Readers familiar with the name of François Barréme, the arithmetical writer of the seventeenth century, who enjoyed in France much the same popularity as did Adam Riese in Germany, Edward Cocker in England, and Nicholas Pike in the United States, will be interested in the facsimile reproduction of the richly ornamented title page of his arithmetic of 1761, and in his dedicatory verses and other poetical outbursts.

FLORIAN CAJORI.

La Mathématique: Philosophie, Enseignement. Par C. A. LAISANT. Paris, Carré et Naud, 1898. 292 pp.

THIS book is intended for teachers and students of mathematics who are not specialists in this science. It deals with the philosophy and teaching of mathematics, and without much pretension to originality, presents the subject in an attractive and instructive manner. Separate chapters are given to arithmetic, algebra, calculus, theory of functions, geometry, mechanics, and to the practical application and the teaching of these subjects. The author does not discuss methods of teaching in detail, but wisely confines himself to general principles. The book gives a good general idea of mathematical instruction in France.

The author refers repeatedly to Comte's philosophy of mathematics and it is interesting to observe that he is compelled to abandon Comte's definition of mathematics, as the science which deals with "the indirect measurement of magnitudes." M. Laisant points out that Comte's definition does not include "the notion of order, which is inherent in mathematics to the same degree as measurement," and warns the reader against such a definition as carrying with it "a certain confusion which is not without danger." This point is just now of especial importance to us in the United States; for in the West certain theories of teaching arithmetic are being promulgated which assume that all mathematics deals solely with ratio and measurement and that the number concept is primarily and purely metrical. M. Laisant, in his discussion of number, does not find its origin primarily in measurement, but bases it on the cognition of a group of objects which, by mental abstraction, are considered alike. The primary number idea is non-metrical. On this point modern mathematicians are unanimous, and it is a sign of danger when the elementary teachers go in a direction diametrically opposite to the advanced workers and, misled by wrong conceptions, write textbooks which give an unnatural and one-sided develop-