

SHORTER NOTICES.

Taschenbuch für Mathematiker und Physiker. Unter Mitwirkung zahlreicher Fachgenossen, herausgegeben von FELIX AUERBACH und RUDOLF ROTHE. 3. Jahrgang, 1913. Leipzig und Berlin, B. G. Teubner, 1913. x + 463 pp. 6 M.

THE general aims and arrangement of this very useful little encyclopedia were explained by Professor J. B. Shaw in his review of the first volume, 1909, published in this BULLETIN, volume 16 (1910), page 321. The present volume opens with a biographical sketch of Friedrich Kohlrausch, and the principal other new contributions, according to the preface, are devoted to the following subjects: Calendar and astronomy, theory of aggregates, group theory and the Galois theory of equations, the last theorem of Fermat, integral equations and their applications, multiply valued functions and uniformization, international commission on the teaching of mathematics, analytical mechanics, theory of quanta, geodesy, crystallography, and general chemistry.

Among the other new features there appears a short historical list of prominent deceased mathematicians. A similar list of prominent physicists is expected to appear in the next volume. To enable the publishers to sell the book at a lower price the present volume contains about 100 pages less than its immediate predecessor. Most of this reduction has been made in the part relating to mathematics. The present volume is about the same size as the first volume of the series and is sold at the same price, while the second volume costs one mark more. The index and the table of contents of the present volume include references to the more important subjects treated in the earlier volumes but omitted in this. The fourth volume (1915) is expected to appear at the end of 1914.

Small books dealing with such immense subjects are very useful, not only to the man who has very little time for study yet wishes to keep in touch with the most important facts and advances, but also to the student who may wish to get a clear notion of some central features before entering into details. The two mathematical subjects to which the largest