

The omission of the name of tree species depicted in several plates also seems to be unnecessary simplification.

"The Forest, Forestry and Man" should be read by every New Zealand forester, not excluding the younger generation who are seeking inspiration and a broad perspective in the relatively narrow confines of their apprenticeship.

T.C.B.

Decay of Timber and its Prevention.—By K. St. G. Cartwright and W. P. K. Findlay. H.M. Stationery Office, Kingsway, London, W.C.2, 1946. Price 12/6.

The review of a book on this subject by two such authorities as Cartwright and Findlay is a task which must be approached with seemingly diffidence. Fortunately in such a review one is spared the impertinence of adverse criticism or the implied patronage of praise. Since this is intended mainly for the perusal of New Zealand foresters, attention will be directed to those parts which are primarily of forest importance.

The book consists of 294 pages and contains 14 chapters and an appendix ; there are 49 plates and 8 figures.

The introduction outlines the losses due to decay with an historical sketch and a world survey of existing research stations.

In Chapter I the causes of decay are discussed with sections on Mechanical Wear, Decomposition by Physical Agencies, Chemical Decomposition, Insect Attack and Fungal Decay. The last section gives, in a few words, a particularly clear account of the nature, classification and life history of fungi.

Chapter II dealing with technique and Chapter III on physiology may be passed over as, although of great value to a pathologist, they are too technical for the general forester.

Chapter IV deals with the effect of fungal decay on wood, of particular interest to foresters are the effects upon the physical properties such as density and strength, on the moisture relations, on the value for fuel and on the appearance.

Chapter V gives detailed accounts of the principal decays of standing trees in Great Britain. New Zealand foresters will find many of the same fungi doing identical damage in this country ; among these may be mentioned *Fomes annosus*, *Polyporus schweinitzii*, *Armillaria mellea* and *Stereum sanguinolentum*, all of which occur on kauri.

Chapter VI deals with the rots of broad-leaved trees, among those found also in this country are *Daldinia concentrica*, *Ganoderma appplanatum*, *Collybia velutipes*, *Pleurotus ostreatus*, *Stereum frustulosum* and *Stereum purpureum*.

In Chapter VII an account is given of decays of felled timber and timber in service in the open ; of the fungi described *Lentinus lepideus*, *Polystictus versicolor*, *Polyporus adustus*, *Stereum hirsutum*, *Trametes gibbosa*, *Schizophyllum commune*, *Lenzites trabea*, *Pholiota adiposa* and *Polystictus hirsutus* are found also in New Zealand.

Chapter VIII deals with decays of timber in buildings and structures and includes *Poria xantha* which is one of the most destructive rots in the north of New Zealand.

Of the next four chapters, XI deals with the prevention of decay in felled and converted timber during storage and shipment, X with the decay of timber in various uses, XI with the deterioration of composite wood and manufactured products, and XII with the natural durability of timber.

Chapter XII gives an account of the preservation of wood by chemicals and XIV with the staining and discoloration of timber.

The Appendix describes the wood-block method of test for the toxicity of wood preservations to fungi.

There is a comprehensive index and each chapter is followed by a valuable list of references applicable to each section.

There are few printing errors of importance except for the unfortunate but obvious inversion of titles on plate 4.

There is nothing in this volume which any forester would not benefit by studying, in particular Chapters I, V, VI, VII, VIII and XIV deal with matters of vital importance in forestry work, while those engaged primarily on utilisation would be well advised, in addition, to make a careful study of the remaining chapters.

While the present volume consists mainly of reprints of previous publications which are no longer available, there is, in addition, much new information which brings the various subjects up to date, many controversial points are clarified and lines of future research are indicated.

In Great Britain the kinds of timber and species of fungi are far smaller numerically than in New Zealand, but nevertheless, we find many of the rots common to both countries and the underlying principles are the same, it is to be hoped that the forest pathology laboratory in New Zealand will produce a similar publication relating to this country.

G.B.R.

The Use of Aerial Survey in Forestry and Agriculture.—By J. W. B. Sisam. Imperial Agricultural Bureaux. Joint Publication No. 9 (Imperial Forestry Bureau and Imperial Bureau of Pastures and Field Crops). 1947. 7/6.

For the last twenty-five years aerial photography has been used to an ever-increasing extent for a variety of forestry and agricultural