so long ago as 1829 and was old enough to have fought at Waterloo, was the father of the present Chief Scout. In the chapter on Christ Church, 'Dr. Tupper' is described simply as an inventor, a D.C.L. and an F.R.S. But he had these six welcome letters after his name before he was thirty-seven years of age, and he was the versifier whose christian name was Martin. Again, V. H. Veley, of University College, is mentioned as having shown that pure nitric acid has no action on copper, but nothing is said of the far greater work of H. B. Dixon, of Balliol, and H. B. Baker, of Christ Church. There was, in fact, at one time in Oxford a school which appeared to set out to show that pure things do not do what it is commonly supposed they do do, one member showing that pure nitric acid does not etch copper, another that carbon will not burn in pure oxygen, a third that pure iron does not rust, and a fourth that pure ammonium chloride does not dissociate thermally. Possibly Dr. Gunther would not regard these investigators as coming into the field of "Early Science".

As was to be expected, this book is well illustrated. The choice has been carefully made and the reproductions are numerous and very good. They include many little-known portraits of Oxford's scientific sons. A. S. R.

AMERICAN VEGETABLES

Vegetable Crops

By Prof. Homer C. Thompson. (McGraw-Hill Publications in the Agricultural Sciences.) Third edition. Pp. xi + 578. (New York and London: McGraw-Hill Book Co., Inc., 1939.) 33*s*.

THIS book is the third edition of a standard American text-book dealing with the production and marketing of vegetables. Particular attention is paid to vegetables cultivated in the eastern States, and all the subtropical products from limited areas of Florida and elsewhere are omitted.

Nine years have elapsed since the previous edition, and opportunity is well taken to bring the text up to date, and to include consideration of recent research, carried out for the greater part at the Cornell Agricultural Experiment Station.

As in previous editions the earlier chapters deal with the principles and methods of cultivation, with soils, manures and fertilizers, and irrigation. A brief consideration of marketing and storage problems is included, but the major portion of the text is devoted to a systematic study of the commoner vegetables.

Although the underlying principles of cultivation do not differ from those laid down in most other countries, the very real differences between local climates and soil conditions, together with differences experienced in transport and marketing, overshadow these similarities. Further complications arise for English readers due to differences in nomenclature, to synonymy, and to different methods of varietal classification. An example or two must suffice: there is no entry in the index of haricot beans, a term applicable to certain varieties of dwarf French beans of which the young pods, but more especially the dried seeds, are so valuable; although the reader will find an alternative classification of beans according to their use, he will yet have to decide whether to include his haricot under snap beans (with edible pods) or dry shell beans. Similarly the classification of cabbages, although based on sound morphological lines, would not be entirely suitable for all our English varieties.

In regard to pests and diseases there are some of major importance in the States which fortunately are not yet with us, but our crops suffer from other pests and diseases which are of such little importance in America that they naturally receive brief attention in these pages; the pests of the potato illustrate this point.

The author includes the deficiency troubles due to a lack of boron, shown in cauliflowers by hollow stems and brown curds, in beet by black spotting, and shown by the brown heart of rutabaga, better known in Britain as swedes.

Although there are brief descriptions of the somewhat uncommon chayote (*Sechium edule*), and okra (*Hibiscus esculentus*) and martynia (as *Proboscidea Jussieudi* Keller) the author omits the yams (*Dioscorea sps.*), the Chinese artichoke (*Stachys tuberifera*), and the Peruvian oca (*Oxalis, crenata*) and other rarer vegetables.

A valuable feature of the book is the literature cited, comprising some five hundred titles, mostly of recent American work. The book appears in the well-known format of the series by the McGraw-Hill Publishing Co., and it is somewhat expensive.

The success of American and British growers in breeding and selecting varieties suitable for their own conditions tends to make this book of somewhat limited use to growers in another country, although its value to students, for whom it is written, is not thereby seriously impaired.