

BRAUER, RICHARD AND CHIH-HAN SAH (Editors), *Theory of Finite Groups* (W. A. Benjamin, 1969) xiii + 259 pp., \$12.50.

This book results from a symposium on finite group theory held at Harvard in May 1968, though it contains some material from mathematicians unable to be present there. It consists of 36 papers (all except one in English), of which nearly all are short accounts of their authors' work, the emphasis being on statement of new results with briefly sketched proofs. Since it presents a lot of important information much of which is not yet elsewhere in print, the volume will be welcomed by all interested in current research on finite groups. (The publishers have used a process of printing direct from a type-script in order to achieve early publication of such topical matter.) As one would anticipate on seeing the density of renowned names in the list of 39 contributors, the content of these research papers is of unquestionably high significance.

The table of contents shows a division of the book into three sections. Part I comprises 19 papers on "Characterizations of old and new simple groups"; these exciting papers include descriptions and/or representations of some of the newly discovered simple groups including those associated with Janko, the Higman-Sims group, McLaughlin's group, Held's group, and Suzuki's group of order 448,345,497,600. Part II consists of 7 papers on representation theory and Part III 10 papers grouped together under the heading of "miscellaneous topics".

T. A. WHITELAW

D. J. STRUIK (Editor), *A Source Book in Mathematics, 1200-1800* (Harvard University Press; London: Oxford University Press, 1969), pp. xiv + 427, 115s.

A major problem which has to be faced by the editor of any source book intended to reveal the mainstream of progress in some branch of science or in mathematics, is that of selection. In his Preface to this particular work, Professor Struik admits that his choice of sources was somewhat arbitrary, being guided partly by his personal understanding or feelings and partly by the advice of his colleagues. The common factor was that all the texts were confined to pure mathematics or to those fields of applied mathematics that had a direct bearing on subsequent advances in pure mathematics, the chapter headings being as follows: Arithmetic; Algebra; Geometry; Analysis before Newton and Leibniz; and Newton, Leibniz, and their School. Introductory passages to each of these chapters and to the 75 excerpts from the writings of Western mathematicians which comprise them, contain additional bibliographical information and help one to place the sources in their historic context. One significant omission which might have been introduced as the final sub-section of Chapter II is the highly original treatment of symbolic logic given by Leonhard Euler in his *Letters to a German Princess*; for there can be little doubt that Venn was indebted to this both for his method and for the diagrams which bear his name, to a much greater extent than he was prepared to acknowledge.

The purpose of the book is nowhere defined, but one might infer from the arrangement of the sources that it is designed primarily for students of mathematics with an interest in the autonomous development of some particular branch of their subject. If this was indeed the editor's intention, he has succeeded very well in his task. He might, however, have provided himself with another criterion of selection and have at the same time increased the width of appeal of this book—hence its sales potential—if he had placed more weight upon the rôle of mathematics in Western culture. It is only by viewing the growth of mathematical ideas within the broad framework of history that the full significance of all such sources will come to be properly appreciated by non-specialist readers or historians of science generally.

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