

67. *Waipa Box Factory and Planing Mill.*—This factory only came into operation during the year. Although equipped to deal with the entire output of the Waipa log-frame mill, amounting for the period to 6,346,000 board feet, only 2,627,000 board feet was available for box-shook manufacture, the remaining timber being required by the Office of the Timber Controller for more essential purposes elsewhere. The principal items of manufacture included shooks for 240,000 cheese-crates, 42,000 barbed-wire reels, 25,000 fruit-cases, and 6,000 miscellaneous cases. The allocation of shooks for 240,000 cheese-crates made by the Office of the Timber Controller is regarded as unremunerative business, as many cheese-crate manufacturers operated at a loss on ruling prices, and this, combined with the high initial costs of starting up a new factory, resulted in a profit of only £1,111 on the year's trading.

68. *Departmental Wood-preserving Activities.*—In view of the serious shortage of fencing-posts and poles with high natural durability the three creosoting-plants at Rotorua, Hanmer, and Conical Hills were maintained in as continuous operation as practicable. As all timber for creosoting must be effectively seasoned before treatment, the poor drying conditions experienced during last spring and summer restricted operations materially, more particularly at the two South Island plants. Nevertheless, as disclosed by Appendix III, the volume of wood treated increased from 102,000 cubic feet for the year ended 31st March, 1941, to 157,000 cubic feet for the year under review, whilst the untreated stocks on hand at the end of these two periods were 126,000 and 183,000 cubic feet respectively. The sales trebled from 49,000 to 146,000 cubic feet, this latter figure including 136,000 fencing-posts.

The Department's commercial accounts showed a loss during the initial period ended 31st March, 1941, amounting to £6,337. This was due to the effort made to produce cheap posts in competition with indigenous split produce, but the high labour-costs involved in the peeling or barking of posts and the losses incurred through incipient decay of timber while seasoning preparatory to treatment resulted in the creosoted posts being sold at below cost of production.

While peeling-costs have since been reduced and post-selling prices advanced to £16 5s. f.o.r. Rotorua for Size 1 and to £11 15s. f.o.r. Rotorua for Size 2, these still appear to be insufficient to return an adequate profit, that on the year's trading amounting to only £239. In contrast, creosoted poles command a good profit; and in view of the fact that as much plant-capacity as possible is now required for the creosoting of poles for essential war purposes it is anticipated that the next year's trading will show a profit.

69. *Departmental Participation in Trade.*—The purpose of departmental participation in the timber trade cannot be too often restated. The Forest Service is faced with the development of a man-made exotic-forest resource already totalling over 440,000 acres and costing over £5,958,650. No experience whatsoever was available to it either in New Zealand or elsewhere as to how and when logging and milling operations, &c., could be undertaken in these softwood forests and what products could be manufactured, and it was imperative that both equipment and operating technique should be developed well ahead of any large expansion in exotic-softwood demand. It was for this reason that the Waipa group of logging, milling, box-factory, and wood-preservation plants have been developed on the Whakarewarewa State Forest of 8,000 acres, and the experience already gained is of far-reaching importance. The necessity for silvicultural or improvement cuttings at appropriate times has been amply demonstrated, the limitations of plant and equipment determined, the practicability of precision manufacture, and of anti-sapstain treatment established, and the high utility of the timber and its manufactured products duly proven. Further experience will decide the practicability of re-establishing the forest by natural regeneration, and allow the development of further refinements in manufacturing technique. Varied as these questions appear, all are directed towards the major objective of reducing both forest-growing and timber-manufacturing costs to an absolute minimum so that the public may receive its timber supplies at the lowest possible price.

CHAPTER IX.—THE TIMBER TRADE.

70. *Annual Dominion Production of Sawn Timber.*—As reported by the Government Statistician the annual cut for the year ended 31st March proved to be 342,000,000 board feet, as compared with an estimated cut of 340,000,000 board feet. The estimated cut for the year ended 31st March, 1942, is 310,000,000 board feet, the reduction being due to the withdrawal of men from the industry for the armed Services.

71. *Species cut.*—The distribution of production by species and districts for the year ended 31st March, 1941, is scheduled in Appendix VII, the outstanding figure of which is the increase in insignis-pine production to 53,000,000 board feet, representing almost one-sixth of the country's total timber production.

72. *Man-power Survey.*—Owing to a serious decline in production during the July–September quarter of 1941, a man-power survey of the timber industry was undertaken in October, as a result of which it developed that of its normal complement of 6,700 the industry had lost 1,800 to the armed Services, but had gained 900 from other industries and occupations, giving a working complement of 5,800, or about 86 per cent. of normal.

73. *Equipment for Timber and Allied Industries.*—As a result of continued supply and shipping difficulties, few units in either the sawmilling or boxmaking sections of the industry found it possible to secure delivery of new equipment except in the case of relatively small machines, and increasing competition for second-hand equipment has been strongly in evidence. To conserve petrol and tires, schemes are being developed for the establishment and reinstatement of forest and timber tramways, particularly those which may be made to serve a number of sawmills.

The new plywood factory established by Messrs N.Z. Plywoods, Ltd., and the Pinex structural fibre board factory erected by Messrs N.Z. Forest Products, Ltd., both at Auckland, are now virtually in full production and relieving the acute shortage of plywood and fibre board resulting from reduced imports.

74. *Domestic Markets.*—The demand for building timbers continued in excess of supply throughout the whole year, and to meet even that for the more important work it was necessary to draw heavily upon stocks both at mills and in merchants' yards until the entry of Japan into the war, supplies of the higher grades were reserved for the building trade, since when, however, the whole production has