were needed in the development of the theory of quantum mechanics, which was beginning to make great strides at about the time of the publication of the first edition. For the quantum theoretician in particular, it will always be an almost indispensable handbook, but also mathematical physicists in all other fields will find a useful account of many of the mathematical methods they need. It is to be hoped that Professor Courant's plan to rewrite and modernize the book, although postponed for the present, will be achieved in the not-too-distant future, especially as there are still so many fields of mathematics of great importance to physicists, such as the theory of singular integral equations and of iterative processes, for which no treatment of comparable viewpoint yet exists.

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Plant Diseases in Orchard, Nursery and Garden Crops. Ernst Gram and Anna Weber; trans. from 2nd Danish ed. by Evelyn Ramsden; R. W. G. Dennis, Ed. New York: Philosophical Library; London: Macdonald, 1953. 618 pp. Illus. + color plates. $18.50.

This book is a handsome production, beautifully printed on a glossy paper, and illustrated by a large number of excellent black-and-white photographs and drawings. Ten color plates are included; some of these are not distinguished by veracity of color. As the title indicates, it deals only with diseases of orchard, nursery, and garden crops—primarily those of northern Europe. The authors, who are leading Danish pathologists, prepared the first edition under the shadow of World War II, largely for use by Danish growers. A second edition was required by 1944, and it is this which, after translation, has been edited and revised by Dr. Dennis of the Royal Botanic Gardens, at Kew, to adapt it to the needs of an English audience. In his words, the editor "has also taken the opportunity . . . to include references to much English work, published since 1940, not available in Denmark until after the second Danish edition was published." Also added is an account of the legislative control measures practised in Great Britain. It is stated that this book was compiled primarily for the use of the growers themselves, which may well be so, but it does assume an awareness and understanding of mycological and pathological terminology that would not be possessed by most small growers in the U.S. The treatment is essentally practical, however, rather than academic, but it could hardly be described as popular.

The book is divided into five sections, each with a bibliography. The first section which deals with the nature of plant diseases and disorders, including nutritional deficiencies and chemical toxicities, includes few citations to American authors, but in the following three sections which deal, respectively, with Tree and Bush Fruit, Vegetables and Herbaceous Fruit, and Ornamental Plants and Trees, some relevant U.S. references are given. A useful feature of these sections is the inclusion of keys for the identification of diseases of some of the major plants. The final section treats, somewhat perfunctorily, disease control practices. Certain of these recommendations are at variance with those developed for the same crop in North America—particularly perhaps is this the case with the fruit crops. Some of the newer fungicides and protectants are not mentioned, perhaps because of unavailability in Denmark.

Within the limitations referred to above this book has much to commend it; perhaps the most appropriate comment to make would be that there might well be a place for a North American edition of "Gram and Weber." This, the English edition, will be of interest here primarily to students and libraries.

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Mr Tompkins Learns the Facts of Life. George Gamow. New York: Cambridge Univ. Press, 1953. 88 pp. Illus. $2.75.

Professor Gamow's account of the adventures of Mr Tompkins in the field of biology does not merit a long review in a publication read primarily by scientists. The biological scientist has at hand better information than is contained in the book, and the physical scientist will want a more authoritative popularization than can be supplied by an author summarizing material remote from his field of specialization.

The general reader will be entertained, will not be irked by the numerous factual errors, and will gain a very considerable amount of important information. He will also, perhaps, become convinced that there is nothing wrong with biology that a few biologists can't fix. Theoretical physicists, Mr Tompkins is authoritatively informed, should be able to solve biological problems by the application of mathematical tools. It is to be hoped that this is true, because any device for bypassing a subject as uninteresting as chemistry would be welcomed by both biologists and physicists.

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