

PREFACE

THE little work on algebra now offered to those interested in secondary education has its source in a course of lectures given by me some years ago at the Ontario Normal College. Since that time not a few teachers who had followed the course have urged me to prepare a work on algebra along the lines suggested in my lectures, insisting that the ideas then advanced are, in the main, in accord with the general movement in the direction of reform in mathematical teaching. In the hope of contributing to that reform this work was undertaken.

While the book must speak for itself, a few words as to the point of view and the plan may not be out of place.

The outstanding fact in elementary algebra is the equation. With the equation algebra began, and the greater number of the topics ordinarily dealt with in the subject stand in close relation to the equation, gaining in meaning as this relation is realized. Thus the simple rules are incidental to the equation, resolution into factors is the central idea in it, while the concept of functionality, in a certain sense embracing that of the equation, sheds light upon it. So also elimination, so important in almost every branch of mathematics, is a study in equations. It follows then that a satisfactory treatment of the subject must give prominence to the equation—to its significance and theory as well as to methods of solution.