NEW PUBLICATIONS.

I. HIGHER MATHEMATICS.

BERZOLARI (L.). Geometria analitica. I: Il metodo delle coordinate. 2a edizione. (Manuali Hoepli.) Milano, Hoepli, 1920. 16mo. 14 + 496 pp.

BHATTACHARYYA (D.). Vector calculus. (Griffith Prize thesis.) Calcutta, University Press, 1920. 8vo. 90 pp.

BIBLIOTHECA chemico-mathematica: catalogue of works in many tongues on exact and applied science, with a subject index. Compiled and annotated by H. Zeitlinger and H. C. S. London, Sotheran, 1921. 2 volumes. 8vo. 12 + 964 pp. £ 3 3s.

CARNOT (L.). Réflexions sur la métaphysique du calcul infinitésimal. 2 volumes. (Les Maîtres de la Pensée Scientifique.) Paris, Gauthier-Villars, 1921. 16mo. 8 + 117 + 105 pp. Fr. 3.50 + 3.50

CLAIRAUT (A. C.). Eléments de géométrie. 2 volumes. (Les Maîtres de la Pensée Scientifique.) Paris, Gauthier-Villars, 1920. 16mo. 14 + 95 + 103 pp. Fr. 3.50 + 3.50

DIEZ (J.). See SMITH (D. E.).

ENGEL (F.). See EULER (L.).

EULER (L.). Opera omnia. Series I: Opera mathematica. Leipzig, Teubner. II–III: Commentationes arithmeticæ. Edidit F. Rudio. Volumen 1, 38 + 611 pp., 1915. Volumen 2, 38 + 543 pp., 1917. XIII: Institutiones calculi integralis. Ediderunt F. Engel et L. Schlesinger. Volumen 3, 18 + 508 pp., 1914. XVII–XVIII: Commentationes analyticæ ad theoriam integralium pertinentes. Volumen 1, edidit A. Gutzmer, 8 + 467 pp., 1915. Volumen 2, ediderunt A. Gutzmer et A. Liapounoff, 12 + 475 pp., 1920.

FUBINI (G.) e VIVANTI (G.). Esercizi di analisi matematica. (Calcolo infinitesimale.) (Grande Biblioteca Tecnica, No. 13.) Torino, Società Tipografico-Editrice Nazionale, 1920. 8vo. 8 + 575 pp. L. 58.00

GATES (S. B.). Pure mathematics for engineers. With an introduction by H. A. Webb. 2 volumes. London, Hodder and Stoughton, 1920. 11 + 191 + 11 + 179 pp. 4s. 6d. + 4s. 6d.

GUTZMER (A.). See EULER (L.).

HAHN (H.). Theorie der reellen Funktionen. 1ter Band. Berlin, Springer, 1921. 8vo. 8 + 600 pp.

HALER (P. J.) and STUART (A. H.). A second course in mathematics for technical students. London, University Tutorial Press, 1920. 8 + 363 pp. 6s.

HEFFTER (L.). Die Grundlagen der Geometrie als Unterbau für die analytische Geometrie. Leipzig, Teubner, 1921. 8vo. 27 pp.

H. C. S. See BIBLIOTHECA.

KOMMERELL (V.) und KOMMERELL (K.). Allgemeine Theorie der Raumkurven und Flächen. 1ter Band. 2ter Band. 3te Auflage. Berlin, Vereinigung wissenschaftlicher Verleger (Walter de Gruyter), 1921. 8 + 184 pp. 2 + 196 pp. $1.75

LECAT (M.).   Pensées sur la science, la guerre, et sur des sujets très variés.
    Bruxelles, Lamertin, 1919.   Royal 8vo.   7 + 478 pp.   Fr. 32.00

LIAPOUNOFF (A.).   See EULER (L.).

MANNING (W. A.).   Primitive groups.   Part 1.   (Stanford University
    Publications, University Series, Mathematics and Astronomy, vol. 1,
    No. 1.)   Stanford University, 1921.   8vo.   108 pp. $1.25

MIELI (A.).   Gli scienziati italiani dall' inizio del medio evo ai nostri giorni.
    Diretto da A. Mieli.   Volume 1, parte 1.   Roma, Nardecchia, 1921.
    Sm. 4to.   8 + 236 pp.   L. 45.00

MILNE (W. P.) and WESTCOTT (G. J. B.).   A first course in calculus.   Part
    2: Trigonometric and logarithmic functions of x, etc.   London, Bell,
    1920.   15 + 222 + 24 pp.   5s.

MORDELL (L. J.).   Three lectures on Fermat's last theorem.   Cambridge,
    University Press, 1921.   3 + 31 pp.   4s.

OSGOOD (W. F.).   Elementary calculus.   New York, Macmillan, 1921.
    12mo.   9 + 224 pp. $2.40

RUDIO (F.).   See EULER (L.).

SCHLESINGER (L.).   See EULER (L.).

SCHNEIDER (H.).   Metaphysik als exakte Wissenschaft.   Heft I: Gegeben-
    heitslehre.   Heft II: Gegliedertheitslehre.   Leipzig, Hinrichssche
    Buchhandlung, 1919–1920.   4 + 143 + 2 + 189 pp.

SMITH (D. E.).   The Sumario compendioso of Brother Juan Diez.   The
    earliest mathematical work of the new world.   Boston, Ginn, 1921.
    8vo.   65 pp. $4.00

STUART (A. H.).   See HALER (P. J.).

STUYVAERT (M.).   Congruences de cubiques gauches.   Louvain, Van
    Rysselberghe et Rombaut, 1920.   8vo.   200 pp.   Fr. 12.50

VIVANTI (G.).   See FUBINI (G.).

VAN WEEL (D. E. W.).   De oplossing der trisectie.   Leeuwarden, Meijer
    en Schaafsma, 1919.   23 pp.   f 0.60

WEBB (H. A.).   See GATES (S. B.).

WESTCOTT (G. J. B.).   See MILNE (W. P.).

ZEITLINGER, H.   See BIBLIOTHECA.

II. ELEMENTARY MATHEMATICS.

EDWARDS (R. W. K.).   An elementary text-book of trigonometry.   Lon-
    don, Harrap, 1921.   13 + 251 pp.   5s.

HAWKES (H. E.), LUBY (W. A.) and TOUTON (F. C.).   Plane geometry.
    Boston, Ginn, 1920.   8 + 305 pp. $1.32

HENSON (J. W.).   Solid geometry.   London, Blackie, 1920.   7 + 88 pp.   3s.

JACKSON (D.).   Specimen answers of college candidates in plane geometry
    written at the examinations in June, 1920.   (College Entrance
    Examination Board, Document No. 99.)   New York, College En-
    trance Examination Board, 1921.   22 pp. $0.25

KAYE (G. W. C.) and LABY (T. H.).   Tables of physical and chemical
    constants and some mathematical functions.   4th edition.   New
    York, Longmans, 1921.   8vo.   8 + 161 pp. $4.00

LABY (T. H.). See KAYE (G. W. C.).

LUBY (W. A.). See HAWKES (H. E.).

MOYER (J. A.) and SAMPSON (C. H.). Practical trade mathematics. New York, Wiley, 1920. 9 + 172 pp. $1.50

OVERMAN (J. R.). Principles and methods of teaching arithmetic. Chicago, Lyons and Carnahan, 1920. 6 + 350 pp. $1.60

PIGAL (H.). Méthode pratique de règle à calcul type Mannheim. Paris, Librairie Desforges, 1921. 8vo. 114 pp. Fr. 7.50

SAMPSON (C. H.). See MOYER (J. A.).

TOUTON (F. C.). See HAWKES (H. E.).

III. APPLIED MATHEMATICS.

ADAMS (M.). See GARNETT (W.)

ANNUAIRE pour l'an 1921 publié par le Bureau des Longitudes. Paris, Gauthier-Villars, 1921. 16mo. 7 + 710 + 130 pp. Fr. 6.00

DE BELLESCIZE (H.). Etude de quelques problèmes de radiotélégraphie. Paris, Gauthier-Villars, 1920. 8vo. 8 + 174 pp. Fr. 16.00

BIGOURDAN (G.). Bibliothèque bibliographique et documentaire. Section des sciences pures et appliquées. 3e partie: Astronomie, géodésie et géophysique. Paris, Gauthier-Villars, 1920. 8vo. 257 pp. Fr. 20.00

BOGGIO (T.). See BURALI-FORTI (C.).

BOREL (E.). See EINSTEIN (A.).

BOULVIN (J.). Calcul des organes des machines. Paris, Gauthier-Villars-1920. 8vo. 10 + 516 pp.

BURALI-FORTI (C.) e BOGGIO (T.). Meccanica razionale. Torino, Lattes, 1921. 16mo. 24 + 425 pp.

CALLENDAR (H. L.). Properties of steam and thermodynamic theory of turbines. New York, Longmans, 1921. 8vo. 12 + 531 pp. $14.00

CLERC (L. P.). Applications de la photographie aérienne. (Encyclopédie Scientifique.) Paris, Doin, 1920. 6 + 350 + 12 pp. Fr. 7.50

COLE (R. V.). The practice and theory of perspective as applied to pictures, with a section dealing with its application to architecture. London, Seeley, Service and Company, 1921. 18s.

CUNNINGHAM (E.). Relativity, the electron theory, and gravitation. 2d edition. New York, Longmans, 1921. 8vo. 8 + 148 pp. $3.50

DALE (G. H. C.). Map reading. London, Macmillan, 1921. 9 + 170 pp. 7s. 6d.

DITTLER (R.). Stereoskopisches Sehen und Messen. Leipzig, Barth, 1919. 36 pp. M. 3.00

EINSTEIN (A.). L'éther et la théorie de la relativité. Traduit de M. Solivine. Paris, Gauthier-Villars, 1921. 16 pp. Fr. 2.50

——. La théorie de la relativité restreinte et généralisée. Traduction de Mlle. J. Rouvière. Préface de E. Borel. Paris, Gauthier-Villars, 1921. 16mo. 22 + 120 pp. Fr. 7.00

ESSELBORN (—.). Lehrbuch der Mathematik. Band 1: Algebra; Geom-
etrie der Ebene und des Raumes; Darstellende Geometrie; Schatten-
konstruktionen; Perspektive. Band 2: Trigonometrie; Analytische
Geometrie; Differential- und Integralrechnung; Mechanik; Festig-
keitslehre; Baustatik. Leipzig, Engelmann, 1920.

EYDOUX (D.). Hydraulique générale et appliquée. (Encyclopédie du
Génie civil et des Travaux publics.) Paris, J. B. Baillière, 1921. 8vo.
512 pp.   Fr. 40.00

FABRE (L.). Les théories d'Einstein. (Une nouvelle figure du monde).
Paris, Payot, 1921. 16mo. 242 pp.   Fr. 7.50

GARNETT (W.) [Mary Adams, pseud.] A little book on map projection.
New and revised edition. London, G. Philip and Son, 1920. 8 +
112 pp.   5s. 6d.

KANTHACK (R.). See VON ROHR (M.).

LANDON (J. W.). Elementary dynamics: a text-book for engineers.
Cambridge, University Press, 1920. 8 + 246 pp.   10s. 6d.

DE LAPLACE (P. S.). See LAVOISIER (A. L.).

LARMOR (J.). See MAXWELL (J. C.).

LAVOISIER (A. L.) et DE LAPLACE (P. S.). Mémorie sur la chaleur. (Les
Maîtres de la Pensée Scientifique.) Paris, Gauthier-Villars, 1920.
16mo. 78 pp.   Fr. 3.00

LORIA (G.). Storia della geometria descrittiva dalle origini sino ai giorni
nostri. (Manuali Hoepli.) Milano, Hoepli, 1921. 16mo. 24 + 584
pp.   L. 25.00

LOVE (A. E. H.). Theoretische Mechanik. Eine einleitende Abhandlung
über die Prinzipien der Mechanik. Autorisierte deutsche Uebersetz-
ung der zweiten Auflage von Hans Polster. Berlin, Springer, 1920.
                                                                  M. 48.00

MAXWELL (J. C.). Matter and motion. Reprinted with notes and ap-
pendices by Sir Joseph Larmor. London, Society for Promoting
Christian Knowledge, and New York, Macmillan, 1920. 15 + 163
pp.   5s.

VAN MOLLÉ (J.). Les théories physiques. 2e édition. Malines, H.
Dierickx-Becke fils, 1921. 8vo. 8 + 360 pp.   Fr. 8.00

NOETLING (F.). Die kosmischen Zahlen der Cheops-Pyramide, der
mathematische Schlüssel zu den Einheits-Gesetzen im Aufbau des
Weltalls. Stuttgart, E. Schweizerbart'sche Verlagsbuchhandlung,
1920. 8vo. 181 pp.

POLSTER (H.). See LOVE (A. E. H.).

VON ROHR (M.). Geometrical investigation of the formation of images in
optical instruments. (Volume 1 of The theory of optical instruments.)
Translated by R. Kanthack. London, published for the Department
of Scientific and Industrial Research by His Majesty's Stationery
Office, 1920. 23 + 612 pp.   2£ 5s.

ROUVIÈRE (J.). See EINSTEIN (A.).

SOLIVINE (M.). See EINSTEIN (A.).

DE VILLAMIL (R.). Soaring flight. A simple mechanical solution of the
problem. London, Spon, 1920. 48 pp.   1s. 6d.