Professor Dunham Jackson will present the principal paper of a symposium on the general theory of approximation by polynomials and trigonometric sums on Friday afternoon, March 25th, at the meeting of the American Mathematical Society at the University of Chicago. The meeting of the Society will extend over Saturday, March 26th.

On account of the meeting of the Central Association of Teachers of Mathematics and Science in St. Louis during Thanksgiving week of this year, the officers of the Southwestern Section of the American Mathematical Society and the officers of the Missouri Section of the Mathematical Association of America have decided to hold the meetings of these organizations also in St. Louis, at Washington University, instead of at the University of Missouri, as had been announced previously.

The opening (January) number of volume 22 of the TRANSACTIONS OF THE AMERICAN MATHEMATICAL SOCIETY contains the following papers: *Arithmetical paraphrases*, by E. T. Bell; *The construction of algebraic correspondences between two algebraic curves*, by Virgil Snyder and F. R. Sharpe; *Concerning certain equicontinuous systems of curves*, by R. L. Moore; *Fundamental systems of formal modular seminvariants of the binary cubic*, by W. L. G. Williams; *A property of two $(n + 1)$ -gons inscribed in a norm-curve in n -space*, by H. S. White; *Recurrent geodesics on a surface of negative curvature*, by H. M. Morse; *On the location of the roots of the jacobian of two binary forms, and of the derivative of a rational function*, by J. L. Walsh; *On functions of closest approximation*, by Dunham Jackson.

The concluding (October) number of volume 42 of the AMERICAN JOURNAL OF MATHEMATICS contains the following papers: *Geometrical significance of isothermal conjugacy of a net of curves*, by E. J. Wilczynski; *Observations weighted according to order*, by P. J. Daniell; *Some determinant expansions*, by L. H. Rice; *A general implicit function theorem with an application to problems of relative minima*, by K. W. Lamson; *On the Laplace-Poisson mixed equation*, by R. F. Borden; *Characteristic subgroups of an abelian prime power group*, by G. A. Miller.

The December number (vol. 22, no. 2) of the ANNALS OF MATHEMATICS contains the following papers: *The mean of a functional of arbitrary elements*, by Norbert Wiener; *On certain determinants associated with transformations employed in thermodynamics*, by J. E. Trevor; *The permanent gravitational field in the Einstein theory*, by L. P. Eisenhart; *On the structure of finite continuous groups with a finite number of exceptional infinitesimal transformations*, by S. D. Zeldin; *Conformal*

mapping of a family of real conics upon another, by T. H. Gronwall; *On the location of the roots of the derivative of a polynomial*, by J. L. Walsh.

The January number (vol. 14, no. 1) of THE MATHEMATICS TEACHER announces the change in the management of that journal, which will be hereafter the official organ of the newly-formed National Council of Teachers of Mathematics. The new staff of editors is constituted as follows: J. R. Clark, editor-in-chief; E. R. Smith, assistant editor; and Alfred Davis, H. D. Gaylord, Marie Gugle, and J. W. Young. This staff will be assisted by an advisory board of twenty members under the chairmanship of Dean W. H. Metzler, formerly editor-in-chief of the same journal.

The March number of the AMERICAN MATHEMATICAL MONTHLY will contain a short statement concerning the scientific and editorial work of Professor F. N. Cole, who was, until the first of January of this year, the editor of this BULLETIN, and the secretary of the American Mathematical Society.

The October number of the BULLETIN OF THE NATIONAL RESEARCH COUNCIL (vol. 1, no. 5) consisted of a report on the quantum theory by Professor E. P. Adams. A few copies of this number are available for free distribution.

The Paris Academy of Sciences announces the award of the following prizes in pure and applied mathematics, in addition to those listed in the December BULLETIN (p. 139): the Grand prize of the mathematical sciences, to Ernest Esclangon, director of the Observatory at Strasbourg, for his memoir *New researches on quasi-periodic functions*; the Montyon prize for mechanics, to Stéphane Drzewiecki, for his work on the general theory of the helix, with special reference to aerial and marine propellers. The Academy announces the following problem for its Bordin prize, to be awarded in 1923: *To find all the cases in which the search for the surfaces admitting a given linear element leads to a partial differential equation of the second order that is integrable by the method of Darboux.* The Damoiseau prize was not awarded in 1920, no satisfactory memoir on the announced subject, *the figures of equilibrium of a rotating fluid mass subject to newtonian attraction* (see this BULLETIN, vol. 24, p. 316), having been received; the same problem is proposed again as the subject for 1923.

The Ackermann-Teubner memorial prize for 1920 was awarded to Professor Gustav Mie for his memoirs on the theory of matter which appeared in volumes 37, 39, and 40 of the *ANNALEN DER PHYSIK*.

The \$5,000 prize offered through the *SCIENTIFIC AMERICAN* for a popular essay on the Einstein theories was awarded to Mr. L. Bolton, of London. The essay appears in the number of the *SCIENTIFIC AMERICAN* for February 5.

The Edison medal, awarded annually for work in electrical engineering by the American Institute of Electrical Engineers, will be presented this year to Professor M. I. Pupin, of Columbia University.

Announcement has been made at Brown University of the completion of the Nathaniel French Davis fund in honor of Professor Davis, now emeritus, who was for forty-one years a teacher of mathematics in that university. The fund amounts to ten thousand dollars, and the income is to supplement the regular library appropriations in purchasing mathematical books and periodicals for the mathematical seminary of Brown University.

A series of four lectures on *Four great geometers* (Archimedes, Galileo, Newton, and Maxwell) was given in November, 1920, by Mr. W. D. Eggar at Gresham College, London.

Professor Paul Painlevé, of the University of Paris, has returned from an educational mission to China. He has succeeded in arranging for an institute of the higher Chinese studies to be subsidized by the Chinese government in Paris, and for a branch of the University of Paris to be created in one of the Chinese universities and supported in part by the French government. An interesting account of these arrangements is given in the number of *SCIENCE* for February 4.

Professor Emile Borel, of the University of Paris, has been appointed honorary director of the *Ecole normale supérieure*.

Dr. David Owen, of Birkbeck College, has been appointed head of the department of physics and mathematics at the Sir John Cass Technical Institute, Aldgate, England.

Dr. P. Schafheitlin has been admitted as *privat-docent* at the technical school at Berlin.

Associate professor S. L. Boothroyd, of the department of mathematics and astronomy of the University of Washington, is spending the year at the Lick Observatory. He has been appointed to succeed Professor O. M. Leland as professor of astronomy and geodesy at Cornell University in September 1921.

Professor H. C. Wilson, of the department of mathematics and astronomy at Carleton College, has been granted leave of absence for the current academic year, part of which he will spend in research at Mt. Wilson Observatory. His position will be filled by Professor E. A. Fath, of Beloit College.

Associate professor Florence P. Lewis, of Goucher College, Baltimore, has been promoted to a full professorship of mathematics.

Dr. F. E. Wood, of the University of Chicago, has been appointed assistant professor of mathematics at the Michigan Agricultural College.

Dr. W. L. Crum, of Yale University, has been granted leave of absence for the second half of the present academic year to fill a temporary vacancy at Williams College as assistant professor of mathematics.

Dr. Teresa Cohen, of Johns Hopkins University, has been appointed instructor in mathematics at Pennsylvania State College.

Dr. Mary G. Haseman has been appointed instructor in mathematics at the University of Illinois.

Professor R. H. Weber, of the University of Rostock, died in August, 1920, at the age of forty-six years.

Dr. J. E. Clark, professor of mathematics in the Sheffield Scientific School of Yale University from 1873 to 1901, died January 3, 1921, in his eighty-ninth year. Professor Clark has been a member of the American Mathematical Society since its foundation.

Professor William Rinck, of Calvin College, Grand Rapids, Michigan, was killed in an automobile accident November 11, 1920, at the age of forty-three years.