Abstract Sets and Finite Ordinals, by G. B. Keene. International Series of Monographs in Pure and Applied Mathematics, Vol. 23. Pergamon Press, 1961. x + 106 pages. $3.50.

"The purpose of this book is to present a fragment of the Bernays Theory (of sets) in a version which, while it makes explicit use of a certain amount of formalism, calls for no previous acquaintance with the subject." The development culminates in the deduction of the Peano axioms for natural numbers (here defined as special ordinals) and the proof that these finite ordinals can be used to define the number of a finite class, thus "drawing a continuous line between the logic of classes and the beginning of mathematics".

G. Bruns, McMaster University

Monographie des treillis et algèbre de Boole, by Michel Carvello. Collection de mathematiques economiques. Gauthier-Villars, Paris, 1962. xii + 127 pages. 28 NF.

This booklet seems to be written mainly for the non-mathematician who has to apply techniques connected with Boolean algebras. Accordingly, emphasis is laid on the technical aspects of the theory rather than its purely mathematical content. The main part (the second) of the book (p. 22 to 75), titled "Algèbre de Boole", gives a detailed treatment of Boolean functions (all Boolean functions of two and three variables are listed explicitly) and Boolean equations. The third part discusses the relations with mathematical logic; the fourth gives applications to electrical networks and some related topics. The least satisfactory part of the book is the first, which gives an introduction to the general theory of lattices and contains some quite imprecise and unusual definitions, and even the wrong statement (p. 8) that every element in a distributive lattice has a pseudo-complement (here called negation).

G. Bruns, McMaster University

Logic and Boolean Algebra, by B. H. Arnold. Prentice-Hall, Inc., Englewood Cliffs, N. J., 1962. vi + 144 pages. $9.00.

The book contains an elementary introduction to the following topics: propositional calculus, Boolean functions, (partially) ordered sets, lattices, Boolean lattices, applications of Boolean lattices to electrical networks, computers and logic. Although the method of presentation is informal, extreme care has been given to make all statements as precise as possible, sometimes to the extent that the beginner can hardly appreciate its usefulness. The book can be recommended to students without any advanced mathematical training who want a first introduction to the fields discussed.

G. Bruns, McMaster University