## PREFACE

practical and pedagogical demands of agriculture teaching with respect to either method or matter except such as results from the limitations of the public school. Logical arrangement of matter and proper methods of teaching are of equal importance in the securing of interest and understanding.

The book has in view the limitations of the public school with respect to the teaching of a subject that is an art as well as a science. The public school is not a trade school. The teaching of agriculture in the public school is education through agriculture rather than agricultural education.  $\mathbf{At}$ the same time, agriculture is an applied science, and the parts of it that can be properly taught are the parts that should be included in the public school programme of studies. Practically the whole of the book is taken up with materials that are at hand, as soils, plants, tillage, and crops. Part I is a series of studies concerned with finding out how natural forces have operated to establish a home for the plant. Part II is a study of the life cycle of the general plant. The pupils already have some acquaintance with soils and plants, but organization should go step by step with the acquisition of knowledge.

Part III, which deals with tillage, includes more matter than is commonly found in text-books on elementary agriculture. This is in harmony with the progress that has been recently made in soil physics and with the emphasis that is being placed on soil condition, rather than on soil content exclusively, as a result of this progress. It is likewise in accord more particularly with the dominant problem of prairie agriculture in meeting our not too plentiful moisture supply by careful cultivation for moisture conservation. While the emphasis to be placed on the different chapters of Part III varies in different parts of the prairie, this section is intended to furnish an important part of the material for teaching in the second year. Part IV, which deals with crops, is subject