

is directed towards engineering students and those already engaged in the nuclear field who are not specializing in heat transfer.

The first of the four chapters commences with a discussion of the way in which heat is produced in a nuclear reactor. The fundamental laws of heat transfer are next reviewed, and then, after defining the required characteristics of a nuclear coolant, separate sections are given to aqueous, gaseous, liquid-metal and organic coolants. The chapter concludes with a section on aqueous and liquid-metal fuels.

The second chapter deals with the conversion of heat to mechanical energy and includes separate sections on steam and gas turbine cycles. The third covers application of theory to practical reactor systems, some thirteen projects being described according to their coolant classification. The final chapter details methods of determining thermal stresses in simple geometries.

The presentation is attractive, and the text is supported by adequate diagrams and worked examples. Comprehensive tables of physical properties are arranged conveniently within the text. Each chapter includes a reasonable bibliography of supporting references.

The work affords a useful introduction to the subject, but, without implying any criticism of it, it would seem that English readers are already adequately catered for by a number of existing British and American books.

R. J. SYMES

#### Nigeria's Feeding-Stuffs

Their Composition and Nutritive Value. By V. A. Oyenuga. Second edition. Pp. 65. (Ibadan, Nigeria: University Press, 1959.) 8s. 6d.

AGRICULTURAL progress in all under-developed countries has been delayed because of a lack of knowledge, particularly of the basic facts about the soil and the crops of these regions. Overworked staff in Government research stations have usually been overwhelmed by the need to give all their attention to problems of immediate practical importance. Many of us hoped that the new university colleges would do something to encourage fundamental research, particularly in the sciences relating to agriculture. This book shows one instance of this hope being fulfilled. It is particularly encouraging to find that Nigerian members of staff, like Dr. Oyenuga, are making such a useful contribution to the development of scientific agriculture in their own country.

This book, which is a revision and expansion of the first edition published in 1955, lists the majority of the important foods, both of man and his livestock, which grow in Nigeria. It gives analyses of their composition, including such data as their protein and starch equivalent, and their nutritive value. Useful notes on the cultivation and use of each crop are included. Readers who do not know Nigeria may sometimes be surprised, for example, by such statements as that the water melon has the highest calorific value (658 calories per 100 gm.) of any that has been determined; the mystery is cleared up by the explanation that in Nigeria water melons are grown for their seeds and not for their watery flesh. All who work on problems of nutrition on man or animals in tropical countries, and particularly in West Africa, will find Dr. Oyenuga's book a very useful tool.

KENNETH MELLANBY

#### Australian Native Plants for Home Gardens

By A. E. Brooks. Pp. xvi+149+40 plates. (Melbourne and Sydney: Lothian Publishing Company, Pty., Ltd., 1959.) 45s.

THE Australian bush is particularly rich in beautiful floriferous plants fit to grace any garden. Many have already been brought into cultivation, and the aim of this book is to make known to the increasing number of native plant enthusiasts which species are obtainable from nurserymen in Australia and the treatment they require in the garden. The information is presented in dictionary form with brief descriptive and cultural notes arranged alphabetically under the botanical names. Popular names are given also, and an index is provided for them. Articles on such topics as propagation, manuring and transplanting are interspersed, and, together with lists of species flowering at different seasons, or suited to particular conditions, add much to the usefulness of the book. Very few of the plants mentioned can be cultivated out of doors in the British Isles. For the London area they would include one *Grevillea* and one or two ti-trees (*Leptospermum* spp.) among the shrubs, and the golden everlasting (*Helichrysum bracteatum*) and Swan River daisy (*Brachycome iberidifolia*) among the herbs. The paucity of hardy species combined with the inadequacy of the descriptive matter for identification and absence of keys limits the sphere of usefulness of the book to Australia. These deficiencies are to some extent ameliorated by the inclusion of seventy photographs of a high standard by which the majority of the genera are illustrated.

R. MELVILLE

#### Antibiotic Therapy and Staphylococcal Diseases

Edited by Dr. Henry Welch and Prof. Maxwell Finland. (Antibiotics Monographs, No. 12.) Pp. xii+208. (New York: Medical Encyclopedia, Inc.; London: Interscience Publishers, Ltd., 1959.) 4.50 dollars.

THIS volume is No. 12 in the series of "Antibiotics Monographs" and covers the important subject of antibiotics effective against staphylococcal infections.

After a foreword in characteristic style by Marti-Ibanez, the first chapter by Welch deals with the staphylococcal problem and the effects of early antibiotics, penicillin, chloramphenicol, the tetracyclines and bacitracin. The next six chapters deal with erythromycin, oleandomycin, novobiocin, vancomycin, ristocetin, and kanamycin. Each is written by a well-known authority in the use of these antibiotics. The last chapter consists of recapitulation and discussion by Finland.

The book is excellently produced. It gives much useful information about each of the antibiotics considered, full references to their use in clinical practice, an assessment of their effectiveness and discussion of the ease with which drug-resistant organisms arise.

It ends with the conclusion that antibiotics against staphylococci should be used sensibly and only for clear indications, that they should never be used for prophylaxis on a wide scale in hospitals or in closed communities particularly for long periods, that the antibiotics most suitable for each case should be selected and changes made after adequate trial has shown them to be ineffective or inadequate, or when other infections are demonstrated or evidence of toxicity precludes their further use.

R. KNOX