

author's part from the second to the first of those ideals in non-euclidean geometry which we dwelt on above.

J. L. COOLIDGE.

CORRECTION.

SPEAKING of M. Nau's translation of Sebokht's reference to the Hindu-Arabic numerals, in the BULLETIN for May, 1917 (volume 23, page 366), I remarked that no report of the matter "seems as yet to have appeared in English." My attention has since been called to the fact that Professor L. C. Karpinski announced the discovery in *Science* for June 21, 1912. While this does not concern Mr. Ginsburg's valuable note on the work and influence of Sebokht, the correction as to the publication of the extract in English should be made.

DAVID EUGENE SMITH.

NOTES.

THE June number (volume 18, number 4) of the *Annals of Mathematics* contains the following papers: "Fermat's last theorem and the origin and nature of the theory of algebraic numbers," by L. E. DICKSON; "The modified remainders obtained in finding the highest common factor of two polynomials," by A. J. PELL and R. L. GORDON; "Nomograms of adjustment," by L. I. HEWES; "Closed algebraic correspondences," by A. A. BENNETT; "The intersections of a straight line and hyperquadric," by J. L. COOLIDGE; "The relation between the zeros of a solution of a linear homogeneous differential equation and those of its derivatives," by W. B. FITE; "Conjugate planar nets with equal invariants," by L. P. EISENHART.

AT the meeting of the Edinburgh mathematical society on May 11 the following papers were read: By L. R. FORD: "A geometrical proof of a theorem by Hurwitz and Borel"; by D. G. TAYLOR: "Geometrical illustrations of cyclant substitutions."

AT the meeting of the London mathematical society held on May 3 the following papers were read: By G. H. HARDY, "Sir George Stokes and the theory of uniform convergence"; by W. P. MILNE, "A symmetrical condition for ω -apolar triads on a cubic curve."

UNIVERSITY OF PARIS.—The following courses in mathematics are being given during the present semester (March 1–July 15).—By Professor L. C. GUICHARD: General principles of analytic geometry with applications to the theory of cyclides and correlative surfaces, two hours.—By Professor E. PICARD: Theory of integral equations with applications to problems in mathematical physics, two hours.—By Professor E. GOURSAT: Differential and integral calculus, two hours.—By Professor P. PAINLEVÉ: Rational mechanics, two hours.—By Professor L. VESSIOT: Formal resolution of the problem of three bodies by means of trigonometric series, and periodic solutions, two hours.—By Professor C. J. DE LA VALLEÉ-POUSSIN: Conferences in higher analysis, two hours.

PROFESSOR E. PICARD was unanimously elected permanent secretary of the Paris Academy of sciences on April 2, as successor to the late Professor G. DARBOUX. Professor Picard became a member of the academy in 1889, succeeding Halphen.

PROFESSOR A. SPEISER has been appointed professor of mathematics in the University of Zurich.

AT the Massachusetts Institute of Technology, Dr. JOSEPH LIPKA has been promoted to an assistant professorship of mathematics.

AT the University of Nebraska, Mr. A. BABBETT and Miss LULU RUNGE have been promoted to assistant professorships of mathematics.

AT Teachers College, Columbia University, assistant professor C. B. UPTON has been promoted to an associate professorship of mathematics.

DR. L. S. DEDERICK, of Princeton University, has been appointed instructor in mathematics in the U. S. Naval Academy.

BOOK CATALOGUES:—Longmans, Green, and Company, Fourth Avenue and 30th Street, New York, text-books and reference works for colleges and technical schools, 16 pp.—The Macmillan Company, 66 Fifth Avenue, New York, books on mathematics and astronomy, 68 pp.—Galloway and Porter, Cambridge, England, short lists of mathematical and physical books, 77 entries.—Librairie Paul Ritti, 76 Avenue du Maine, Paris, Bulletin périodique, mathématique, 41 entries.

NEW PUBLICATIONS.

I. HIGHER MATHEMATICS.

- BLICHFELDT (H. F.). Finite collineation groups. Chicago, University of Chicago Press, 1917. 12mo. 12+194 pp. \$1.50
- DARBOUX (G.). Principes de géométrie analytique. Paris, Gauthier-Villars, 1917. 8vo. 6+520 pp. Fr. 20.00
- FERNÁNDEZ BAÑOS (O.). Estudio sintético de los espacios complejos de n dimensiones. (Junta para ampliación de estudios e investigaciones científicas, Laboratorio y seminario matemático, Tomo 2, Memoria 1.) Madrid, 1917. 8vo. 80 pp.
- HUDSON (R. G.) and LIPKA (J.). A manual of mathematics. New York, Wiley, 1917. 8vo. 2+132 pp. \$1.00
- . A table of integrals. New York, Wiley, 1917. 8vo. 25 pp. Paper. \$0.15
- LIPKA (J.). See HUDSON (R. G.).
- MICHEL (C.). Cours d'algèbre et d'analyse, à l'usage de la classe de mathématiques spéciales et des candidats aux écoles du gouvernement. Paris, Alcan, 1917. 8vo. Fr. 18.00
- FRINGSHEIM (A.). Vorlesungen über Zahlen- und Funktionenlehre. 1ter Band, 2te Abteilung: Unendliche Reihen mit reellen Gliedern. Leipzig, Teubner, 1916. 8vo. 222 pp. M. 10.80

II. ELEMENTARY MATHEMATICS.

- AUSTIN (F. E.). Preliminary mathematics. Hanover, N. H., F. E. Austin, 1917. 169 pp. \$1.20
- BELL (A. H.). Algebra, theoretical and applied: a class-book for secondary, higher elementary and technical schools. London, Blackie, 1916. 8vo. 354 pp. 4s. 6d.
- CONCINA (U.) e NEPPI-MODONA (A.). Trigonometria piana ad uso dei licei. Con 50 figure e 809 esercizi e problemi. Torino, Casa G. B. Petrini di Giovanni Galizio, 1917.
- . Trigonometria piana e sferica ad uso degli istituti tecnici. Con 75 figure e 1000 esercizi e problemi. Torino, Casa G. B. Petrini di Giovanni Galizio, 1917.