of group theoretic methods to quantum mechanics, could have been far more thoroughly discussed on the space available. As it is one is referred in decisive moments to some other source book so that it is not possible to learn the underlying principles by studying this book though, of course, new applications of representation theory to quantum mechanics have been discovered since the appearance of Van der Waerden's book which are discussed in this book.

There is no intrinsic evidence given why a student of theoretical physics interested in the application of group theory to quantum mechanics should not directly proceed to study the books by E. Wigner and by L. D. Landau and E. M. Lifschitz on Quantum Mechanics.

Hans Zassenhaus, McGill University

Russian-English Mathematical Dictionary. Words and Phrases in Pure and Applied Mathematics with Roots and Accents, Arranged for Easy Reference, by L. M. Milne-Thomson. The University of Wisconsin Press, Madison, 1962. xiv + 191 pages. \$6.00.

This will be a valuable aid for all those mathematicians who wish to read mathematical work in Russian. In spite of the fact that a good deal of the Russian mathematical literature is now being translated into English (and (or) German and French), many readers will find it desirable to be their own translators. This will not only enable them to get to know earlier; in the case of books they will have them at one fifth of the price of the corresponding American edition.

An outline of the Russian grammar is added which will enhance a more intelligent use of the dictionary and perhaps induce the beginner to undertake a more extensive study of the Russian language without which even the best dictionary is only a makeshift tool.

H. S.

Vector Analysis Including the Dynamics of a Rigid Body, by G.D. Smith. Oxford Mathematical Handbooks, Oxford University Press, London, 1962. 192 pages. \$4.50.

This book is the third in the series of Oxford Mathematical Handbooks, and is aimed at the reader interested in applications of vector analysis.

A geometrical treatment of vectors, with a careful definition of a vector as a directed line segment, is given in the first five chapters.