

**LIGHT, A CONSIDERATION  
OF THE MORE FAMILIAR  
PHENOMENA OF OPTICS**

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Light, a consideration of the more familiar phenomena of optics by Charles S. Hastings

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**CHARLES S. HASTINGS**

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**LIGHT**

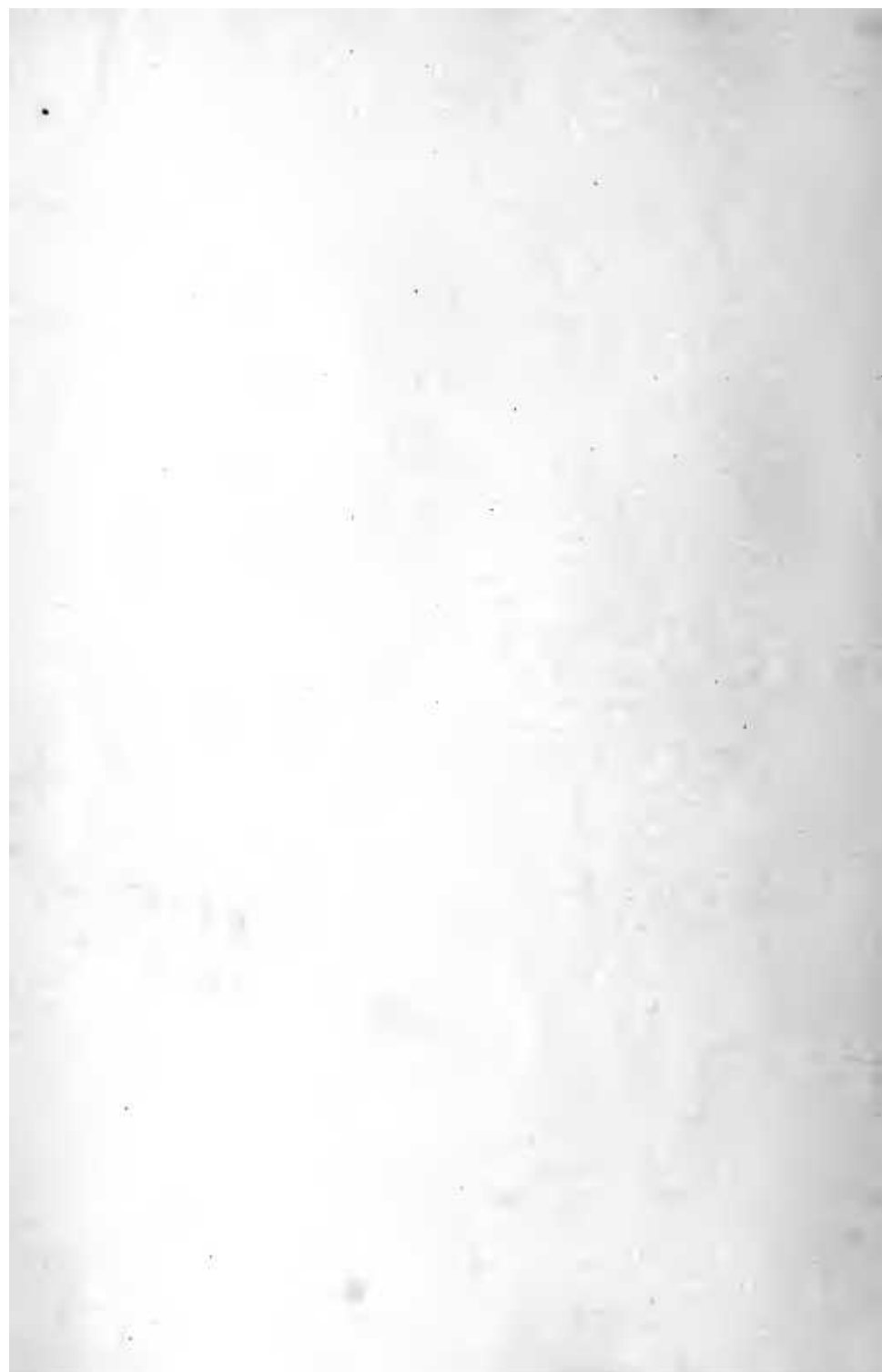


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Physics  
optics

# LIGHT

A CONSIDERATION OF THE MORE  
FAMILIAR PHENOMENA  
OF OPTICS

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## P R E F A C E

THERE is a very large number of phenomena in the domain of optics which may be regarded as familiar, in the sense that all of them may be observed without the accessories which are found only in the collections of philosophical apparatus characteristic of physical laboratories. To describe and explain this class of phenomena is the aim of this book. The extensive subjects of spectroscopy and of polarized light are excluded by the limitation imposed; the remaining topics are presented rather with a view to usefulness than with respect to any arbitrary notion of relative importance. For the reason just given the phenomena of color sensations are dealt with in a rather brief way, since that admirable work, the "Students' Text-Book of Color," by Professor Rood, supplies, far better than a less accomplished writer could hope to do, all demands of the ordinary reader. On the other hand, so little has been contributed during more than half a century to what may be called atmospheric optics, that it seems justifiable to extend the chapter treating this subject to an unusual degree.

Very great improvements in the theory and construction of the most important optical instruments have been made since any popular work devoted to their consideration has appeared. Indeed, no branch of applied science has experienced a more remarkable revolution in recent times than that which the advance of theoretical optics has impressed upon the skilled