by well-chosen diagrams. The short bibliography at the end contains references as late as 1959 and includes German, French, and American works on noise and its control.

Mechanics and Properties of Matter (2nd ed.). By Reginald J. Stephenson. 367 pp. John Wiley & Sons, Inc., New York, 1960. $7.50. *Reviewed by T. Teichmann, General Atomic, Division of General Dynamics Corporation.*

NEWTONIAN mechanics forms the basis for a large portion of classical physics, and engineering, and this book presents and develops the connection at the undergraduate level. The contents are not quite as ambitious as the title might lead one to think; some aspects of the mechanical behavior of solids, liquids, and gases are discussed, but not the "properties" of materials as they are usually understood these days.

All the standard topics are clearly discussed, including Newton's laws, gravitational attraction, relative motion, and elliptic orbits for particle motion; rigid mechanics; oscillations of systems of particles and elastic substances; and statics and elementary hydrodynamics. There are a number of examples in the text and the general treatment encourages the reader to work out the numerous examples at the end of the various chapters.

Special attention is given to a variety of problems not usually encountered in such detail in such a text. These include the transformations of special relativity, the scattering of nuclear particles, a detailed discussion of the rotation of rigid bodies, including Euler's equations and their application to the spinning top, and dimensional analysis.

The presentation is carried out in such a way that more advanced study of classical mechanics will not require a complete reorientation of the student, and the book should prove useful to both science and engineering undergraduates.

Graphite and Its Crystal Compounds. By A. R. Ubbelohde and F. A. Lewis. 217 pp. Oxford U. Press, New York, 1960. $5.60. *Reviewed by Stuart A. Rice, Institute for the Study of Metals, The University of Chicago.*

IN many courses in elementary (and even advanced) chemistry the student is led to believe that graphite is an inert form of carbon, somewhat related in electronic structure to aromatic molecules, but of little chemical interest in its own right. This very clearly written book should do much to rectify the situation. I have read it not as an expert on graphite (which I am not), but as a chemist interested in the properties of condensed matter. Not only have I learned many surprising facts, but also have had many ideas for research problems suggested by the material presented.

The text is divided into nine chapters, four devoted to pure graphite and the remaining five to compounds of graphite and their properties. In all instances, the