

BOOKS, ETC., RECEIVED.—*Continued.*

*An Introduction to Elementary Statics (treated graphically).* By R. NETTELL. pp. 64. 2s. 1905. (E. Arnold.)

*Wiadomosci Matematyczne.* Edited by S. DICKSTEIN. Tom VIII. Parts 4, 5, 6. 1904.

*Oeuvres de Laguerre.* Edited for the *Académie des Sciences* by MM. CH. HERMITE, H. POINCARÉ, and E. ROUCHÉ. Tome II. *Géométrie.* pp. iv, 716. 22 frs. 1905. (Gauthier-Villars.)

*Leçons de Mécanique Céleste.* By H. POINCARÉ. Tome I. *Théorie Générale des Perturbations Planétaires.* pp. vi, 366. 1905. (Gauthier-Villars.)

*Einführung in die Vektoranalysis, mit Anwendung auf die Mathematische Physik.* By R. GANS. pp. x, 98. 2m. 80. 1905. (Teubner.)

*Orthogonale Axonometrie.* By R. SCHÜSSLER. pp. viii, 170. 7m. 1905. (Teubner.)

*Cours de Géométrie Analytique.* By H. MANDART. pp. 574. 10 frs. 1904. (Wesmael-Charlier, Namur.)

*Tōkyō Sūgaku-Buturigakkwai Hōkoku.* Vol. II. Nos. 5-17.

*On Transfinite Cardinal Numbers of the Exponential Form.* By P. E. B. JOURDAIN. pp. 42-56. *Phil. Mag.*, Jan. 1905.

*On the General Theory of Functions.* By P. E. B. JOURDAIN. pp. 169-210. *Crelle.* Heft 3. Bd. 128.

*A Study of the Development of Geometric Methods.* By G. DARBOUX. Translated by G. B. HALSTED (*Popular Science Monthly*, March, 1905). pp. 412-434.

*A Preparatory Course of Geometry.* By W. P. WORKMAN and A. G. CRACKNELL. pp. vii, 56. 9d. 1905. (Univ. Tutorial Press.)

*Introductory Mathematics.* By R. B. MORGAN. pp. vi, 151; Answers separate, pp. 16. 2s. 1905. (Blackie.)

PROCEEDINGS OF THE  
EDINBURGH MATHEMATICAL SOCIETY.

Vol. XXII.

Williams and Norgate.

7s. 6d.

CONTENTS:—J. W. Butters, *On the use of Symmetry in Geometry*; E. Collignon, *Sur l'intégration de  $a^n \cos ada$ ,  $a^n \sin ada$* ; R. F. Davis, *On the quadrilateral circumscribed to two circles*; Prof. Gibson, *Note on M. Collignon's Paper. Note on the Treatment of Tangents in recent Text-books of elementary Geometry*; A. Holm, *Some points in Diophantine Analysis*; F. H. Jackson, *A Basic-sine and cosine. A Theorem of Lommel*; J. H. Maclagan-Wedderburn, *On the Linear Matrix Equation*; R. F. Muirhead, *On "power" in Geometry, and a "doubtful sign." Solution of a Geometrical Problem. Minimum Deviation through a Prism*; D. K. Picken, *On the Fractional Infinite Series for cosec  $x$ , etc. On  $f(D)y \sum_1^n a_r x^r$* ; P. Pinkerton, *The turning values of a cubic function and the roots of a cubic equation. On a Geometrical Problem*; C. Tweedie, *An Inequality Theorem in Geometry. On Newton's Theorem of Symmetric Functions.*

# THE MATHEMATICAL ASSOCIATION.

(An Association of Teachers and Students of Elementary Mathematics.)

"I hold every man a debtor to his profession, from the which as men of course do seek to receive countenance and profit, so ought they of duty to endeavour themselves by way of amends to be a help and an ornament thereunto."—BACON.

## President :

G. B. MATHEWS, M.A., F.R.S.

## Vice-Presidents :

SIR ROBERT S. BALL, LL.D., F.R.S.	Prof. W. H. H. HUDSON, M.A.
Prof. A. R. FORSYTH, Sc.D., LL.D., F.R.S.	R. LEVETT, M.A.
G. HEPPEL, M.A.	A. LODGE, M.A.
	Professor G. M. MINCHIN, F.R.S.

## Treasurer :

F. W. HILL, M.A., City of London School, London, E.C.

## Editor of the *Mathematical Gazette* :

W. J. GREENSTREET, M.A., Marling Endowed School, Stroud.

## Secretaries :

C. PENDLEBURY, M.A., St. Paul's School, London, W.  
H. D. ELLIS, M.A., 12 Gloucester Terrace, Hyde Park, London, W.

## Other Members of the Council :

S. BARNARD, M.A.	C. S. JACKSON, M.A.
R. F. DAVIS, M.A.	F. S. MACAULAY, M.A., D.Sc.
F. W. DOBBS, M.A.	A. W. SIDONS, M.A.
C. GODFREY, M.A.	C. O. TUCKEY, M.A.
Cecil Hawkins, M.A.	W. H. WAGSTAFF, M.A.
C. E. WILLIAMS, M.A.	

THE MATHEMATICAL ASSOCIATION, formerly known as the *Association for the Improvement of Geometrical Teaching*, is intended not only to promote the special object for which it was originally founded, but to bring within its purview all branches of elementary mathematics.

Its fundamental aim as now constituted is to make itself a strong combination of all masters and mistresses, who are interested in promoting good methods of mathematical teaching. Such an Association should become a recognized authority in its own department, and should exert an important influence on methods of examination.

General Meetings of the Association are held in London once a term, and in other places if desired. At these Meetings papers on elementary mathematics are read, and any member is at liberty to propose any motion, or introduce any topic of discussion, subject to the approval of the Council.

"The *Mathematical Gazette*" is the organ of the Association. It contains—

- (1) ARTICLES, on subjects within the scope of elementary mathematics.
- (2) NOTES, generally with reference to shorter and more elegant methods than those in current text-books.
- (3) REVIEWS, at present the most striking feature of the *Gazette*, and written by men of eminence in the subject of which they treat. They deal with the more important English and Foreign publications, and their aim, where possible, is to dwell rather on the general development of the subject, than upon the part played therein by the book under notice.
- (4) PROBLEMS AND SOLUTIONS, generally selected to show the trend of investigation at the universities, so far as is shown in the most recent scholarship papers. Questions of special interest or novelty also find a place in this section.
- (5) SHORT NOTICES, of books not specially dealt with in the REVIEWS.

Intending members are requested to communicate with one of the Secretaries. The subscription to the Association is 10s. per annum, and is due on Jan. 1st. It includes the subscription to "The *Mathematical Gazette*."