sophisticated or inexperienced reader, a commentary by Trevor J. McMinn is provided in the Foreword, together with a comparison of the Morse system with other well-known systems of axiomatic set theory. In fact the system is closest to one given by J. L. Kelly in the appendix to his book *General Topology*.

The book is intended for graduate students and professional mathematicians. Because of its formal and unfamiliar approach it is likely to be more successful as a textbook for a formal post-graduate course in set theory than as a book for the general mathematical reader. A. A. TREHERNE

BERBERIAN, STERLING K., *Notes on Spectral Theory* (D. van Nostrand Co. Ltd., 1966), 118 pp., 20s.

This book contains a presentation of spectral theory in which the spectral theorem for normal operators is not significantly more difficult than for the Hermitian case. However the disparity is made up, to some extent, by making the Hermitian case harder. In this approach, once the machinery of positive operator valued measures is set up, the normal case is deduced from the Hermitian case using only elementary manipulation of measures. Some of the basic techniques are developed in settings more general than are needed for the spectral theorem and conditions are imposed only when required. This may worry some readers approaching spectral theory for the first time. Also, although the deeper results of integration theory are not used, the reader needs to have a thorough familiarity with basic measure theory.

The author writes in an entertaining informal style and achieves this without glossing over the more tedious points. In fact most of the proofs are given in full detail. The book deserves a place among the better of the many available treatments of spectral theory. J. ERDOS

RINDLER, W., *Special Relativity* (Second Edition) (University Mathematical Texts Series, Oliver & Boyd, 1966), xii+196 pp., 13s. 6d.

This excellent book has been very carefully revised for the second edition, and the emphasis on the fundamental principles, already noted in the first edition (these Proceedings, **12** (1961), 169), further developed. Apart from changes to take account of modern developments (Mössbauer for Ives and Stilwell, slowing of electrostatic dispersion of charged particles in a fast accelerator beam and so forth), the chapter on particle dynamics has been completely rewritten, and concepts from Newtonian dynamics which are not conveniently transferred to the relativistic theory are omitted or played down. For example, the concept of mass as quantity of matter is no longer useful; the definition of force is postponed until after a thorough discussion of the relations between mass, energy and momentum. One could perhaps wish that this discussion had been so phrased that at the end the term " mass " meant " rest mass ", for that is the way the term is used by research physicists today; the quantity energy-divided-by-c^2 differs from energy only in the same way as the electromagnetic and electrostatic units of charge differ.

The very useful examples which are an integral part of the course and really teach the student what the subject is all about have also been extensively revised. If only one had the time to make one's students (and oneself, too) work through them!

D. J. CANDLIN

LYNDON, R. C., *Notes on Logic* (D. van Nostrand, 1966), 20s.

This book consists of a series of short chapters dealing with various aspects of modern mathematical logic. The approach is algebraic and owes much to the work of Tarski. The book is concise and well written. It would form a useful introduction to the subject for third or fourth year undergraduates. M. T. PARTIS