

motion of a rigid body is very pretty. It is, however, necessary to introduce the notion of the symmetric linear function, and unless the reader looks up the reference to Heaviside or similar source, he may find the chapter a trifle hard. The Poincot motion yields with great ease to vector methods, and the author makes the most of his analysis.

The chapter on the mechanics of deformable bodies begins with a concise summary of properties of the general linear vector function, passes to strains and infinitesimal displacements, discusses surfaces of discontinuity (Hadamard), and terminates with stress. It would be difficult in so short a space (47 pages) to do the work better. There follows thirty pages on hydrodynamics which contain most of the classical theory as far as general properties are concerned, and a few other things. This, too, is thoroughly good.

To this point we have covered only 170 pages of the text. The brevity is partly a matter of conciseness in style, but largely due to systematically thinking and using vectors. Sixty-nine exercises, a table of cartesian-vector equivalents in parallel column, and an index complete the work. We could only wish for fifty pages more in which the classical electromagnetic theory, including a little crystal optics, should be presented as succinctly as the theory of rigid motion, fluid motion, and elastic media. As it is, however, Silberstein has given us an almost ideal introduction to mathematical vector physics.

EDWIN B. WILSON.

NOTES.

THE July number (volume 15, number 3) of the *Transactions of the American Mathematical Society* contains the following papers: "A new principle in the geometry of numbers, with some applications," by H. F. Blichfeldt; "An application of Severi's theory of a basis to the Kummer and Weddle surfaces," by F. R. Sharpe and C. F. Craig; "Transformations of surfaces of Voss," by L. P. Eisenhart; "Birational transformations of certain quartic surfaces," by F. R. Sharpe and Virgil Snyder; "One-parameter families of curves in the plane," by G. M. Green; "The minimum of a definite integral for unilateral variations in space," by G. A. Bliss and A. L. Underhill; "On a method of comparison for triple-systems," by L. D. Cummings; "An existence theorem