

last three chapters are on the method of least squares, interpolation and numerical integration.

The book is clear and very easy reading even for the undergraduate. There is perhaps too much detail. The presentation on the page is pleasing and there are few errors. The few found when the book was used in a class were not important. The reviewer regrets that the author stopped short of a discussion of the method of moments and of frequency curves. These however could be included in a companion volume.

A. R. CRATHORNE.

NOTES.

THE American association for the advancement of science will hold its seventy-first meeting at Chicago from December 27, 1920, to January 1, 1921. What has been heretofore Section A, mathematics and astronomy, of the Association has been divided into two sections, A, mathematics, and D, astronomy. Of Section A, Professor D. R. CURTISS has been elected vice-president and Professor W. H. ROEVER secretary, Professors DUNHAM JACKSON, A. D. PITCHER, G. A. BLISS, J. M. PAGE, and H. L. RIETZ members of the sectional committee, Professor G. A. MILLER member of the council, and Professor E. V. HUNTINGTON member of the general committee. Professor JOEL STEBBINS has been elected vice-president and Professor F. R. MOULTON secretary of Section D.

THE British association for the advancement of science will meet at Cardiff, beginning August 24, under the presidency of Professor W. A. HERDMAN. Professor A. S. EDDINGTON has been appointed president of Section A, mathematics and physics.

THE Mathematical society of Greece announces the publication of an official journal, the *Bulletin of the Mathematical Society of Greece*, of which the first volume appeared in 1919. Articles for insertion in the *Bulletin* should be addressed to Professor NILOS SAKELLARIOU, Rue Asklipiou 96, Athens.

The following university courses in mathematics are announced:

COLUMBIA UNIVERSITY (summer session, July 6 to August 13).—By Professor EDWARD KASNER: Fundamental concepts of modern mathematics, five hours; Geometric transformations and groups, five hours.—By Professor W. B. FITE: Differential equations, five hours.—By Dr. G. A. PFEIFFER: Introduction to higher algebra, five hours.

COLUMBIA UNIVERSITY (academic year 1920–1921).—By Professor T. S. FISKE: Theory of functions, four hours.—By Professor F. N. COLE: Algebra, four hours.—By Professor D. E. SMITH: History of mathematics, two hours; Practicum in the history of mathematics, four hours.—By Professor EDWARD KASNER: Seminar in differential geometry, two hours.—By Professor W. B. FITE: Differential equations, three hours.—By Dr. J. F. RITT: Selected topics in the theory of functions of a complex variable, three hours.—By Dr. G. A. PFEIFFER: Analysis situs and applications, three hours.

PROFESSOR M. BORN, of the University of Berlin, has been appointed professor of theoretical physics at the University of Frankfurt, as successor to Professor M. VON LAUE, who has been appointed to the same position at the University of Berlin.

PROFESSOR M. KRAUSE has been elected rector of the Dresden technical school.

DR. E. TREFFTZ, of the technical school at Aachen, has been promoted to a full professorship of mathematics.

DR. A. VON BRUNN has been promoted to a professorship at the Danzig technical school.

DR. H. FALCKENBERG, of the technical school at Braunschweig, has been admitted as privat docent at the University of Königsberg.

PROFESSOR W. OLBRICH has been appointed associate professor of descriptive geometry at the Vienna agricultural school.

ASSOCIATE professor A. TAUBER, of the University of Vienna, has been promoted to a full professorship of mathematics.

ACTUARY ARNFINN PALMSTRÖM has been appointed professor of insurance at the University of Christiania.

PROFESSOR L. BIANCHI, of the University of Pisa, and Sir JOSEPH LARMOR, of Cambridge University, have been elected corresponding members of the Paris academy of sciences, in the section of geometry.

MR. S. POLLARD, of Trinity College, has been awarded a Smith's prize for 1920 for his paper on "The Stieltjes integral and its generalizations."

PROFESSOR J. HADAMARD delivered a course of lectures at Yale University, beginning April 30, on "Some topics in linear partial differential equations."

AT Brown University, associate professor H. P. MANNING has retired from active service, after twenty-nine consecutive years as teacher in the department of mathematics. Dr. R. F. BORDEN, of the University of Illinois, has been appointed instructor in mathematics.

PROFESSOR G. D. BIRKHOFF, of Harvard University, has been elected a member of the Danish academy of sciences.

PROFESSOR O. D. KELLOGG has resigned his position in the University of Missouri and has become permanently connected with Harvard University as associate professor of mathematics.

PROFESSOR J. E. ROWE, of Pennsylvania State College, has resigned to accept an appointment as mathematics and dynamics expert in the ordnance bureau of the war department. He is serving as chief ballistician at the Aberdeen Proving Ground.

PROFESSOR W. L. G. WILLIAMS, of William and Mary College, has been appointed instructor in mathematics at Cornell University.

PROFESSOR CHESTER SNOW, of the department of mathematics at the University of Idaho, has resigned to accept a position as physicist in the bureau of standards at Washington.

PROFESSOR A. D. BUTTERFIELD, of the department of mathematics at the Worcester Polytechnic Institute, has resigned to become educational director for the Norton Company.

PROFESSOR WALDEMAR VOIGT, of the University of Göttingen, died December 13, 1919, at the age of sixty-nine years.

PROFESSOR MORITZ CANTOR, of the University of Heidelberg, died April 10, 1920, at the age of ninety-one years.

PROFESSOR G. E. FISHER, of the University of Pennsylvania, died March 28, 1920, at the age of fifty-seven years, after thirty-one years service in the department of mathematics. Professor Fisher became a member of the American Mathematical Society in 1891.

CORRECTION. On page 331 of the April BULLETIN the date of the opening of the first term of the University of Chicago summer session should be June 21.

NEW PUBLICATIONS.

I. HIGHER MATHEMATICS.

- BOREL (E.). See VALLÉE POUSSIN (C. DE LA).
- BREUER (S.). Ueber die irreduktiblen auflösbaren trinomischen Gleichungen fünften Grades. (Diss.) Frankfurt a. M., 1918.
- BROUWER (L. E. J.). Begründung der Mengenlehre unabhängig vom logischen Satz vom ausgeschlossenen Dritten. 2ter Teil: Theorie der Punktmengen. Amsterdam, Johannes Müller, 1919. M. 1.60
- BÜRKLEN (O.). Aufgaben zur analytischen Geometrie des Raumes. 2te Auflage. Berlin, 1918. M. 1.25
- DECKERT (A.). Analytische Geometrie. Breslau, 1918. M. 7.50
- DURELL (C. V.). Modern geometry: The straight line and circle. London, Macmillan, 1920. 10 + 145 pp. 6s.
- FELIX KLEIN zur Feier seines siebenzigsten Geburtstages. Sonderheft: Die Naturwissenschaften. 25. April 1919. Berlin, Springer, 1919.
- HAMMERSTEIN (A.). Zwei Beiträge zur Zahlentheorie. (Diss.) Göttingen, 1919.