hypotheticals which best explain them. The more important form-
ulas of differential and integral calculus are deduced in an early
chapter (of only 15 pages) on "varying quantities." This is
well written for review, but less adapted to the student who is un-
familiar with calculus. The next chapter discusses vectors,
position of motion or velocities, harmonic motion, etc., as pre-
liminary to mechanics, gravitation, and the properties of matter.
While the phenomena and the laws of sound, light, heat, and
electricity are taken up in succession, the essential unity and in-
terdependence of the several subjects are kept in view, as is
many of the terms and formulas which we usually associate with
statical electricity are discussed in connection with gravitation.
Among the interesting topics are Thomson's hypothesis of
vortex atoms, Maxwell's electromagnetic theory of light, and
the several theories of ether.
References to original papers, and problems to be solved by the
student, might have been desirable features, but would have in-
creased the size of the volume. A very large range of physical
science is comprised within moderate space; and this is confidentially
recommended to those who enter into the beauties of mathematical
thought.

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Illustrations of the tools employed are also given. The paper
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