ing length and orthogonality. These yield a definition for the inner (or scalar) product $\mathfrak{x}\mathfrak{y}$ of two vectors $\mathfrak{x}$ and $\mathfrak{y}$. (American readers may at first be confused by the author's use of a dot when a vector is multiplied by a scalar but *not* when two vectors are multiplied together!) The other topics in this part include congruent transformations, complex geometry, and quadrics. In Part III, projective n-space is derived from affine $(n+1)$-space by identifying the points of the former with the classes of parallel vectors in the latter. After discussing cross-ratio, collineations and correlations, polarities, and the projective theory of quadrics, the author shows how the affine and metrical geometries can be derived from projective geometry. It is unfortunate that he failed to take full advantage of his division of the book into three parts. Content (i.e., area, volume, etc.) is considered in Part II, and barycentric coordinates in Part III, whereas both these subjects properly belong to affine geometry. The text and the 76 figures are clear and accurate. The book ends with a short bibliography, a full index, and a useful list of symbols.

H. S. M. COXETER

Rational fluid mechanics, 1687–1765. By C. Truesdell. Editor's introduction to vol. II 12 of Euler's works. Offprint from Leonhardi Euleri Commentationes Mechanicae ad Theoriam corporum fluidorum pertinentes (Euleri Opera Omnia, Series II, vol. 12.) Zürich, Füssli, 1954. 125 pp.

The volumes of the great Euler edition have in recent years been provided with excellent introductions, which help to clarify the astonishing achievements of this eighteenth century mathematician. Professor Truesdell has written one of these introductions; it is the preface to the first volume of Euler's contributions to the theory of fluid motion, and an interesting piece of work it is. We find in his essay not only an extensive account of Euler's main papers on hydrodynamics, but also a report on the achievements of those authors who, from Archimedes on, prepared the way to Euler's theory. We thus have in this introduction an accurate and comprehensive account of an important field of early science, a field never before so carefully investigated; a valuable contribution to the history of science in general and to the appreciation of Euler's hydrodynamical work in particular.

We owe to Euler what we may call "classical" hydrodynamics, the theory underlying the science of our present textbooks, which he established so thoroughly that all authors before him can safely be classified as "prehistoric." However, in contrast to Euler's mechanics