NOTES.

The date of the April meeting of the American Mathematical Society at New York has been changed by vote of the Council from April 30 to April 23. At this meeting Professor W. A. Hurwitz will present the opening paper of a symposium on divergent series.

The March number (vol. 22, no. 3) of the ANNALS OF MATHEMATICS contains the following papers: *The asymptotic expansion of the Sturm-Liouville functions*, by F. H. Murray; *On the conformal mapping of a region into a part of itself*, by J. F. Ritt; *Conjugate nets R and their transformations*, by L. P. Eisenhart; *The application of modern theories of integration to the solution of differential equations*, by T. C. Fry.

Volume 55 (1919–1920) of the PROCEEDINGS OF THE AMERICAN ACADEMY OF ARTS AND SCIENCES contains the following mathematical papers: *The functional relation of one variable to each of a number of correlated variables determined by a method of successive approximation to group averages. A contribution to statistical methods*, by G. F. McEwen and E. L. Michael; *Contribution to the general kinetics of material transformations*, by A. J. Lotka; *Rotations in space of even dimensions*, by H. B. Phillips and C. L. E. Moore; *Orbits resulting from assumed laws of motion*, by Arthur Searle; *Some geometric investigations on the general problem of dynamics*, by Joseph Lipka.

The October number (vol. 6, no. 10) of the PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES contains: *On a condition for Helmholtz's equation similar to Lamé's*, by A. G. Webster; *Motion on a surface for any positional field of force*, by Joseph Lipka; The November number contains: *Seminvariants of a general system of linear homogeneous differential equations*, by E. B. Stouffer; *The permanent gravitational field in the Einstein theory*, by L. P. Eisenhart.

The following doctorates in mathematics were recently conferred by the University of London: H. E. J. Curzon: *The reversal of Halphen's transformation;* S. R. U. Saveer: *On the instability of the pear-shaped figure of equilibrium of a rotating mass of homogeneous liquid.*

The following persons have been appointed associate editors of the TRANSACTIONS OF THE AMERICAN MATHEMATICAL SOCIETY: Professors O. E. Glenn, A. J. Kempner, H. H. Mitchell, and J. H. M. Wedderburn.

The following persons have been appointed associate editors of the BULLETIN OF THE AMERICAN MATHEMATICAL SOCIETY for the year 1921: Professors Dunham Jackson, Edward Kasner, D. N. Lehmer, Tullio Levi-Civita, and H. L. Rietz.

At the meeting of the Edinburgh Mathematical Society on December 10, 1920 the following papers were read: by G. D. Stokes, *Analytical treatment of the cam problem;* by D. G. Taylor, *Multiply perspective polygons inscribed in a plane cubic curve;* by T. A. Brown, *Converse of the Le Roy-Lindelöf theorem.* At the meeting on January 14, 1921, the following papers were read: By P. Humbert, *Some extensions of Pincherle's polynomials;* by T. M. MacRobert, *Some asymptotic expressions for the Bessel functions and the Fourier-Bessel expansions.*

At the meeting of the London Mathematical Society on December 9, 1920, the following papers were read: by S. Beatty, *The algebraic theory of algebraic functions of one variable;* by F. Debono, *The construction of magic squares;* by A. S. Eddington, *An application of the calculus of tensors to the theory of finite differences;* by A. R. Forsyth, *Developable surfaces through a couple of guiding curves in different planes;* by J. E. Jones, *The distribution of energy in the neighborhood of a vibrating sphere;* by L. J. Mordell, *I: The reciprocity formula for the Gauss's sums in a quadratic field; II: A new class of definite integrals;* by G. N. Watson, *The product of two hypergeometric functions;* by W. H. Young, *I: Integration over the area of a surface and transformation of the variables in a multiple integral; II: A new set of conditions for a formula for an area.* At the meeting on January 13, 1921, papers were read by A. S. Eddington, *Dr. Sheppard's method of reduction of error by linear compounding;* by W. F. Sheppard, *Conjugate sets of quantities;* by E. A. Milne, *A problem concerning the maxima of certain types of sums and integrals;* by H. J. Priestley, *The linear differential equation of the second order;* by M. Kössler, *The zeros of analytic functions;* by A. C. Dixon, *The theory of a thin elastic plate, bounded by two circular arcs, and clamped;* by G. A. Miller, *Determination of all the characteristic sub-groups of an abelian group.*

The following courses in mathematics are announced:

COLUMBIA UNIVERSITY (summer session, July 5 to August 12).—By Professor Edward Kasner: General survey of modern mathematics, five hours; Mathematical introduction to Einstein's theory of relativity, five hours.—By Professor W. B. Fite: Differential equations, five hours.—By Dr. G. A. Pfeiffer: Theory of functions of a real variable, five hours.— By Dr. J. F. Ritt: Theory of numbers, five hours.

COLUMBIA UNIVERSITY (academic year 1921–1922).—By Professor T. S. Fiske: Differential equations, four hours.— By Professor F. N. Cole: Invariants and higher plane curves, three hours (second term); Theory of groups, three hours.— By Professor D. E. Smith: History of mathematics, two hours; Practicum in the history of mathematics, four hours.—By Professor C. J. Keyser: Modern theories in geometry, four hours; Introduction to mathematical philosophy, two hours (first term).—By Professor Edward Kasner: Einstein's theory of gravitation, two hours.—By Professor W. B. Fite: Infinite series, three hours (first term); Calculus of variations, three hours (second term).—By Dr. G. A. Pfeiffer: The theory of sets of points, three hours.—By Dr. J. F. Ritt: Functional equations, three hours.

CORNELL UNIVERSITY (summer session, July 9 to August 19).—By Professor V. Snyder: Projective geometry, six hours.—By Professor W. A. Hurwitz: Analysis, six hours.

CORNELL UNIVERSITY (academic year 1921–1922).—By Professor J. H. Tanner: Mathematics of finance, two hours (given in each term).—By Professor F. R. Sharpe: Hydronamics and elasticity, three hours.—By Professor W. B, Carver: Modern algebra, three hours.—By Professor A. Ranum: Non-euclidean geometry, three hours.—By Professor D. C. Gillespie: Advanced calculus, three hours.—By Professor W. A. Hurwitz: Linear integral and differential equations, three hours.—By Professor C. F. Craig: Functions of a complex variable, three hours.—By Professor F. W. Owens: Theory of probability, three hours.—By Dr. H. M. Morse: Elliptic functions, three hours.—By Dr. Helen B. Owens: Projective geometry, three hours.—By Dr. F. W. Reed: Dynamics, three hours.—By Dr. G. M. Robison: Differential equations, three hours.—By Mr. H. S. Vandiver: Theory of groups, three hours.—By Dr. W. L. G. Williams: Advanced analytic geometry, three hours.

PRINCETON UNIVERSITY (academic year 1921–1922).—By
Professor H. B. Fine: Functions of a complex variable, three
hours.—By Professor O. Veblen: Projective geometry, three
hours.—By Professor J. W. Alexander: Differential equations,
three hours. Professors Eisenhart and Veblen will conduct a
seminar in relativity.

Professor R. Courant, of the University of Münster, has
been called to the chair of mathematics at the University of
Göttingen that was vacated by Professor Felix Klein on his
retirement.

Professor P. R. Scott Lang, for more than forty years
Regius professor of mathematics at the University of St.
Andrews, has been knighted.

Professor W. W. Rankin, of the University of North Caro-
lina, who has been on leave of absence for the last two years
acting as instructor at Columbia University, has been ap-
pointed head of the department of mathematics at Agnes
Scott College.

At Cornell University, Professor V. Snyder has been granted
leave of absence for the academic year 1921–1922. For the
second term of the year he has been awarded a subvention
by the Heckscher Research Foundation for the prosecution of
research on the theory of algebraic surfaces.

Professor Arthur Searle, Phillips professor of astronomy,
emeritus, at Harvard University, died October 24, 1920, at the
age of eighty-three years.

Dr. Alexander Pell, formerly professor of mathematics and
astronomy and dean of the engineering school at the Univer-
sity of South Dakota, and associate professor at Armour Insti-
tute, died January 26, 1921, at the age of sixty-two years.
Dr. Pell had been a member of the American Mathematical
Society since 1898.

NEW PUBLICATIONS.

I. HIGHER MATHEMATICS.

ANDERSEN (A. F.), BOHR (H.) og MOLLERUP (J.). Cesàro's Summa-
   bilitetsmetode med Anvendelse paa Fourier'ske og Dirichlet'ske
   Rækker. Tre Foredrag holdt i Matematisk Forening (København).
   København, Gjellerup, 1919. 8vo. 51 + 20 + 25 pp.

BOHR (H.). See ANDERSEN (A. F.).