Dr. Rindler has given an elegant and clear treatment of the principles and applications of the special theory. Into the limited space at his disposal he has managed to pack a wealth of discussion and there is no doubt that the book will be found most useful not only for the student but also for the more advanced worker. A particularly stimulating feature is the collection of a dozen or so exercises (with occasional hints) at the end of each chapter. Among these are to be found several important results and they should therefore be regarded as an integral part of the text and not merely as examples of the theory.

The first three chapters establish the special principle of relativity and proceed to discuss relativistic kinematics and optics. No techniques are used here other than the most elementary calculus and vector analysis. The elegant presentation of the remaining material makes general use of tensor concepts and for this purpose there is an Appendix which develops *ab initio* those aspects of tensor analysis and calculus needful to the main text. To indicate the scope of topics treated by these means one can hardly do better than cite the five chapter headings: Space-time, Relativistic mechanics of mass points, Relativistic electrodynamics in vacuo, Waves, Relativistic mechanics of continuous matter. The last chapter forms an excellent springboard for entry into the general theory of relativity.

This is a book the early parts of which one could recommend to a mature schoolboy with an enquiring mind. The whole book is perfectly suitable as a basis for an undergraduate course. As usual the complicated printing has been admirably carried out by Messrs. Oliver and Boyd.

J. B. HELLIWELL

AHARONI, J., *The Special Theory of Relativity* (Clarendon Press: Oxford University Press, 1959), 285 pp., 45s.

This further addition to the list of books on the special theory of Relativity has been written with the student of quantum theory particularly in mind. The work covers the usual topics dealt with in books on Relativity but in addition contains a valuable chapter of eighty pages or so in length on spinors and the Lorentz group. The Maxwellian field is discussed at length and, in a chapter on general field theory, the Proca field is treated. The book is not encyclopaedic and the bibliography contains only twenty items or so but, nevertheless, it should be useful to atomic physicists and especially to those beginning the study of elementary particle theory. The printing and layout are excellent.

D. MARTIN