

The discussion of the relation of optics to thermodynamics and to the kinetic theory of gases serves not only to illustrate the interrelations of the sciences, but also to demonstrate the virility with which this domain of science has been exploited. There is nothing better in English, or in any other language, which gives in such small compass so full and complete a presentation of the science of modern optics. The book is written for the physicist, and presupposes a knowledge of differential and integral calculus. In the preface to the translation, Professor Michelson states that no one who desires to gain an insight into the most modern aspects of optical research can afford to be unfamiliar with this remarkably original and consecutive presentation of the subject of optics.

*The science of
modern optics.*

The absence of any advanced text in the English language which embodies all lines of progress in recent years in the field of theoretical and experimental optics has led Professors C. R. Mann and R. A. Millikan of the University of Chicago to bring out a translation of Drude's "Theory of Optics" (Longmans). The great merit of this work lies in the fact that it includes an authoritative presentation of the results of original work in the past decade in this field of physics, by a leader in the science. Indeed, the book itself, in the section devoted to physical optics, contains some original hypotheses of the author. We find here, for the first time in English, a satisfactory presentation of the theory of optical instruments as elaborated by Abbe and his followers. In the department of physical optics, the author sets forth very fully the electromagnetic theory as to the nature of light. The ion-hypothesis of Helmholtz is adopted as the simplest, most intelligible, and most consistent way of presenting dispersion, absorption, and rotary polarization, as well as magneto-optical phenomena and the optical properties of bodies in motion.