

NOTES.

A REGULAR meeting of the AMERICAN MATHEMATICAL SOCIETY was held in New York on Saturday afternoon, April 24, at three o'clock, the Vice-President, Professor R. S. Woodward, in the chair. There were five members present. The Council announced the election of the following persons to membership in the Society: Mr. CHANCY W. BOUCHER, Marion Normal College, Marion, Ind.; Dr. LINNEAUS WAYLAND DOWLING, University of Wisconsin, Madison, Wis.; Mr. SOLOMON A. JOFFE, Columbia University, New York, N. Y. Three nominations for membership were received. The following papers were read:

(1) Dr. E. O. LOVETT: "Note on the invariants of n points."

(2) Professor H. B. NEWSON: "Continuous groups of circular transformations."

(3) Dr. L. E. DICKSON: "Systems of continuous and discontinuous simple groups."

At the meeting of the Council held April 24, it was proposed that the New York meetings of the Society be held hereafter at intervals of two months. By providing for both morning and afternoon sessions at each meeting as much time would be allowed for the business of the Society as at present. Action upon this proposition was deferred until the next meeting of the Council.

THE UNIVERSITY OF CHICAGO, SUMMER 1897. The following mathematical courses will be offered:—By Professor MOORE: Abstract groups; Projective geometry.—By Professor BOLZA: Hyperelliptic functions; Advanced integral calculus.—By Dr. LOVETT: The geometry of Lie's transformation-groups.—By Dr. YOUNG: ¹Conferences on mathematical pedagogy; ¹Determinants; Culture calculus; ²Plane trigonometry.—By Mr. SLAUGHT: Integral calculus; College algebra. The courses are four or five hours weekly for twelve weeks from July 1, 1897; the two courses marked 1 are, however, only for the first six weeks, and the course marked 2 is ten hours weekly for the second six weeks. Those who expect to work in mathematics at the University of Chicago during the coming summer, as well as those who desire further information, are requested to communicate with Professor Moore.

UNIVERSITY OF GÖTTINGEN. The mathematical courses announced for the summer semester are the following:—By Professor SCHERING: Partial differential equations; Seminar in mathematical physics.—By Professor VOIGT: Potential; Selected chapters of mechanics in the seminar.—By Professor KLEIN: Introduction into the theory of differential equations; Seminar in mathematical physics.—By Professor SCHUR: Theoretical astronomy (second part) and theory of perturbations; Seminar in mathematical physics.—By Professor HILBERT: Algebraic theory of invariants with applications to geometry; Theory of functions (second part); Exercises in theory of functions in seminar (with Professor KLEIN).—By Professor SCHOENFLIES: Determinants; Non-Euclidean geometry; Mathematical proseminar.—By Dr. BOHLMANN: Analytical geometry; Mathematical exercises in insurance.—By Dr. SOMMERFELD: Differential calculus with exercises; Calculus of variations.

UNIVERSITY OF LEIPZIG. The mathematical courses announced for the summer semester are the following:—By Professor SCHEIBNER: On the variation of constants in problems of mechanics.—By Professor NEUMANN: Selected chapters of the theory of functions; Discussion of mathematical problems.—By Professor LIE: Introduction into analytical geometry; Differential equations with infinitesimal transformations; Exercises in the mathematical seminar.—By Professor MAYER: Higher analytical mechanics; Exercises in the mathematical seminar.—By Professor VON OETTINGEN: Meteorology.—By Professor ENGEL: Applications of differential calculus to curves and surfaces; Mathematical seminar.—By Professor DRUDE: Theory of heat.—By Dr. WIEDEBURG: Electrical oscillations.—By Dr. HAUSDORFF: Applications of differential calculus to natural science.—By Dr. KNOBLAUCH: Introduction to the mathematical treatment of questions in natural science.

UNIVERSITY OF MUNICH. The mathematical courses announced for the summer semester are the following:—By Professor BAUER: Algebra (theory of equations), continuation; Mathematical seminar.—By Professor LINDEMANN: Analytical geometry of three dimensions; Theory of definite integrals and analytical representation of arbitrary functions; Mathematical seminar.—By Professor PRINGSHEIM: Integral calculus; Exercises; Applications of differential calculus to geometry.—By Professor GRÄTZ: Mechanical theory of heat.—By Dr. BRUNN: Elements of higher mathematics for students of all departments.—By

Dr. DÖHLEMANN: Descriptive geometry (second part); Exercises; Graphical statics; Exercises.—By Dr. von WEBER: Selected chapters of algebraic analysis; Elementary geometry; Determinants with applications.—By Dr. KORN: Theory of potential; D'Alembert and Lagrange.

NEW PUBLICATIONS.

I. HIGHER MATHEMATICS.

- BARKER (A. H.). Graphical calculus: with an introduction by J. Goodman. London, Longmans, 1896. 12mo. 10 and 188 pp. Cloth.
- BOBEK (K.). Einleitung in die projektivische Geometrie der Ebene. Ein Lehrbuch für höhere Lehranstalten und für den Selbstunterricht. Nach den Vorträgen des Herrn C. Küpper bearbeitet. 2te wohlfeile Ausgabe. Leipzig, Teubner, 1897. 8vo. 6 and 210 pp. Mk. 2.00
- CABREIRA (A.). Sur la géométrie des courbes transcendantes. Mémoires originaux. Lisbonne, 1896. 8vo.
- CRELIER (L.). Sur quelques propriétés des fonctions Besséliennes tirées de la théorie des fractions continues. Berne, 1896. 22 and 31 pp. Mk. 3.00
- DICKSTEIN (S.). Catalogue des œuvres imprimées et manuscrites de Hoëné Wronski. Cracovie, 1896. 8vo. 8 and 111 pp. 1 portrait, 1 facsimile. Mk. 4.50
- FIEGER (A.). Ueber die hypergeometrische Reihe und die Zurückführung anderer Reihen auf dieselbe. Karlsbad, 1896. 8vo. 20 pp. Mk. 1.50
- FROLOV (M.). Recherches sur la théorie des parallèles. Paris, 1897. 8vo. Mk. 1.00
- GLAS (R.). Krümmungshalbmesser-Constructionen der Kegelschnitte. Wien, 1896. 8vo. 21 pp. Mk. 1.50
- GMEINER (J. A.). Ueber die ganzen Zahlen im Rationalitätsgebiete der fünften Einheitswurzeln. Pola, 1896. 8vo. 24 pp. Mk. 1.50
- GOODMAN (J.). See BARKER (A. H.).
- HEINZE (M.). Moritz Wilhelm Drobisch. Gedächtnissrede. Leipzig, 1897. 8vo. 25 pp. Mk. 0.60
- JAHRBUCH über die Fortschritte der Mathematik. Herausgegeben von E. Lampe. Vol. 25. Jahrgang 1893 und 1894. 3tes (Schluss-) Heft. Berlin, Reimer, 1897. 8vo. Pp. 1317-1996. Mk. 19.00
- JANISCH (E.). Ueber eine specielle Fusspunktcurve der Steiner'schen Hypocycloide. Wien, 1896. 8vo. 19 pp. Mk. 1.80
- KIEPERT (L.). Tabelle der wichtigsten Formeln aus der Integral-Rechnung. 6te Auflage. Hannover, Helwing, 1897. 8vo. 38 pp. Mk. 0.50
- KÜPPER (C.). See BOBEK (K.).