

the work of Bose, Shrikhande and Parker in their recent refutation of Euler's conjecture (which was that no such pairs exist for any order $4k+2$ and is now known to be wrong for all orders $4k+2 > 6$). Other fine results are on the existence and non-existence of balanced incomplete block designs and perfect difference sets.

The author has himself made many distinguished contributions to the subject, and his authority is evident throughout the book. Extensive references after each chapter, excellent book production and accurate printing combine to make this a worthy addition to this distinguished series of monographs.

JOHN LEECH

CHORLTON, F., *Textbook of Dynamics* (D. van Nostrand Co. Ltd., London, 1963), 263 pp. Paper 25s., Cloth 45s.

This book is a straightforward treatment of some topics of classical dynamics based on vector methods and on the analytical methods deriving from Lagrange's equations of motion. It is obviously designed as a textbook to be used by undergraduates attending "conventional" courses in dynamics as part of an honours degree in applied mathematics. Some parts of it would be useful to students reading for a general degree or for a degree in physics or engineering.

Within this framework it is a carefully written book. The basic physical principles are clearly stated, the necessary mathematical techniques are developed and the theory is fully illustrated by worked examples. At the end of each of the eleven chapters there are problems for the student to work for himself. These are carefully selected from examination papers set in the Universities of Cambridge, London and Reading; answers are given to these problems.

The only sense in which we should quarrel with the author is with his claim that his treatment is "modern". It is in fact no more modern than the classic treatise of Lamb, published many years ago, and much less modern than well-known treatises by Whittaker and Birkhoff. There are many students of the present generation requiring a modern course of dynamical theory because of its own intrinsic merits or because they wish to go on to do research in quantum theory, astronomy or the mechanics of continua. Unfortunately the course outlined in this book will not give them what they want; if it is of use to some British students it is only because they have to sit examinations on syllabuses which bear no relation to their subsequent careers.

I. N. SNEDDON

MAXWELL, E. A., *Fallacies in Mathematics* (Cambridge University Press, 1963), 95 pp., 6s. 6d.

Dr Maxwell's little book on fallacies in mathematics is already well known—indeed it is so widely recognised as a minor classic that it comes as a surprise to realise that the first edition was published only in 1959. The present edition is described as the "First Paperback Edition". It is a reprint of the first edition but is now available at a much reduced price. It is to be hoped that this will lead to its being acquired by many sixth-formers and students as well as by those who are entrusted with the task of teaching them, for it is difficult to think of any other book which so fully achieves the author's aim "to instruct through entertainment".

I. N. SNEDDON

AUSLANDER, L. AND OTHERS, *Flows on Homogeneous Spaces*, *Annals of Mathematics Studies* 53 (Princeton University Press, 1963), vii + 107 pp., 22s.

This is a series of papers presenting recent results of the authors concerning the action of a one-parameter group of transformations on a homogeneous space G/H of a connected Lie group. Here H is a closed subgroup, and the transformation group