

the text. As well, it is not clear at times whether the group under discussion is supposed to be finite.

Hopefully, these defects will be removed in a second edition. Meanwhile, with some supervision, a student will find working through this book an interesting educational experience, and an enjoyable introduction to group theory.

L. O'CARROLL

DEDRON, P. and ITARD, J., *Mathematics and Mathematicians*. Translated from the French by J. V. Field, 2 vols (Transworld Student Library, 1974), Vol. 1, 325 pp., £1.50; Vol. 2, 222 pp., £1.00.

These two small octavo volumes, containing an astonishing amount of valuable material, provide a "history of mathematics" written to a new recipe. According to the authors' preface, the work "does not claim to be even a brief history of mathematics or mathematicians. It offers varied and fairly straightforward material in the hope of provoking a certain amount of reflection about the birth and development of mathematical sciences." The authors confine themselves to elementary mathematics, their survey ending at the beginning of the nineteenth century; and even then the treatment is highly selective. Thus there is no detailed account of the rise of the infinitesimal calculus; instead we are given a long and illuminating quotation from d'Alembert on its metaphysical principles. The restriction to early mathematics undoubtedly makes the work more accessible to the non-specialist, but at the same time there has been no sacrifice of standards of scholarship. A most valuable feature of the presentation is the number of extracts from original sources. While these may require the reader to switch to an archaic idiom and a different pace of thought, and to put up with a certain amount of long-windedness (as in the extract from Plato's *Theaetetus*) he is usually compensated by the clearer picture that emerges of mathematical concepts in their nascent state. The mathematical pages are frequently enlivened by biographical or anecdotal interludes.

The first volume having surveyed topics from Greek geometry through Napier and logarithms to the "golden age" of the seventeenth and eighteenth centuries, the second goes on to discuss the development of certain mathematical methods and famous problems. Some idea of the ground covered in this volume is given by the chapter headings: Written Numbers and Numerical Calculations; Algebraic Notations and First Degree Problems; Second Degree Problems; Pythagoras' Theorem; Trigonometry; Duplication of the Cube and Trisection of the Angle; Squaring the Circle.

The translation reads fluently; few misprints have been noted, and there is a bibliography and a good index. The choice of the book as a prescribed text for the Open University Second Level Course in History of Mathematics seems entirely appropriate. In spite of its small size this is a work of real distinction.

R. SCHLAPP

POPP, W., *History of Mathematics: Topics for Schools* (Transworld Publishers Ltd., 1975), vii+150 pp., £0.85.

The number of recent books tracing the development of mathematical concepts is evidence of a growing realisation that a historical perspective can be a useful auxiliary in the teaching and learning of mathematics at all levels.

The little book under review is a translation by Professor Maxim Bruckheimer of Walter Popp's *Geschichte der Mathematik im Unterricht*, first published in 1968, and is intended for the mathematical novice. It provides an introduction to the development of some of the major topics of school mathematics; it is no part of the author's plan to give biographical information. The material is divided into two parts, described