

In exemplification of the practical value of the δ , ϵ notation, one may refer to the simple discussion on page 100 of the relative accuracy required in each step for the computation of a root of an irrational number with an assigned accuracy. From the general result it readily follows that, in the extraction of square, cube or fourth roots, one needs the number under the radical only to the same number of decimal places as the desired root.

On page 103, the signs of $-\mu$ and $+\mu$ at the end of (8) and (9) should be interchanged. At the top of page 105, one should have $M > \beta$, $M < b_n$; the developments, moreover, seem to need some minor alterations when $\beta < 0$. Near the bottom of page 137, $f(x) - g$ should replace $f(x)$. Before (5) on page 153, read $z = n/x$.

The elements of purely analytic trigonometry are developed on pages 160–167, thereby making the extension (in I_2) to complex arguments very simple. On page 161, m should be restricted to integral values.

In noting so many errata, the reviewer does not wish to give the impression that the book was either written or printed carelessly. It is only just to state that the list is not merely the result of a reviewer's perusal, but rather of a detailed study for class use, also including various observations on the part of its members. It is thus hoped that the list may prove of use, particularly to those who read only portions of the text.

As the book of 1897 proved so popular, in spite of its bugbear in Chapter III, it requires no prophet to foresee the reception awaiting the present three-volume series of Burkhardt's Vorlesungen.

L. E. DICKSON.

NOTES.

THE fifteenth regular meeting of the Chicago Section of the AMERICAN MATHEMATICAL SOCIETY will be held at Northwestern University, Evanston, Ill., on Saturday April 2. Titles and abstracts of papers to be presented at this meeting should be in the hands of the Secretary of the Section, Professor THOMAS F. HOLGATE, 617 Hamline Street, Evanston, Ill., not later than March 10.

THE dates of the regular meetings of the San Francisco section of the AMERICAN MATHEMATICAL SOCIETY have been changed from May and December to February and September. The change is to go into effect after the next regular meeting, which will be held at Stanford University in May.

AT the meeting of the London mathematical society held on January 14, the following papers were read: By Professor J. D. EVERETT, "On various systems of piling"; by Mr. H. BATEMAN, "On functions defined by the equation $\partial^2 V / \partial x_1^2 + \dots + \partial^2 V / \partial x_n^2 = 0$ "; by Dr. G. PRASAD, "On the notion of lines of curvature in the theory of surfaces"; by Professor W. BURNSIDE, "On groups of order $p^\alpha q^\beta$ "; by Mr. H. M. MACDONALD, "Electric radiation from conductors"; by Dr. W. H. YOUNG, "Open sets of points and the theory of content."

AT the last meeting of the Kansas State teachers' association at Topeka steps were taken to organize a Kansas association of teachers of mathematics. A committee of five, representing different grades of instruction, was appointed to perfect the preliminary organization. Among other objects the association proposes to urge the adoption of a common standard course in mathematics in the preparatory schools, and of uniform entrance requirements in the colleges of the state along the lines recently proposed by the AMERICAN MATHEMATICAL SOCIETY and already adopted by many of the leading colleges. Professor H. B. NEWSON, of the University of Kansas, is chairman of the committee on organization.

THE universities below offer during the summer semester of 1904 courses in mathematics as follows:

UNIVERSITY OF MUNICH. — By Professor F. LINDEMANN: Integral calculus, five hours; Conformal representation and linear differential equations, four hours; Foundations of geometry, two hours; Seminar, solution of higher equations, one and one half hours. — By Professor A. VOSS: Analytic geometry of space, five hours; Analytic mechanics II, four hours; Seminar, exercises in mechanics, two hours. — By DR. K. DOEHLEMANN: Descriptive geometry, three hours, with exercises, two hours; Synthetic geometry, three hours. — By Professor E. v. WEBER: Algebraic analysis, four hours; Differential equations, four hours; Selected chapters from the theory of functions, two hours. — By DR. H. K. BRUNN: Algebra II, four hours.

UNIVERSITY OF TURIN.— By Professor C. SEGRE: Abelian integrals and their application to geometry, four hours. — By Professor E. D'OVIDIO: Theory of algebraic forms, four hours.

THE Paris academy of sciences announces the following prize problems in mathematics for 1904: grand prize of 3000 francs, "to perfect in some important point the study of the convergence of algebraic continued fractions"; Bordin prize of 3000 francs, "to develop and complete the theory of surfaces applicable to the paraboloid of revolution"; Vaillant prize of 4000 francs, "to determine and study all the displacements of an invariable figure in which the different points of the figure describe spherical curves." The Francœur prize of 1000 francs and the Poncelet prize of 2000 francs will be awarded for treatises or discoveries which are most useful to the progress of mathematical science, either pure or applied.

THE Royal Institute of Lombardy has decided not to award its prize for a notable contribution to the theory of Lie's groups of transformations, announced for 1903. No sufficiently important papers were submitted for the competition.

M. SCHILLING, of Halle, announces two new series of mathematical models, prepared since the publication of the sixth edition of his catalogue: Series XXX, numbers 1 and 2, plaster models of the depiction of the projective plane on a finite closed non-singular surface, by Dr. W. BOY; number 3, plaster model of a cubic surface, illustrating its form near a parabolic point, by Professor P. STÄCKEL; series XXXI, second series of kinematic models, 11 in number, by Professor F. SCHILLING.

THE Faculty of Sciences and the Engineering School of Rome have issued a circular inviting international subscriptions to a memorial of the late Professor LUIGI CREMONA. Contributions should be sent to the Secretary of the Engineering School, I. Sonzogno, Piazza San Pietro in Vincoli 5, Rome, Italy.

ON November 29, 1903, a bust of the late Professor COSSA, director of the technical school at Turin, Italy, was unveiled at the school with appropriate ceremonies.

PROFESSOR KARL PEARSON, of University College, London, has been elected honorary fellow of King's College, Cambridge.

MR. E. M. HORSBURGH has been appointed lecturer on practical mathematics at the University of Edinburgh.

DR. E. DELASSUS has been appointed associate professor of the calculus at the University of Besançon.

PROFESSOR POMEROY LADUE, of New York University, has been granted leave of absence; his academic work will be temporarily in charge of Mr. C. ROYCE, of Harvard University.

PROFESSOR E. HESS, professor of mathematics at the University of Marburg, died December 27 at the age of 60 years.

MR. C. H. ROCKWELL, astronomer and physicist, died at Tarrytown, N. Y., on January 1. Mr. Rockwell took an active part in the expedition sent by the national government to the Caroline Islands to observe the total eclipse of the sun, May, 1883. He had been a member of the AMERICAN MATHEMATICAL SOCIETY and its predecessor the New York Mathematical Society since October, 1891.

THE death, on January 22, of the eminent mathematician and theologian, Rev. GEORGE SALMON, has already been announced in the BULLETIN. Dr. Salmon was born at Dublin, September 25, 1819, and was graduated as senior moderator in mathematics from the University of Dublin, in 1839. He was soon appointed scholar and then fellow of the university, and at this period he wrote his well-known treatises on mathematics. For these works he was awarded the royal medal, the Copley medal and the Conyngham medal, and received honorary election to many of the learned societies of Europe. In 1866 Dr. Salmon was elected professor of divinity at Trinity College, Dublin, since which time his activity has been devoted to theological studies.

NEW PUBLICATIONS.

I. HIGHER MATHEMATICS.

BERGER (H.). Ueber Rotationsflächen zweiten Grades, die einem gegebenen Tetraeder eingeschrieben sind. (Diss.) Strassburg, 1903. 8vo. 43 pp.

BLASEL (C.). Beitrag zur Theorie periodischer Reihen. (Progr.) Leobschütz, 1903. 4to. 20 pp. M. 1.00