1918.]

In fact, the book does not at all help the student to realize the ideal expressed by the author, that "the student should at all times strive to get answers as nearly accurate as the tables will permit." Nothing whatever is said about the degree of accuracy warranted by the given statistics of a problem.

Errata are numerous in the text. Some parts of the book are poorly written. There is a dearth of punctuation in general, and of periods in particular. In places the arrangement of the material is very poor, while in other portions of the text the material is well spaced and the page presents its salient points at a glance. The figures and curves are very good.

M. E. Wells.

Tables numériques usuelles. Par L. ZORETTI. Paris, Gauthier-Villars, 1917. 8vo. 52 pp. 3 fr.

THESE small tables are designed for the use of engineers, students of college and lower grades, and general computers. They consist of multiplication tables for the multipliers 1, 2,  $\cdots$ , 9 and multiplicands of three figures; together with columns that give for three figure arguments the reciprocal, the square and the common logarithm to four places. A table of trigonometric functions, grades, and radians for every degree and quarter degree follows. Tables of logarithms of certain common constants, and the values of  $\pi d$  and  $\frac{1}{4}\pi d^2$  for two figure arguments close the volume. The leaves are thumbindexed and by proper spacing made otherwise convenient. The type is clear and the paper with no glare. The book is ample for most of the computations involved in the author's general course in mathematics.

JAMES BYRNIE SHAW.

Ueber gewisse Teilbereiche und Erweiterungen von Ringen. By Dr. Phil. Adolf FRAENKEL. Leipzig und Berlin, Teubner, 1916. 64 pp.

In the investigations of the arithmetic properties of the algebraic numbers the fundamental notion is that of domain of rationality, in which the four operations of arithmetic, excluding only division by zero, are permissible. Besides these certain other sets, called orders by Dedekind and rings