

BRIEF MENTION

Mécanique générale. By J. Pérès. Paris, Masson, 1953. 8+408 pp. 2,545 fr.

This book is written as a text for an intermediate course in mechanics. Its purposes are on the one hand to develop "the qualities of order, precision, and initiative"; on the other, "to bring into evidence the insufficiency and the limitations of classical mechanics" arising from the fact that the principles themselves furnish only an underdetermined system and have to be supplemented by constitutive equations "whose origin is empirical, which are sometimes very crude, and which fail to recognize the complexity of real bodies and the interdependence of phenomena relegated to the different domains of our science."

Although there is much material on mass-point dynamics and some on continuum mechanics, the author's principal interest is in rigid bodies. He emphasizes general theorems, clearly stated and succinctly derived, often in generalized forms due to the French mathematicians of the last century. Applications of these theorems, usually interesting ones, are given in nearly every case. On the other hand, in keeping with the expressed purpose of the book, there is no attempt at a systematic exposition of the entire field. Elastic and inelastic impact, friction, stability, holonomic and non-holonomic constraints are discussed in detail with many worked out examples.

The book follows the French tradition of good writing and is typical of the better French textbooks; it reflects also the recent tendency to discuss the range of application of particular results to physical experience. Students of mechanics will profit from this thoughtful presentation by a connoisseur who gives evidence of detailed knowledge and sincere love for the subject.

C. TRUESDELL

Die Laplace-Transformation und ihre Anwendung. By P. Funk, H. Sagan, and F. Selig. Vienna, Deuticke, 1953. 8+106 pp. \$2.40.

This little book is designed to help engineers and teachers of engineers. It is based on a series of lectures given by the first named author in the *Ausseninstitut der Technischen Hochschule* in Vienna and was prepared by the other two. The plan of the book is perhaps best described by a paragraph from the introduction (freely translated): "The present book seeks to provide a link between the purely mathematical and the purely technical literature of the field and as such has not the character of a systematic text book but rather of a short introduction. It is aimed primarily at engineers and physicists and caters to their particular needs."