

authors has amassed a reference book of documented information on oil-seed meals of every sort as well as on by-products of milling, fermentation and much else. To leaven the lump, R. F. A. Dean has contributed from the Medical Research Council unit in Kampala, Uganda, an excellent and balanced review on the use of these vegetable proteins in human nutrition.

"The Microbiology of Fish and Meat Curing Brines" consists of thirty-eight papers, mostly quite short. They will be of interest to the people who attended the congress at which they were originally read. Scientists whose interests in biology are more general will be prepared to wait until the observations, facts, comments and doubts reported here are fitted into a more complete picture.

The "Bibliography of Food" is a most systematic affair, ranging widely from lists of grocers' journals to Sumner and Myrback's monograph on enzymes—unexpectedly entered under "nutrition: vitamins". The compilation of a bibliography, however, is a treacherous business even if it is a 'select' one. But though the authors do list Plimmer's historical tables of food composition and omit to mention the workaday ones of McCance and Widdowson, all in all they deserve our thanks for their efforts to codify the sources of twenty years of information on food.

"Flavor Research and Food Acceptance", fathered by no live editor but by an institution, Arthur D. Little Inc., is very good in parts, notably the excellent sections by L. M. Beidler and C. Pfaffmann on the physiology and psychology of taste, respectively. Other chapters are on a different level. For example, it appears that an agreeable aroma is important for the sale of petrol as well as soup. The book is a marriage of commerce and science, and the marriage is not an altogether happy one. MAGNUS PYKE

INFECTIOUS DISEASES

Die Infektionskrankheiten des Menschen und ihre Erreger

Herausgegeben von Prof. Dr. A. Grumbach und Prof. Dr. Kikuth. Band 1: Pp. xl+1-840. Band 2: Pp. iv+841-1702. (Stuttgart: Georg Thieme Verlag, 1958.) 198 D.M. (zwei banden).

THIS work is the product of the experience of Dr. Grumbach of the Institute of Hygiene, Zurich, and of Dr. Kikuth, the well-known pioneer in malaria and chemotherapy, assisted by a number of German, Swiss and other specialists. It is written from a novel point of view—to facilitate the understanding of the laboratory and scientific sides of infective disease by the clinician, and of the medical side by the biologist. It is not a laboratory manual in that details of technical procedures are largely omitted, and it is entirely bereft of illustrations, but throughout the book the clinical and therapeutic descriptions are intimately related to etiology; another title might have been "Clinical Microbiology".

The first part is occupied by a description of the general principles of the subject as a whole (such as virulence, epidemiology and immunity) and of the specific groups (bacteria, rickettsia, viruses, fungi, protozoa and helminths), followed by useful chapters on chemotherapy (by Klein), disinfection (by Roemer) and disinfestation (by Weyer). The second part forms three-quarters of the two volumes and is devoted to the individual infections. Each is considered under

the following headings: signs and symptoms, morbid anatomy, infective agent, pathogenesis, epidemiology, diagnosis, treatment, prophylaxis and control. This uniform classification makes it easy for reference, while an up-to-date bibliography, at the end of each section, indicates original sources, methods, etc. The greatest attention is paid to the bacterial and virus diseases (about a thousand pages); the parasitic infections are considered in much less detail, and organisms of minor importance are omitted (such as *Sarcocystis*, *Pneumocystis*, *Trypanosoma rangeli*, *Isospora belli*, *Iodamoeba butschlii*). The book is clearly written and well produced, and is specially recommended to workers in temperate zones; it will undoubtedly form a standard text-book on the subject of microbiology. P. C. C. GARNHAM

CHEMICALS AND INSECTS

Methods of Testing Chemicals on Insects

Vol. 1. Edited by Harold H. Shepard. Pp. iv+356. (Minneapolis, Minn.: Burgess Publishing Company, 1958.) 40s.

THIS is the first volume of a work of which another one, or possibly two, further parts are projected. The preface says, "This manual is intended to describe methods used in studying any phase of the action of chemicals on insects", and this first volume is devoted to the more fundamental aspects of the subject and to general techniques. More specialized subjects, such as testing chemicals for wood impregnation, soil treatment, as repellents and acaricides, are reserved for the second volume.

The sixteen authors, thirteen American and three British, are mostly well known. Together they contribute fourteen chapters which may be given the following condensed titles: (1) cuticle surface; (2) cuticle penetration; (3) respiration; (4) electrophysiology; (5) circulation; (6) radioactive tracers; (7) resistance; (8) topical application and injection; (9) feeding; (10) dipping; (11) spraying surfaces; (12) dusting; (13) fumigation; (14) synergism. It will be noted that methods for testing space sprays, mosquito larvicides and systemic insecticides are not included.

The chapters vary greatly in length (from seven to one hundred and five pages) and in the detail with which the subjects are treated. It appears from the preface that the editor has had some difficulty in collecting the contributions. Perhaps this is why so little attempt seems to have been made to impose on the authors a greater uniformity of presentation. For example, in dealing with the actual methods the author may simply refer to the literature, give an outline description and refer to the literature for details, or give a full description down to the last particular. Furthermore, authors are clearly uncertain how much attention to give to the vital subject of standardizing and handling the test insects and to discussing the relationship between the insects and the insecticide under the test conditions. Some scarcely mention these subjects while others treat them at great length and refer to much literature which more properly belongs to other chapters.

The work invites comparison with "Techniques for Testing Insecticides" by J. R. Busvine already reviewed in *Nature* (182, 486; 1958). Criticisms may be made of Dr. Busvine's book, especially of some of the explanations and interpretations he gives of the