

*Pour l'Histoire de la Science Hellène. De Thalès à Empédocle.* By Paul Tannery. Deuxième Édition par A. Diès, avec une préface de M. Federigo Enriques. Paris, Gauthier-Villars, 1930. xxiv + 435 pp.

During the half century from about 1880 our knowledge of Greek mathematics has been largely revolutionized by the work of two men, Sir Thomas L. Heath in England and Paul Tannery in France. The work of both men represents the highest type of modern scholarship; it is interesting that both worked largely independently of any university connection.

Paul Tannery's contributions consisted essentially of a series of several hundred monographs throwing light upon the life and achievement of Greek philosophers, astronomers, and mathematicians. In this work Tannery had the devoted assistance of his wife through whose efforts his collected works and correspondence have now been assembled in twelve volumes. In the preface to this volume as it appeared in 1887 Paul Tannery dedicates the work to his wife, the indefatigable companion in his activities.

While these apparently scattered essays may seem to have had no great underlying unity, yet the volumes issued by Tannery on Greek Astronomy (*Pour l'Histoire de l'Astronomie Ancienne*, 1893), Greek Geometry (*Géométrie Grecque*, 1887), and this volume under review on Greek Philosophy, represent in these fields a new point of view, revolutionizing ancient views held and widely taught up to modern times.

The text of this work is left as it appeared in the edition of 1887. However certain tentative notes made by Paul Tannery from time to time in his own personal copy of the edition of 1887 have been included as footnotes. At the same time the references have been given to Diels' *Die Fragmente der Vorsokratiker*, which appeared first in 1903 and which has enjoyed three subsequent editions. A bibliography of pertinent works which have appeared since 1887 constitutes a very useful addition.

In this philosophical work the sections which interest the student of mathematics are particularly those which treat of the relation to oriental science, to Thales, and those on the Pythagorean arithmetic. The amazing material which has recently been discovered relating to Egyptian and Babylonian mathematics has made imperative new studies on the relationships of the oriental to the Greek mathematics. Tannery would have been among the first to accord to the orientals that recognition which is their due.

The historical development of the ideas of the infinitesimal is now understood more completely through the recently discovered work of Archimedes on Method. Tannery was probably the first and certainly the most influential in indicating the actual significance of the work of Zeno, particularly its bearing on the development of mathematical ideas.

The long labors of Tannery and Heath, with also Zeuthen and Heiberg, are now reflected in popular treatises on the historical development of Greek mathematics. These can now be based upon the firm foundation of not only dozens of actual Greek treatises but also upon hundreds of supporting documents showing the progress of these ideas in Greece and Europe. The mathematics of medieval Europe does not yet enjoy any similar complete documentation so essential to real understanding. In the enjoyment of the fruits of the labors of