

dates throughout the year to some noteworthy deed or name on which the mind might like to dwell for an instant in the midst of the labors of the day.

In the lists of men whose birthdays, or the anniversaries of whose deaths are considered worthy of mention, we find many famous statesmen, authors, painters, musicians, and the like but, alas! very few if any mathematicians, physicists, or astronomers. Why should not the order of prominence be reversed? And it is in the *Gedenktagebuch* under review. In a neat little volume of 121 pages are gathered for each day of the year, with great care and the kindly spirit which seems to radiate from the genial face of the author whose frontispiece adorns the book, a great mass of miscellaneous information concerning the deeds and names of celebrities in the fields of mathematics, physics, and astronomy from the time where history becomes authentic to the present.

Many a man now living may not agree with the selection of names as listed for honorable mention—especially if his is not included. Such criticism will always be directed at any catalog of men famous for their deeds and jealous of their rank. Besides the *Gedenktagebuch* aims to be international in scope. Those who feel that others—or they—should have this mention not now given them might fill in at the proper places on the alternate blank pages any such additional facts as would please them or add to this feature of the history of the three sciences whose noteworthy deeds and dates are so carefully chronicled.

ERNEST W. PONZER.

*Technische Infinitesimalrechnung.* Von Prof. Dr. F. EBNER, Oberlehrer an der Königl. höheren Maschinenbauschule zu Aachen. Berlin, Verlag von Otto Salle, 1912. vii + 172 pp.

In attempting to classify properly this interesting pamphlet the reviewer has come to the conclusion that it might serve a most excellent purpose as a correspondence school text in the calculus for engineering students. It is primarily a collection of problems involving fundamental calculus notions which arise in engineering practice. Sufficient detail is given in the solutions of these problems to enable the reader to follow readily through to the results obtained.

A summary of the contents of the book would show that the author has selected his material from many distinct engineering fields and that every application of the principles of the calculus included would be considered fundamental and discussed thoroughly in some particular engineering course in any technical school of merit.

Since the flavor of actual engineering practice pervades every one of the 172 pages we naturally expect to find, as we do, much use made of figures and diagrams to illustrate the text, and great emphasis placed on the merit of the geometric intuition in developing the theory. The differential is used frequently and approximations are numerous, but the reader is nowhere worried by the presence of involved demonstrations employing epsilons and limits.

Instructors in the calculus, if interested, will find in the pamphlet under review some new material, several new viewpoints, and many applications of principles—all of which might aid them to add new life and vigor to their courses.

ERNEST W. PONZER.

*The Dynamics of Particles and of Rigid, Elastic, and Fluid Bodies.* By A. G. WEBSTER. Second edition. Leipzig, B. G. Teubner, 1912. xii + 588 pp.

THE second edition of Professor Webster's *Dynamics* has appeared in less than ten years after the first, and the fact that it is substantially identical with the first is evidence of the value of the work. The book grew out of the lectures delivered by the author to students of physics, and presents in compact form a treatment of so much of the science of dynamics as is considered an essential part of the equipment of an investigator in physics. The classical treatises in English as well as other languages are too bulky for a student to read completely, and they presuppose frequently a knowledge of mathematics which the student does not possess. "The attempt has been made to treat what is essential to the understanding of physical phenomena, leaving out what is chiefly of mathematical interest." The wisdom of the selection of material is attested by the success of the first edition. It is assumed that the student has a good knowledge of the calculus, but not of differential equations or higher analysis. This does not mean that subjects involving advanced mathe-