NOTES.

AT the annual meeting of the London mathematical society held on November 11, 1909, the following officers were elected for the present year : President, W. NIVEN ; secretaries, A. E. H. LOVE and J. H. GRACE ; treasurer, Sir J. LARMOR ; three vice-presidents and nine other members of the council. The following papers were read : By G. H. HARDY, " The ordinal relations of the terms of a convergent sequence," " The applications of Dirichlet's series to Borel's exponential method of summation," and " Theorems relating to summability and non-convergence of slowly oscillating series " ; by W. ESSON, " Notes on synthetic geometry " ; by H. BATEMAN, " Kummer's quartic surface as a wave surface " ; by H. S. CARSLAW, " Green's function in a wedge and other problems in the conduction of heat " ; by J. L. S. HATTON, " The envelope of a line cut harmonically by two conics " ; by F. H. JACKSON, " On a case of a q-hypergeometric series."

THE American commissioners of the International commission on the teaching of mathematics earnestly request all to whom questionnaires have been addressed to send in their replies at the earliest possible moment. If the country is to prepare a set of reports that shall show the work that is being done, and if these reports are to be ready when those of other countries are presented, a great deal of hard work must be done this winter. Prompt replies therefore are necessary.

THE annual meeting of the Federation of teachers of the mathematical and the natural sciences will be held at Boston, December 27–28, in affiliation with the American association for the advancement of science. Besides the reports of various administrative committees, that of the committee of fifteen on a syllabus in geometry will be presented and discussed ; the committees on the college entrance problem and on the bibliography of science teaching will also present their reports.

During the year six associations have joined the federation, making the total membership fourteen. The annual election of officers will be held at the annual meeting, and standing committees will be appointed.

AT the meeting of the Syracuse section of the Association of teachers of mathematics in the Middle States and Maryland

held at Syracuse December 28, 1909, the following papers
were read : "Questions, answers, and per cents.," by C. F.
WHEELOCK ; " Algebraic number and the equation," by J.
M. TAYLOR ; " Shortening the course in arithmetic," by S.
WILLIAMS.

AT the meeting of the Paris academy of sciences on November
7 the following prizes for contributions to geometry during the
last academic year were announced : Francœur prize (1,000 fr.)
to DR. E. LEMOINE ; Bordin prize (3,000 fr.), divided between
Professor G. BAGNERA, of the University of Palermo, and
Professor M. DE FRANCHIS, of the University of Catania.

THE house of Underwood and Underwood, of London, an-
nounces a series of stereopticon views for use in teaching geom-
etry of space.   The first 25, prepared by E. LANGLEY, illus-
trate elementary theorems, while 23 others, by Professor A. G.
GREENHILL, relate to spherical curves, particularly catenaries.

THE publishing house of Gauthier-Villars, Paris, announces
that the following mathematical books are in the press, and will
appear in a short time : O. BLUMENTHAL, " Principes de la
théorie des fonctions entières d'ordre infini ; " E. BOREL,
" Leçons sur la théorie de la croissance ; " C. RIQUIER, " Les
systèmes d'équations aux derivées partielles."

IN accordance with the resolution adopted by the fourth
international congress of mathematicians, the president of the
congress has appointed the following committee on the unifi-
cation of the vectorial notation : Professors Abraham, Ball,
Hadamard, Langevin, Lori, Marcolongo, Prandtl, Stekeloff,
Whitehead, E. B. Wilson.

PROFESSORS F. KLEIN, of the University of Göttingen,
Sir J. LARMOR, of Cambridge University, and H. POINCARÉ, of
the University of Paris, have been elected honorary members
of the Calcutta mathematical society.

DR. J. M. MILLER has been appointed acting head of the
department of mathematics at the technical college of Glasgow.

MR. J. R. WILTON has been appointed assistant lecturer on
mathematics at the University of Sheffield.

MR. G. H. HERRIOT has been appointed lecturer in mathe-
matics at the school of mining, Kingston, Ontario.

PROFESSOR A. G. WEBSTER delivered at the University of

Illinois, November 29 to December 1, a series of public lectures on the following subjects : " Great physical problems of the past, present and future," " Sound and its measurement," " The gyroscope and its practical applications," " Classification of mathematical physics with reference to mechanics," " Waves, ether and relativity."

AT the University of Michigan Dr. J. W. BRADSHAW has been promoted to an assistant professorship of mathematics ; Mr. W. V. N. GARRETSON has been granted a leave of absence to study at Yale ; Mr. F. M. DRYZER, of the University of Iowa, and Mr. T. H. HILDEBRANDT, of the University of Chicago, have been appointed instructors in mathematics. Professor CARL RUNGE, of Göttingen, will deliver a series of lectures at the University in February.

AT the University of North Dakota Miss F. BALCH has been appointed instructor in mathematics.

MR. J. W. RUSSELL, former lecturer of mathematics in Balliol and St. John's Colleges, Oxford, died November 4 at the age of 81 years.

CATALOGUES of second hand mathematical books : Ernst Carlebach, Hauptstrasse 136, Heidelberg, catalogue no. 313, 1283 titles in mathematics and exact sciences.

NEW PUBLICATIONS.

(In order to facilitate the early announcement of new mathematical books, publishers and authors are requested to send the requisite data as early as possible to the Departmental Editor, PROFESSOR W. B. FORD, 1345 Wilmot Street, Ann Arbor, Mich.)

I. HIGHER MATHEMATICS.

ANDRÉ (D.). Des notations mathématiques. Enumération, choix et usage. Paris, Gauthier-Villars, 1909. 8vo. 18 + 502 pp. Fr. 16.00

BECKER (G. F.) and VAN ORSTRAND (C. E.). Hyperbolic Functions. Washington, Smithsonian Institution, 1909. 8vo. 51 + 321 pp. Cloth. $4.00.

BOREL (E.). Die Elemente der Mathematik. Vom Verfasser genehmigte deutsche Ausgabe besorgt von P. Stäckel. 2ter Band : Geometrie. Mit 403 Textfiguren. Leipzig, Teubner, 1909. 8vo. 12 + 324 pp. Cloth. M. 6.40

ENZYKLOPÄDIE der mathematischen Wissenschaften mit Einschluss ihrer Anwendungen. Vol. VI. 1ter Teil. A. Geodäsie und Geophysik. Redigiert von P. Furtwängler und E. Wiechert. 3tes Heft. Leipzig, Teubner, 1909. 8vo. Pp. 245–372. M. 4.00