monotonous and of the stereotyped character, such as the falling body, oscillation in a resisting medium; a greater variety of illustrations would doubtless make the book more attractive to the non-mathematical reader for whom it is chiefly intended.

It is an interesting fact that the need for books of this type is becoming more and more clearly recognized; it seems to be a part of the movement for the popularization of the principal results of the sciences; how far this can be carried in the case of mathematics seems doubtful, because mathematics is and must remain, as soon as we pass beyond the elementary stages, a highly theoretical subject, which does not lend itself to popularization. Quite a different thing it is of course to present some topic in mathematics in such a way as to make it available to those who have had at least some preparation; such as for instance giving undergraduate students an idea of what lies beyond or below, as has been done in J. W. A. Young's Monographs on Modern Mathematics and in J. W. Young's Fundamental Concepts of Algebra and Geometry; or again, to give to students of physics and chemistry a knowledge of those parts of mathematics that are essential to a full understanding of their own subjects. It is as a contribution to those fields that Professor Love's book is perhaps most valuable, taking its place by the side of such books as Nernst und Schoenflies's Mathematische Behandlung der Naturwissenschaften.

ARNOLD DRESDEN.

NOTES.

THE March number (volume 14, number 3) of the *Annals of Mathematics* contains the following papers: "Groups which contain an abelian subgroup of prime index," by G. A. MILLER; "On infinite systems of linear integral equations," by L. BRAND; "The method of monodromie with applications to three-parameter quartic equations," by R. P. BAKER; "Note on the existence theorem of a minimum of $\int_{xy}^{x'y'} Pdx + Qdy$," by E. SWIFT; "Continuant expressions for $\sqrt{a^2+b^2}$ and $(\sqrt{a^2+b^2}+a)^n$," by L. H. RICE.