

G. BELL AND SONS, LTD.

ADVANCED TRIGONOMETRY. By C. V. DURELL, M.A., and A. ROBSON, M.A.
Price 8s. 6d. A Key will be issued at 15s. net.

This book is a continuation of Durell and Wright's well-known *Elementary Trigonometry* (third edition, 5s.), and completes the school course for mathematical specialists. It is hoped that the volume will meet the need that teachers have long felt for a higher trigonometry on modern lines.

A Key will be issued which will to some extent form a supplementary teaching manual.

EXAMPLES IN MECHANICS. By A. ROBSON, M.A., and C. J. A. TRIMBLE, M.A.
Price 4s. 6d.

Contains about 750 examples, arranged according to subjects, such as Kinematics, Friction, Harmonic Motion, General Elementary Dynamics. Many of the questions have been taken from scholarship papers, but there are in each section also examples of the easier type more suitable for those whose ambitions only extend to such examinations as the Higher Certificate.

A Set of Hints for the solution of the harder examples will also be issued.

THE PRINCIPLES OF MECHANICS. An Elementary Course. By H. C. PLUMMER, F.R.S., late Royal Astronomer of Ireland. 165 text figures.
Demy 8vo. 15s. net.

Covers the usual range of an elementary course, but is designed more definitely to give the student an introduction to principles, on which developments can be based later, as his mathematical equipment becomes greater.

It is difficult to explain the fundamental ideas of mechanics without employing the notions of the calculus, and, even were it possible, an independent approach to the calculus is made harder than need be if the opportunity of associating its concepts with the concrete problems of mechanics has been neglected. Accordingly the notation of the calculus has been introduced in the hope of explaining its purpose and function. No attempt is made to anticipate the formal study of this branch of analysis beyond the barest needs of the moment.

STANDARD TABLE OF SQUARE ROOTS. The square roots to eight significant figures of all four-figure numbers, with printed differences. By L. M. MILNE-THOMSON, M.A., Assistant Professor of Mathematics, Royal Naval College, Greenwich. Medium 8vo. 96 pages. 7s. 6d. net.

These tables give to eight significant figures the square roots of all four-figure numbers, 400 values being visible at one opening. The roots are arranged in parallel columns, giving respectively the roots of x and $10x$, the argument being x , so that the required value is taken from the appropriate column at one opening of the tables. As printed differences are also given, interpolation is greatly facilitated. To users of calculating machines this arrangement offers obvious advantages for rapid evaluation, either by interpolation or by division by an approximate value.

ELEMENTS OF THE MATHEMATICAL THEORY OF LIMITS. By J. G. LEATHEM, Sc.D., late Fellow of St John's College, Cambridge. Demy 8vo.
14s. net.

The work was substantially complete at the time of the author's death, and has been printed under the supervision of Professor H. F. Baker, F.R.S., of Cambridge, and Professor E. T. Whittaker, F.R.S., of Edinburgh. It gives, in an eminently practical and readable form, a sound introduction to University mathematics. A large number of examples is provided, and the solutions are indicated.

YORK HOUSE, PORTUGAL STREET, LONDON, W.C. 2.

BELL'S MATHEMATICAL SERIES

ADVANCED SECTION.

General Editor: **WILLIAM P. MILNE, M.A., D.Sc.**
Professor of Mathematics, Leeds University.

A FIRST COURSE IN NOMOGRAPHY. By **S. BRODETSKY, M.A., B.Sc., Ph.D.**,
Professor of Applied Mathematics at Leeds University. 2nd Edition,
revised. Demy 8vo. 10s. net.

Graphical methods of calculation are becoming of ever greater importance in theoretical and industrial science, as well as in all branches of engineering practice. Nomography is one of the most powerful of such methods, and the object of this book is to explain what nomograms are and how they can be constructed and used. The book caters for both the practical man who wishes to learn the art of making and using nomograms, and the student who desires to understand the underlying principles. It is illustrated by 64 figures, most of which are actual nomograms, their construction being analysed in the text. In addition there are numerous exercises illustrative of the principles and methods.

A FIRST COURSE IN STATISTICS. By **D. CARADOG JONES, M.A., F.S.S.**,
Lecturer on Social Statistics, Liverpool University. 2nd Edition, revised.
Demy 8vo. 15s. net.

Scottish Educational Journal:—"An admirable introduction. . . Mr Jones has done his work well. We trust his valuable book will have a large circulation. It deserves it."

AN ELEMENTARY TREATISE ON DIFFERENTIAL EQUATIONS AND THEIR APPLICATIONS. By **H. T. H. PIAGGIO, M.A., D.Sc.**, Professor of Mathematics, University College, Nottingham. 6th Edition, revised and enlarged. Demy 8vo. 12s. net.

In the new edition the main change is the addition of a long new chapter dealing with miscellaneous methods. The other parts of the book have been revised, and a few more examples added.

Mathematical Gazette:—"With a skill as admirable as it is rare, the author has appreciated in every part of the work the attainments and needs of the students for whom he writes, and the result is one of the best mathematical text-books in the language."

THE ELEMENTS OF NON-EUCLIDEAN GEOMETRY. By **D. M. Y. SOMMERVILLE, M.A., D.Sc.**, Professor of Mathematics, Victoria University College, Wellington, N.Z. 7s. 6d. net.

Nature:—"An excellent text-book for all students of Geometry."
Mathematical Gazette:—"A useful and stimulating book."

ANALYTICAL CONICS. By **D. M. Y. SOMMERVILLE, D.Sc.** Demy 8vo. 15s. net.

Nature:—"One of the most comprehensive English treatises. The author shows a wide, detailed, and accurate knowledge of the subject."

A Professor of Mathematics writes:—"The treatment is refreshingly novel, and in all cases the presentation is concise and lucid."

AN INTRODUCTION TO THE STUDY OF VECTOR ANALYSIS. By **C. E. WEATHERBURN, M.A., D.Sc.**, Professor of Mathematics, University of Western Australia. 3rd Edition. Demy 8vo. 12s. net.

A simple exposition, showing how vector analysis may be employed with advantage in geometry and mechanics.

Nature:—"An excellent introduction to the subject."

ADVANCED VECTOR ANALYSIS. By **C. E. WEATHERBURN, D.Sc.** Demy 8vo. 15s. net.

Here the wider problems involving functions of several independent variables are discussed, the requisite vector analysis being developed in four chapters. The remaining six form an adequate introduction to Mathematical Physics.

G. BELL & SONS, LTD., PORTUGAL ST., LONDON, W.C. 2