

ASSISTANT PROFESSOR S. I. BAILEY has been promoted to an associate professorship of astronomy at Harvard University.

DR. E. P. CHILDS has been appointed professor of physics in the University of New Mexico.

MR. J. M. POOR has been appointed instructor in astronomy in Dartmouth College.

PROFESSOR W. C. TINDALL, until recently head professor of the department of mathematics in the Missouri State University, died on September 17th.

THE University of Pennsylvania has given its *alumnæ* mathematical fellowship for women to MISS R. H. VIVIAN.

FATHER CYPRIEN, of the monastery of Mount Athos, formerly the well-known explorer, Prince C. Wiasemsky, contributes to the *Revue générale des Sciences* for the 15th of September, 1898, an article entitled: "New theory of transcribed spheres."

PROFESSOR H. POINCARÉ, of the University of Paris, contributes an article "On the foundations of geometry" to the October number of the *Monist*.

NEW PUBLICATIONS.

I. HIGHER MATHEMATICS.

ADAM (C.). See DESCARTES.

ALLEN (J.). See TANNER (J. H.).

BREUER (A.). *Elementar entwickelte Theorie und Praxis der Functionen einer complexen Variablen in organischer Verbindung mit der Geometrie.* Vienna, Daberkow, 1898. 8vo. 8 and 205 pp.

DESCARTES. *Oeuvres de Descartes.* Publiées par Charles Adam et Paul Tannery, sous les auspices du ministère de l'instruction publique. Correspondance, II (mars 1638-décembre 1639). Paris, Cerf, 1898. 4to. 23 and 657 pp.

FATTOR (L.). *Di una costruzione delle coniche per punti e per tangenti.* Cividale, Fulvio, 1898. 8vo. 7 pp.

GIUDICE (F.). *Nozioni sulle trasformazioni puntuali e sui gruppi continui.* Brescia, Appolonio, 1898. 8vo. 10 and 144 pp.

GOETTLER (J.). *Conforme Abbildung eines von confocalen elliptischen und hyperbolischen Kurven nter Ordnung begrenzten Flächenstückes auf der Halbebene.* (Programme.) Passau, Waldbauer, 1898. 8vo. 34 pp. M. 1.00

- JAHN (F.). Ueber die Entwicklung der doppelt periodischen Funktionen in doppelt unendliche Fourier'sche Reihe. (Diss.) Strassburg. 4to. 55 pp.
- KEMMER (G.). Ueber die Verwandlung von Projectivitäten in Involuntionen und von Reciprocitäten im Polarsysteme durch Anwendung von Projectivitäten. Darmstadt, 1898. 8vo. 24 pp. M. 1.00
- KOVALEVSKY (S.). Sophie Kovalevsky, ein weiblicher Professor, von J. v. Zednik. Prague, 1898. 8vo. 15 pp. M. 0.20
- LUDWIG (K.). Prüfungsaufgaben aus der allgemeinen Mathematik und deren Auflösungen. Leipa, 1898. 8vo. 119 pp. M. 2.60
- MILLER (G. A.). Sur les groupes hamiltoniens. (*Comptes rendus de l'academie des sciences*, t. 126, 1898). 4to. Pp. 1406-1408.
- PALATINI (F.). Osservazioni sulle corrispondenze univoche fra i gruppi di h punti del piano ed i punti dello spazio lineare di $2h$ dimensioni. Avellino, 1898. 8vo. 13 pp.
- PLONER (L.). Die Einheit der Kegelschnitte. Bozen, 1898. 8vo. M. 1.00
- ROE (E. D.). Die Entwicklung der Sylvester'schen Determinante nach Normal-Formen. Leipzig, Teubner, 1898. 8vo. 52 pp. M. 2.00
- TANNER (J. H.) and ALLEN (J.). An elementary course in analytic geometry. New York, American Book Co., 1898. 20 and 390 pp. \$2.00
- TANNERY (P.). See DESCARTES.
- TAYLOR (J. M.). Elements of the differential and integral calculus, with examples and applications. Revised edition. Boston, Ginn and Co., 1898. 8vo. 13 and 269 pp. Cloth. \$2.15
- ZEDNIK (J. v.). See KOVALEVSKY (S.).

II. ELEMENTARY MATHEMATICS.

- ARITHMETIC GRADUATED. Standard 5, Scheme A. London, Chambers, 1898. 48 pp. 3d.
- BRIGGS (W.). See MATHEMATICS.
- CHERITON (W. W.). A simplified Euclid. Book I., for the use of preparatory schools and the lower forms in public schools. Preface by E. Kitchener. London, Rivington, 1898. 8vo. 114 pp. 1s. 6d.
- COMBETTE (E.). Cours abrégé de géométrie élémentaire. Paris, 1898. 8vo. Fr. 5.00
- EUCLID. See CHERITON (W. W.).
- FRÈRES DES ÉCOLES CHRÉTIENNES. Exercices de calcul sur les quatre opérations fondamentales de l'arithmétique. Livre de l'élève. Paris, Poussielgue, 1898. 16mo. 8 and 72 pp.
- . Géométrie (cours moyen). Paris, Poussielgue, 1898. 16 mo. 191 pp.
- GAMBORG (V. E.). Logarithmentafeln, Logarithmen und Antilogarithmen nebst den Logarithmen der trigonometrischen Funktionen. Berlin, Juncker, 1898. 8vo. 3 and 93 pp. M. 2.25

KITCHENER (E.). See CHERITON (W. W.).

KULLRICH (E.). Die abgekürzte Decimal-bruchrechnung. (Progr.).
Schöneburg, 1893 4to. 28 pp.

LAGRANGE (J. L.). Lectures on elementary mathematics, translated by
T. J. McCormack. Chicago, The Open Court Publishing Co., 1898.
8vo. 14 and 156 pp. Cloth. \$1.00

MAGUIRE (J. G.). The A. L. Scheme B Arithmetic. Standard VII.
London, Simpkin, 1898. 8vo. 48 pp. 3d.

MATHEMATICS second stage. Edited by W. Briggs. London, Clive,
1898. 8vo. 470 pp. 3s. 6d.

MCCORMACK (T. J.). See LAGRANGE (J. L.).

ROBINSON (J. L.). Mathematical examination papers, for use in navy
classes in schools. London, Rivington, 1898. 8vo. 150 pp. 2s 6d.

III. APPLIED MATHEMATICS.

BRISSE (C.) et PICQUET (H.). Cours de géométrie descriptive, professé
à l'école centrale des arts et manufactures, rédigé et annoté par H.
Picquet. Paris, Baudry et Ce., 1898. 8vo. 8 and 470 pp.

CLÆSSENS (F.). Cours de géométrie appliquée. (Complément d'algèbre;
trigonométrie rectiligne; courbes usuelles; lever des plans; arpen-
tage; nivellement.) Morlanwelz, 1898. 8vo. 128 pp.

CROSSKEY (L. R.). Elementary perspective; arranged to meet the re-
quirements of architects and draughtsmen, and of art students pre-
paring for the elementary examinations of the Science and Art
Department, South Kensington. London, Blackie, 1898. 8vo.
128 pp. 3s. 6d.

HELMHOLTZ (H. v.). Vorlesungen über theoretische Physik. Heraus-
gegeben von A. König, O. Krigar-Menzel und C. Runze. (6 Bände.)
Band I. (in 2 Abtheilungen). Abtheilungen 2: Vorlesungen über
die Dynamik discreter Massenpunkte. Herausgegeben von O. Krigar-
Menzel. Leipzig, 1898. 8vo. 10 and 380 pp. M. 15.00

———. Dieselben. Band III.: Vorlesungen über die mathematischen
Principien der Akustik. Herausgegeben von A. König und C. Runze.
Leipzig, 1898. 8vo. 10 and 256 pp. M. 12.00

KOECHLIN (M.). Applications de la statique graphique. 2e édition,
revue et augmentée. Paris, Baudry et Ce., 1898. 8vo. 19 and
626 pp.

KOENIG (A.). See HELMHOLTZ (H. V.).

KRIGAR-MENZEL (O.). See HELMHOLTZ (H. V.).

PICQUET (H.). See BRISSE (C.).

RUNGE (C.). See HELMHOLTZ (H. V.).

SULLIVAN (C. G.). Elements of perspective. New York, The American
Book Co., 1898. 12mo. 96 pp. Cloth. \$1.00

WILLSON (F. N.). Theoretical and practical graphics. A scientific course
on the theory and practical applications of descriptive geometry and
mechanical drawing. Second edition. New York, The Macmillan
Co., 1898. 4to. 300 pp. Cloth. \$4.00