

*Repertorium der Physik.* Von R. H. WEBER und R. GANS.  
Erster Band: *Mechanik und Wärme.* Erster Teil. Leipzig,  
B. G. Teubner, 1915. xii + 434 pp. 8vo. Price, 8 Marks.

THIS is the first part of the first volume of a repertorium of physics similar to the well-known Pascal repertorium of mathematics. The general character is more that of a small treatise, intermediate between an ordinary textbook and a manual, since it is written in a fairly connected style. It includes many results of memoirs, however, that one would not find in the ordinary text, and omits many details, particularly numerical ones, that would be found in a complete manual. In this way it has been possible to compress within a reasonable space a quite convenient vademecum for both physicists and mathematicians.

This first part is divided into three books. The first and second are written by R. Gans of La Plata. The third book is written by F. A. Schulze. The first book is on the mechanics of discrete particles. A list of the chapter headings will convey a sufficient idea of the contents. These are: Fundamentals of mechanics; Principles of mechanics; Dynamics of rigid bodies; Gravitation; Coordinate systems, rotation of the earth, centrifugal force; Friction; Vibrations. The second book is devoted to the mechanics of continuous media under two divisions: *A*, Elasticity; *B*, Hydrodynamics. Under *A* we find chapters on: Kinematics and dynamics of deformable media; Statical problems of the theory of elasticity; Dynamical problems of the theory of elasticity. Under *B* we find the chapters treating of: Equations of motion and general theorems; Kinematics of fluids with an immersed fixed body; Dynamics of fluids containing an immersed fixed body; Problems in two dimensions; Waves; Vibrations of the air; Viscosity; Tides. The book on Acoustics contains chapters on: Propagation of sound; Intensity of sound; Various problems; Musical scales.

The second part of the first volume will treat of Capillarity, Heat, Statistical mechanics, Kinetic theory of gases; the second volume will be devoted to Electricity, Magnetism, and Optics.

It may be regretted that for a subject as extensive as physics, the work is not a little more comprehensive, but as it is it will be useful.

JAMES BYRNIE SHAW.