## PREFACE

In this little book an attempt has been made to give the chief characteristics of the more commonly occurring and more useful minerals. In order that the minerals should not be studied as mero specimens, an outline of their modes of occurrence and origin has been added. The hook deals, therefore, with both mineralogy and geology. Since, however, only slight reference has been made to certain geological phenomena, it has been thought better to restrict the title to mineralogy.

It is hoped that the book will, in some measure at least, meet the needs of the general reider and the prospector for minerals, as well as those of the student in the secondary schools. We have tried to make the study, as far as possible, an outdoor one, and to draw the reader's attention to minerals and rocks which he can obtain in most neighborhoods, and to descriptions of phenomena which he can verify for himself. Owing to the fact that volcanic action, mountain structure, or even exposures of compact rock in place, and other phenomena on which much stress is laid in many elementary books, cannot all be studied in most populated districts, the references to some of them are brief. We have also sought to explain in a practical way such terms as are commonly met with in the daily press or in ordinary periodical literature, with which every person professing to have a liberal education should be acquainted.

In order to keep within the space allotted to us, the description of historical geology is brief. The age names which are commonly used are, however, explained.