

bound up with the nutritional state of the two classes.

War-time food economy necessitates rationing and successful scientific rationing demands an intimate acquaintance not only with the principles of nutrition but also with the nutritional and vitaminic composition of the available foods. This fundamental knowledge and data are to be found in the book under review. In a series of seven lucid chapters, the author has dealt with the energy value of foods, the food values of starches, sugars and fats, the body-building values of foods, the value of mineral salts, the vitamin values of foods, losses of food value and the food value of dishes and diets. There is a descriptive Appendix of "Tables of food values". While the book is primarily intended to help the solution of the problem of food imposed on England by the war, the ideas developed in the book will prove helpful in the building up of a new world in which food will still remain the main deciding factor. This little book which is within the reach of every one, will receive the wide circulation it deserves.

V. S. G.

Reference Service and Bibliography. Vol. 1: *Theory*. By S. R. Ranganathan, M.A., L.T., F.L.A., and C. Sundaram, B.A., 1940, pp. 642. Vol. 2: *Bibliography of Reference Books and Bibliographies*. By S. R. Ranganathan, M.A., L.T., F.L.A., and K. M. Sivaraman, B.A., 1941, pp. 511. (Madras: Madras Library Association; London: Edward Goldston.) (n.p.).

These two volumes, it is hoped in the preface by the Madras Library Association, will help libraries in India and elsewhere to organize their work in an efficient, scientific and serviceable way. These are welcome additions to the library literature in the country. Skilfully have the authors traced the genesis and expounded the what, why and how of reference service in Parts 1-3; Part 4 encompasses the whole field of bibliographies including the subject of bibliography or "reference bibliography" as the authors prefer to call it. Vol. 2 is a bibliography to Vol. 1, so to speak.

It may be surprising for many to learn how helpful and informative can the library service be in various fields of knowledge if it is equipped with reference staff. With

this background the authors have painted a splendid picture that is just what the titles of the two volumes indicate. The skill of bibliographical research, keen discernment of a librarian *savant*, analytical and interpretative ability of a scholar, and creativeness of a thinker, have all been deployed in penning the picture. Books, institutions, men, memories, incidents in day-to-day library routine, causes and effects, have been searched out, evaluated, and combined, with the result that the two volumes have a wide appeal to anyone who has had contact with a library or who is interested in problems of library service.

That the authors' exposition of the art of reference work is academic as well as practical is seen throughout the work and particularly in the assortment of problems which, with their worked out solutions, fill a number of pages of the pleasingly unorthodox Vol. 1. This book is also unique in the emphasis it places on indological allusions so that the truth of the subject-matter may be feelingly realized by the Indian reader. In this volume the authors put forth the thesis that reference books as a rule are "rather treacherous" and reference service is therefore not a *service de luxe* but a necessity—for guiding the unwary reader through the so-called ready reference works. In the *why* section, a vista of reference books has been opened before the reader, and each book has to bear the brunt of the authors' critical genius. This section is educative for educationists and librarians alike, although it cannot be said to be the last word so far as highly specialized and scientific matter is concerned.

The voluminous flow of pages of lucid, racy, persuasive style is remarkably free from transcription blemishes except on pages 213, 254 and 543 of Vol. 1 and on page 212 where the hog idiom has been pierced by a through. Perusal of foreign titles, however, leaves in general an uneasy feeling owing to their shortcomings of accentuation. Many readers would wish that the valuable references in footnotes were accompanied by names of publishers.

These minor points are not intended to detract from the general interest or message of the composite treatise. It assembles a vast amount of information which the ordinary user might find difficult to acquire.

This makes the work a reference work on reference works. It is adequately indexed, conveniently arranged for reference, and articles are decimally numbered. Throughout the work the reader is struck by the scholarship, personality and humanity of the authors.

The volumes will be profitably read by staff and users of libraries. They show librarians the way of making their service more efficient, give the more ambitious members of library staff an incentive to do reference service, and enable the reader to find his way about in libraries with a quiet confidence in the domain of reference books.

It is to be earnestly hoped that the treatise will contribute to bring about in this country the recognition—hardly nascent at present—that reference service in libraries really has the advantage claimed for it; and that quite independent of a thorough organization of library catalogues and other illuminating guides such as maps, charts, readers' handbooks, etc., modern reference service is a specific requirement if the five primordial laws of library service enunciated and expounded by the senior author in a monumental work published earlier in the same Series are to be satisfied.

G. T. KALE.

The Problem of the Pure Teak Plantation.

By M. V. Laurie, M.A., I.F.S., and A. L. Griffith, M.A., M.Sc., I.F.S. (Manager of Publications, Delhi). 1942. Price Rs. 3-10 or 5sh. 9d.

The technique of raising teak plantations has been thoroughly worked out by foresters in India and every year some 6,000 acres of artificial teak plantations are being added on to the forest estate of the country. At the same time, however, an uneasy feeling has prevailed amongst a section of the professional circles that all is perhaps not well with these plantations; that the promising early growth of these pure crops may later be attended with unexpected and grave consequences such as, for example, the deterioration of the soil—the ultimate capital of all forestry enterprise; that, in short, the dividend from the pure teak

plantation may not be worth the depreciation in capital value. These misgivings found expression at the periodical Sylvicultural Conferences at Dehra Dun and the 1934 Conference opined that the time had come for revising the existing bulletin on the subject (Bulletin No. 78). Undertaking this revision, the present authors have compiled and interpreted the available data with commendable thoroughness, having cast their net very wide to garner the knowledge and experience of the Indian provinces, some of the Indian States and notably also of the Forest Research Institute, Buitenzorg, Dutch East Indies.

Every one of the charges against the pure teak plantations and the possible mistakes in their past management have been examined in detail. The suggested remedies are then considered. Finally, the authors conclude that "the case against pure teak as a general proposition has not been established and that from the purely economic point of view, the value of teak timber is so much greater than that of any other species likely to be grown with it, that relatively poor teak is almost always a sounder financial proposition than any other possible alternative". This, so far as it goes, is reassuring but the critics of the pure teak plantation can justifiably point out to chapter VI of the Record where the authors give a list of points on which the existing data, being either scanty or unreliable, do not warrant generalisations. This list includes such important subjects as soil deterioration, quality of the timber, heredity factors and the regeneration of the second rotation. These factors, it will be noticed, are not amenable to the mere expression of subjective opinions (however competent and experienced the holders of such opinions may be) but demand prolonged experimental work and statistical interpretation.

This book with its eight plates of uniformly excellent photographs is a clear statement of our present state of knowledge and ignorance of the pure teak plantation in India. It forms an admirable introduction to all those who have to manage or would design further experiments on the teak plantation in its many aspects.