though its scope has clearly been extended in the writing. It is impossible to imagine that in the study of the foundations of geometry in any British University, Euclidean and hyperbolic geometries could occupy anything like so considerable a place. But because of the important part that the search for a satisfactory system of postulates for Euclidean geometry has played in the history not only of geometry but of the development of the idea of mathematics as a logical structure, it is desirable that every mathematician should know what is involved in the construction of such a system of postulates; and the proper place for this is within the logical structure of the family of geometries of which Euclidean geometry is a member. As a complete and clear account of this structure, this book can be confidently recommended.

T. S. GRAHAM

NICOLSON, M. M. (edited by D. R. Hartree and D. G. Padfield), *Fundamentals and Techniques of Mathematics for Scientists* (Longmans, 1961), 526 pp., 45s.

The first draft of this book was almost completed when the author, Dr. M. M. Nicolson, was killed in a tragic accident. Thereafter, Professor D. R. Hartree undertook to edit the manuscript and prepare it for publication with the assistance of Dr. Daphne Padfield but, unfortunately, Professor Hartree died suddenly in 1958. Consequently, much of the editorial work and the task of providing chapters on essential topics not treated by Dr. Nicolson has fallen on Dr. Padfield. It is gratifying that the work has now been completed and the fruits of Dr. Nicolson's labours, which show evidence of considerable pedagogic skill, put into permanent form.

The book is eminently suitable for honours students of physics, who are not mathematical specialists, in their penultimate year of undergraduate study and, besides covering the calculus which they require, includes chapters on vector calculus, determinants and matrices, functions of a complex variable, Laplace transforms, special functions, and eigenvalue problems. The style of writing is smooth and discursive and there is plenty of motivation throughout. The book has one major defect from the student's point of view, namely, the lack of exercises; a few easy examples are interspersed in the text, but nothing more. Should a new edition of the book be called for in due course, surely this defect could be remedied.

D. MARTIN

JEFFREYS, H., *Cartesian Tensors* (Students Edition) (Cambridge University Press, 1962), 8s. 6d.

This is a paper-backed edition of the book which was originally published in 1931. The contents consist of some of the properties of cartesian tensors, followed by some applications of them in the fields of Geometry, Dynamics, Statics, Elasticity and Hydrodynamics. Considering the date at which the book was written the treatment is still remarkably modern on the whole. It is a book which should be very useful for colleges and universities, and at a price of 8/6 it should be within the reach of most students.

G. EASON