When $n = 2$ and the elements of the table are real the series of reduced tables may be arranged, one for each interval, as a single parameter λ ranges both ways from a given value λ_1 defining a series of intervals such that

$$0 < \cdots < \lambda_{-2} < \lambda_{-1} < \lambda_1 < \lambda_2 < \cdots < \infty,$$
$$(\lim \lambda_i = \infty, \lim \lambda_{-i} = 0).$$

For the general case the reduction is accomplished by means of the fundamental inequalities of Minkowski. The two fundamental problems of finding the units of a realm and of separating the ideals of a realm into classes of equivalent ideals are made to depend upon the reduction of a base.

Three notes, the first on the application of the theory of moduli to periods of functions, the second a study of the realm $K(\sqrt{82})$, and the third a brief account of congruences with respect to an ideal and with respect to the norm of an ideal, occupy the last twenty-four pages of the book.

M. Châtelet modestly disclaims for the book any originality so far as material is concerned. But if it contains no hitherto unpublished results, the treatment is sufficiently novel to make the book a noteworthy contribution to the literature of algebraic numbers. The bringing together of the algebraic analysis of Hermite and the geometrical researches of Minkowski as aids to the development of the brilliant conceptions of Kummer and Dedekind is an achievement for which the mathematical world owes much to the author.

The book as a whole is well written, though at times it is brief almost to the point of obscurity. For the ordinary reader its value would have been greatly enhanced by additional concrete illustrations, and by even a few figures similar to those which illuminate Minkowski's Diophantische Approximationen.

E. B. SKINNER.

A Treatise on the Analytic Geometry of Three Dimensions. By GEORGE SALMON. Fifth edition, volume 2, edited by R. A. P. ROGERS. London, Longmans, Green and Company, 1915. xvi+334 pp.

THE second volume of the fifth edition of the Treatise begins with families of surfaces, which was Chapter XIII of the fourth edition. The numbering of the chapters has been retained.