is abundantly rich in exercises. With regard to the numerical work it is evident that the author believes in the pedagogic value of accuracy and the proper arrangement of computation. Great prominence has also been given to graphical methods.

The book differs from the general type of text-books in trigonometry in several points. Under each case in the solution of triangles there are two sets of examples, one in which the angles are given in degrees and minutes, and another in which they are expressed in degrees and the decimal part of a degree. Another feature is the treatment of spherical trigonometry, in deriving the formulas of which the author makes use of the principle of duality, which is stated in the following form: "If the sides of a general spherical triangle are denoted by the Roman letters a, b, c, and the supplements of the corresponding opposite angles by the Greek letters, α, β, γ, then, from any given formula involving any of these six parts, we may write down a dual formula by simply interchanging the corresponding Greek and Roman letters." This method has many advantages, a great part of the work required in deriving formulas being done away with.

The general appearance of the book is very attractive. The cuts, the typography, and the arrangement of matter on the page are excellent.

JACOB WESTLUND.

Dynamique Appliquée. Par L. LECORNU. Paris, Octave Doin, 1908. 534 pp. 5 francs.

Hydraulique Générale. Par A. BOULANGER. Paris, Octave Doin, 1908. Vol. 1, xvi + 382 pp. Vol. 2, vii + 299 pp. 5 francs each.

(Encyclopédie Scientifique. Publiée sous la direction du Dr. Toulouse.)

M. LECORNU's textbook on applied mechanics is divided into four parts: Résumé of the chief results of rational mechanics; Mechanical properties of materials; Applications of dynamics; Theory of machines.

The first part occupies seventy-one pages, and furnishes the theoretical foundation for the rest of the book. It is a summary of the well-known equations of translations, moments; kinematics of a point, a set of points, and a solid; dynamics of particles, momentum, lifting force; statics of systems, virtual work, restraints, equilibrium of solids and of jointed systems,