

very complete account of the kinematics of a point and of a rigid body, including mechanisms and strains. The treatment of kinetics is preceded by a discussion of Newton's principles and criticisms of these principles by Mach and others. Statics follows kinetics and includes a good chapter on attractions and potential. Part V contains a chapter on hydrostatics and one on hydrokinetics. The sixth part consists of a short chapter on statics of elastic solids.

The author expects that most users of the book will bring to it some previous knowledge of the subject, and the elementary parts are briefly outlined to serve as a reference and for logical completeness. The general scope and treatment is designed to meet the needs of degree candidates of London and other universities. Very few, if any, American universities offer courses for which this book would be suitable as a text. But as a reference book for the teacher it would be very valuable because of the large number of examples and the very complete index.

W. R. LONGLEY

*Clerk Maxwell's Electromagnetic Theory* (The Rede Lecture for 1923).

By H. A. Lorentz. Cambridge University Press, 1923. 35 pp.

*The Theory of Relativity, Studies and Contributions.* By Archibald Henderson, A. W. Hobbs, and J. L. Lasley. University of North Carolina Press, Chapel Hill, N. C., 1924. xiii+99 pp.

Some men can put into a brief exposition a revelation of such insight and appreciation of the scientific significance of their topics as they may have won after years of detailed study. Among authors who have written on the theory of relativity, A. S. Eddington has written expositions of the type which I have in mind, his Romanes Lecture (delivered in 1922 at the Sheldonian Theater in Oxford) being an excellent example. The more recent lecture by Lorentz, mentioned above, is in the same class, conveying a nontechnical appreciation of the place of Maxwell's theory in the modern development of physics.

On the other hand the booklet by Professor Henderson and his colleagues is a disappointment to those who have read Professor Henderson's magazine articles on Bernard Shaw. One might have expected a mathematician of comparatively broad interests to bring to the subject of relativity a more novel point of view and a more significant insight into the physical meaning of the subject. Instead he has hurriedly and carelessly written a formal outline of the theory. As an example of carelessness I will refer to page 66 where the reader is suddenly confronted with the statement that the mass of the sun is 1.47 kilometers, with no explanation of the use of a linear unit for mass. Eddington's Report to the Physical Society of London is a better and less expensive work of approximately the same scope.

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