the authors have ensured that their book will form a useful introduction to University courses.

One of the hardest tasks of the schoolmaster in teaching pupils who will later read mathematics at the University consists not of showing them how to solve examination problems, but of answering the question familiar enough to readers of the *Gazette*: “Why all this fuss?” Differentiation under the integral sign, integration of infinite series, conical projection, to mention only three familiar processes, can sometimes be used to obtain quick solutions. But are the processes justifiable? The teacher of Scholarship candidates is under the obligation of encouraging his pupils to see that such questions must be asked, and answered; and his task is not made simpler by the fact that there is often little time available for teaching such pupils, who must therefore learn largely by reading the text-books recommended to them.

For this reason, the reviewer hopes that this volume will be widely recommended. It is a sound, well-written text-book which students can safely be left to read for themselves. The worked examples are aptly chosen, and there are excellent sets of exercises (from various sources) for the student to work. No one using this book need fear that he will learn anything that will later have to be unlearnt.

Misprints are few; the only misleading one discovered appears in a note on p. 20, where the definition of \( \sin \theta \) is incorrect.

It need hardly be added that the book is beautifully set out and printed.

R. Walker.


Post-graduate work is an important and highly-organised part of the American educational system, and so is worthily granted a place in the series of yearbooks of the National Society for the Study of Education. But even a large volume such as this would be hopelessly inadequate to deal in any detail with the whole field, and therefore the present book deals only with the comparatively small part of post-graduate study, that in which the topic of study is education; more precisely, that branch of post-graduate work which is “designed to serve the intellectual interests and professional needs of those whose present or prospective careers are identified with the field of organized education.” The first 130 pages deal with the history, aims and general organisation; the remainder of the volume offers examples of the programmes provided by some of the institutions which cater for graduate study in education. The first part of the volume is likely to be more interesting to the average English reader than the latter part; the close analysis and the detail, at times minute, may become tiresome, but the undercurrent of idealism must command respect, even in England, where education has seldom been taken seriously.*

T. A. A. B.


This is Volume 2 of a Textbook of Physics for Intermediate and General Certificate of Education (Advanced Level) students. It maintains the high standard set in the first volume.

J. Topping

**The Calculus.** By G. P. Rawlings. Pp. 84. 10s. 6d. 1951. (Percival Marshall)

This is a short book, designed to dispel fear of the calculus by a simple

* Scotland, I understand, must be excluded from this judgment.