The Author Index and Subject Index occupy about ten pages.

To sum up: Professor Miller has written a valuable, original, and very entertaining book, containing much out-of-the-way information difficult of access elsewhere. It deals only with pure mathematics, and in this field emphasizes considerably the subjects of groups, theory of numbers, and theory of equations. While the treatment is often, perhaps necessarily, scrappy (by reason of its "synoptic" nature) it has been shown above that the separate sections do not always treat the subject with the breadth to be expected in a volume designed to guide a student to "points from which he can overlook domains of considerable extent." Either the amateur or the professional mathematician must find much of interest within its covers, however, and the work is heartily recommended. R. C. ARCHIBALD.

Brown University, Providence, R. I.

SHORTER NOTICES.

A History of Elementary Mathematics with Hints on Methods of Teaching. By FLORIAN CAJORI. New York, The Macmillan Company, 1917. viii + 324 pp. Price \$1.75.

Two of the most unsatisfactory literary labors that members of our guild are called upon to undertake are first, the publication of a new edition of an old work, using plates of many years' standing; and second, the review of an edition prepared under such circumstances. Probably the most severe critic of the work in hand is Professor Cajori himself, and if he had been free to do so he would undoubtedly have revised the work more radically than most of his readers would or could undertake to do. The book was written more than twenty years ago, and the world knows more about the subject than it did at that time; it has found better ways of overcoming certain difficulties in the matter of presentation of material; and it has the problem of a history of mathematics better in hand.

¹²⁵ and 272 (add to index) differs from the index form; for Graup, page 161, line 4 from bottom, read Graap; for McMahon, page 293, read MacMahon. Here and above the slips or errors are practically all of somewhat minor importance. As a whole Professor Miller's work is exceedingly accurate.