Einführung in die Mechanik Deformierbarer Körper. By Max Planck.

The first edition of this little book appeared in 1919. This second edition is little more than a corrected first edition. The contents are divided into three parts. Part one (two chapters) deals with strains and stresses in an elastic medium. Part two (four chapters) deals with infinitesimal deformations and in particular with the relations connecting the coefficients of strain and stress. In the last two chapters the preceding theory is applied to the problem of the vibration of solids and fluids. Part three (four chapters) is devoted to rotational and irrotational fluid motion. The last chapter is on viscosity. The equations of hydrodynamics are derived as special cases of the general equations of elasticity. The equation of continuity is given in two forms, one stating that a given small mass of fluid remains invariant, and the other that the difference between the inflow and outflow from a small volume is equal to the increase in the mass contained in the small volume.

The author being a physicist, the treatment is more physical than the usual book on elasticity and hydrodynamics, with the exception of that by Thompson and Tait. The style is clear, concise, and appealing. Even one familiar with the subject will find Planck’s treatment refreshing and fascinating.

C. L. E. Moore


The first edition of Professor Müller’s text on descriptive geometry was reviewed by Professor Snyder [vol. I (1908), 1st part of vol. II (1912), and 2d part of vol. II (1916) in this BULLETIN, vol. 16, p. 136; vol. 20, p. 253; and vol. 24, p. 257]. The second editions of the two parts of the second volume, which appeared in 1919, were practically the same as the first edition. In the preface to the third edition of volume II (where the two parts are bound together), the author says that he has made only slight changes, although he has much new material which he might have inserted.

In the preface to the Müller-Kruppa book, Professor Müller says that soon after he took the chair of descriptive geometry (in 1902) at the Technical High School of Vienna, he began to supplement his regular teaching by advanced lectures containing some results of his own researches. These gradually settled down to a four-year cycle, although the content has naturally undergone changes. As he did not have the time to get any of this material into shape for publication, he was happy when his former pupil and present colleague was willing to undertake the task for some of the lectures. Although Professor Kruppa had the original manuscripts, Professor Müller gives him the credit for the final wording, for the drawings, for the revision of some parts of the manuscript, and for certain additions.