

orders for such classes of produce as stakes, pickets, posts, poles, &c., with the result that, although salvaging is going on constantly, some waste is inevitable, though naturally every effort is made to reduce this to an absolute minimum. The moral is to reinstate silvicultural improvement measures as soon as the man-power can be made available.

66. *Waipa Milling Operations*.—The production of sawn timber at the Waipa log-frame mill reached a new record of 7,696,000 board feet (6,346,000 board feet). Owing to previous commitments and to directions of the Timber Controller, it was still necessary to sell some of the output on the open market—viz., 2,182,000 board feet (4,092,000 board feet). At 31st March, 1943, the Waipa stocks were 1,853,490 board feet (1,565,504 board feet).

67. *Waipa Box-factory and Planing-mill*.—The year's operations represent the first full year in production, but although 4,380,000 board feet were converted (2,627,000 board feet), the mill is capable of dealing with at least the whole of the Waipa sawmill output, amounting to the 7,696,000 board feet already recorded. The production consisted principally of export containers, including 133,000 cheese-cases, 127,000 meat-cases, 102,000 biscuit-cases, 14,000 boot-cases, 56,000 vegetable-cases, and 200,000 barb-wire reels. In addition, 86,000 fruit-cases and 14,000 miscellaneous cases were made.

Owing to the date of this report, final financial accounts are not available, but preliminary accounts for the combined sawmill and box-factory operations show a profit of £13,000 (£5,508).

68. *Departmental Wood-preserving Activities*.—The creosoting plants at Rotorua and Conical Hills have maintained their production of creosoted poles and fencing-posts. The third plant, at Hanmer, however, has been inactive for a period owing to all available labour being engaged on the production of poles, stakes, &c., to be used untreated on various defence projects. Poles for creosoting were also prepared, but it has not been possible to treat the majority of these, owing to their being insufficiently seasoned. Defence requirements of untreated poles, stakes, &c., from the forests normally supplying the requirements of the Rotorua plant have made it impossible to maintain seasoning-yard stocks, particularly of posts, at a satisfactory level, and the impact of this will be felt next year, when it will be necessary to cease creosoting operations for about four months. Appendix III summarizes the year's activities in this field.

69. *Departmental Objective in Commercial Development*.—The furnishing of high-quality timber products at the lowest possible price is the ultimate objective of departmental participation in commercial development. In sponsoring the national grading rules and the development of kiln drying, the Forest Service has made outstanding contributions to the indigenous-timber trade. In the exotic-timber trade much more was required. Only small logs were available, as compared with the large logs so characteristic of the indigenous forests, and with infinitely higher costs in both logging and milling. Neither could the sawn exotic timber be abused as in the case of the indigenous timbers, but had to be protected against sap stain or kiln dried. What was worse, many users were prejudiced against the timber on account both of poor sawing and bad sap staining. The only corrective was to develop the use of new types of logging and sawing equipment and of treating methods for protection against sap stain. After considerable investigation, a satisfactory solution to these various problems was evolved and is typified in the Waipa log-frame sawmill.

Insignis-pine prices throughout New Zealand range from as low as 16s. 9d. to as high as 22s. 9d. per 100 board feet on an ex-mill basis, but with only one or two exceptions these apply to sawn timber produced from relatively large logs much cheaper to log and mill than the small logs (average diameter is 10 in.) sawn by the Waipa State mill. Yet the average price realized by the Waipa mill is only 20s. 4d. per 100 board feet for green sales ex-mill, and considering that the mill is only in the second year of full production the operations are showing a reasonable profit and paying for the growing of the timber; the venture is a valuable contribution to the solution of the Dominion exotic utilization problem.

CHAPTER IX.—TIMBER TRADE

70. *Production of Sawn Timber*.—Full details are presented in Appendix VII. The annual cut for the year ended 31st March, 1942, was 324,000,000 board feet (342,000,000 board feet), this reduction of 5 per cent. being due to the accumulated loss of experienced workers to the armed Services. Although a number of mills have cut out meantime, the released employees have assisted to more fully man other operations, and this concentration of production, coupled with the release of skilled and key personnel from the armed Services and the working of extended hours, is estimated to yield an annual cut for the year ended 31st March, 1943, of 350,000,000 board feet.

71. *Species cut*.—With an extraordinary demand for boxing and crating timber for the packing of export produce both for Great Britain and other theatres of war, the cut of insignis pine for the year ended 31st March, 1942, increased to 56,000,000 board feet (53,500,000 board feet), whereas with the exception of beech, which remained at the previous year's level (9,326,000 board feet), all other important species registered a decrease of between 6 per cent. and 20 per cent. For the past year, however, it is anticipated that the indigenous species will show, as a result of the working of more extended hours, a greater recovery in production than insignis pine.

72. *Man-power*.—In spite of determined attack upon the man-power problem, many mills have been inadequately staffed, if not in numbers, then in experienced and young fit men. Few, if any, other industries are believed to require the same high standard of physique as the logging and milling sections of the timber trade, and high tribute is due to those who keep the logs moving and the saws cutting, often under most difficult conditions. Credit is also due to those older and experienced workers who have returned