

poplar timber for special purposes are, however, less enthusiastic, and allege that the timber is brittle as compared with that of other species. As the hybrid is of comparatively recent origin, it is doubtful whether any timber over 25 years of age has found its way on to the market: and so there is equally some doubt whether this adverse opinion does not arise from the well known conservatism of users, and prejudice against a new product. There is, however, a general consensus of opinion among both growers and users that it gives a large volume of timber from very straight logs at an early age: and that, if stands are pruned, this timber is very clean and knot free. For the purposes for which poplar timber is at present used in New Zealand, this seems an adequate recommendation for the species here, where the fact that its timber tends to be "hard and stiff" as compared with that of some other less easily grown poplars would probably be of little moment.

The intense and renewed interest in poplars evidenced by these and other recent publications in Europe is explained in the *Revue du Bois* publication as a deliberate step in the various nations' attempts at forest rehabilitation after war damage. The destruction of available timber can most quickly be repaired by poplar culture, even though all other stands of war-destroyed timber are quickly replanted. It is stated that, even now, the consumption of poplar timber in log sizes exceeds 35 million cub. ft. per annum in France alone; and that smaller pulp wood sizes consume much more. The emphasis laid, therefore, on rapid extension of poplar stands for replenishment of war-damaged woods is readily understandable: and quite logically, it is argued that the way to achieve it is to understand the genus and select its best species or hybrids.

C.M.S.

Elementary Forest Mensuration.—By A. D. McKinnon. Published by the N.Z. State Forest Service, Wellington, 1947. 112 pp., 39 fig., paper covers. Price 6d.

Surely this must be the best value for sixpence put on to the book market for some time. In 112 pages McKinnon has combined the essentials of basic Mensuration with the particular requirements for conditions in New Zealand. The need for a book on this subject has long been felt, and in a condensed form the subject matter here has been expounded with clarity and common sense.

At first reading the book appears to be disjointed, and somewhat illogical in the sequence of chapters introduced, but on second thoughts the reason for this is apparent and entirely justified. McKinnon has departed from orthodox procedure and included in Chapter V an introduction to Elementary Forest Surveying which undoubtedly forms a desirable addition to a book of this kind. By this means

sufficient information is given to show the important link existing between forest mensuration and forest surveying, two subjects which are usually treated separately.

The first part of the book shows the ways and means the forester has of dealing with the problems of mensuration, while the concluding chapters indicate how to apply this in practice.

The diagrams have been selected to cover a wide range of elementary subjects so that nothing is left to chance for the beginner. A number of questions are appended at the conclusion of each chapter and these form useful guides to some of the problems confronting the forester in the field and at the same time afford the beginner useful exercises. In this connection a set of answers at the end of the book would have served a useful purpose.

Timber Cruising is dealt with in four sections, but it is impossible to do full justice to this subject in so small a space and it is hoped that in this connection a separate publication will be made available at an early date.

It is to be regretted that such a useful book as this should have emerged from the printers with so many errata when an hour's checking would have eliminated the majority of mistakes. Also much space could have been saved without loss of clarity had more attention been given to printing and spacing. This particularly applies to some of the mathematical calculations as given on pages 15, 39 and 111.

As a text book for instructional purposes a long felt need has been supplied, and as a refresher for those whose forest mensuration has become a little rusty it can be recommended as a desirable tonic and source of reference.

J.A.B.