

Histoire des Mathématiques dans l'Antiquité et le Moyen Age.
H. G. ZEUTHEN. Edition Française, revue et corrigée par
l'auteur, traduite par JEAN MASCART. Paris, Gauthier-
Villars, 1902. Pp. xvi + 296.

THIS work originally appeared in Danish in 1893. Two years later a German translation was published, thus bringing it quite generally before the mathematical world. It is a compliment to the excellence of the work that now a French edition should make it known to those who confine their studies to the Latin tongues. Furthermore it is a fortunate circumstance that Professor Paul Tannery has taken such interest in the translation as to examine the manuscript and append a number of valuable notes. Among these notes is the record of the comparatively recent discovery of the Metrics of Heron.

The size of the work is some evidence of its nature. It makes no pretense to set forth original discoveries. It claims merely to digest the important facts as presented by the works of Cantor, Hankel, Chasles and others of their class. These facts it seeks to place in relief, neglecting as unessential to the purpose in view the minor details, the question of the discovery of various theorems, and the controversies over dates and incidents of biography. The result is a manual whose usefulness is not limited merely to the needs of teachers of mathematics in Denmark, for whom it was written, and who, by a wise regulation of the government, are required to pass an examination upon the history of the subject.

The work is confined in large measure to the history of Greek mathematics, about three fourths of the space being thus employed. Less than ten per cent of the space is given to Hindu mathematics, and about fifteen per cent to the middle ages, including the work of the Arabs. This allotment is probably a fair one in the present state of our knowledge, and is certainly one to be expected from a man who has done so much in the study of Greek mathematics. Suter's recent investigation of the mathematical literature of the Arabs, and Braunnmühl's exposition of their contributions to trigonometry, are, however, likely to change the common estimate that they were merely transmitters of knowledge, and to give them more prominence in future works.

For so brief a sketch, the work is to be commended for its attempt in several instances to bring out causal relations and to evaluate the work of prominent writers. This is