studies he will find this book a most useful volume to have at his elbow.

The few errors noted by the reviewer were of no great importance. Perhaps some mathematicians will be disturbed by an occasional lack of completeness or of precision, but such defects seem trivial by comparison with the high merits of the book as a whole.

The reviewer considers the book to be a very valuable addition to mathematical literature, bridging the gap as it does between the mechanics of the nineteenth century and more recent developments.

E. J. MOULTON

Mechanics. By S. Banach. Trans. by E. J. Scott. (Monografie Matematyczne, vol. 24.) Warszawa-Wrocław, 1951. 4+546 pp. $6.00.

This work was first published in Polish in 1938.

The book is notable for its clarity, and for the completeness of its exposition of the range of material covered. Assuming that the mathematical preparation of the student includes nothing beyond the elements of the calculus, the author undertakes to give as easy a presentation of classical mechanics as possible. To him this means the giving of a logically arranged set of definitions, assumptions, and theorems, with detailed proofs and with numerous illustrative examples. He has carried out his task exceptionally well—at least from the viewpoint of a mathematician.

As a text book the volume would be improved by the inclusion of problems to be solved by the student (none are given), but a teacher may select such exercises from the many which are available in standard works.

The illustrative examples are interesting, and cover a wide range. Thus we find (a) the reactions when a three-legged stool rests on a floor, (b) the fuel load required for an interplanetary rocket, (c) the determination of the mass of a planet, and so on. Chapter VI, on statics of a rigid body, is particularly designed for students of technology, and is so written as to be independent of much of the material in the preceding chapters.

The first chapter is devoted to that portion of the algebra of vectors which is most important in the study of mechanics. This tool is then freely and effectively used throughout the remainder of the book.

The mathematical quality of the exposition may be suggested by the following introductory paragraph: "Time. In kinematics, in addition to known geometric concepts, there arises the concept of time.