

purposess, a fair market for a reasonable quantity of the wood might be expected, particularly in districts distantly situated from railway communication. The commercial outlook of general afforestation should not be judged by the results instanced above, as, in the first place, planting was conducted principally for shelter purposes at wide spacing-distances, to the detriment of the production of good boles, and, secondly, the necessity of having to dispose of a large quantity of timber irrespective of market conditions. Although the *Eucalyptus* plantations were not damaged to such an extent by the gale, a small sawing contract of mixed gums was let on royalty at 2s. per 100 superficial feet. This material is being used to much advantage in local gate-making and bridging. As might be expected, the *Eucalyptus* firewood is easily sold at 14s. per cord on the ground, and thus showing a profit of 6s. per cord over and above splitting and stacking expenses.

Notwithstanding a comparatively dry season the planting of 75,000 *Pinus Laricio*, 54,150 *P. ponderosa*, and 55,000 *P. radiata* at Ardlui Road reserve was attended with a very fair measure of success under the direct supervision of the Board's able overseer, Mr. D. McIlwraith. In addition, experiments were undertaken with *Populus deltoides* and seedling *Eucalyptus viminalis*, *E. Macarthuri*, *E. sieberiana*, *E. piperita*, *E. Muellerii*, and after success seemed assured a late frost destroyed every vestige of young foliage on the tender trees, and only a small proportion of these have since made a recovery. The experiment is to be repeated this season, when a more favourable issue is hoped for. Probably 140,000 trees will be supplied to the Board this year from Tapanui and Hanmer Springs Nurseries.

CONCENTRATION OF RECORDS AND SURVEYING PLANTATIONS.

Record-keeping.—Towards the end of the year an official inspection of the district offices was made and a reorganization of record-keeping decided upon. It was considered that by relieving the Nurserymen in charge at Ranfurly and Hanmer Springs of the bulk of their clerical work more time would be at the disposal of these officers to carry on their more important outside duties. All imprest work and concentrated records are now kept at Tapanui, and although the office-work is increased by this new departure the introduction of specially prepared printed forms will simplify matters. Every effort will be made to carry on the office routine with the present assistance.

Surveying Plantations.—Good progress was made with the surveying of plantations, and although Ranger Leonard has completed all preliminary work in connection with Dusky Hill, Conical Hills, and Naseby Plantations, the plans unfortunately are still in an unfinished state. It is hoped, however, ere the presentation of the next report that the tabulation of records and preparation of working plans for each station will be completed, although the ascertaining of detailed expenditure on some of the earlier-planted blocks will surely be an intricate proposition. With the advancing years the compilation of reliable statistics associated with young forests becomes more perplexing, and the surveying of our Hanmer Springs Plantation should be looked upon as an urgent matter. Although much detailed information is retained there for use in the drafting of the working-plans, a satisfactory statement cannot be furnished until each block of trees is accurately defined.

GENERAL.

A gradually increasing amount of work inseparable from an expanding branch is being ably undertaken by all officers, to whom I desire to express my appreciation.

It is also desirable to place on record the names of the following employees who have joined the Expeditionary Forces: A. Barrett, R. Beresford, J. Brown, G. Burnside, E. Collins, N. Collins, W. A. Fraser, R. Gregory, S. King, P. Knowles, D. J. Lowry (killed), N. Morton, L. Rainton, C. Risk, R. Risk (died of wounds), H. J. Screen, F. Smith, J. H. Tregerthen, J. R. Tye, W. Woods.

R. G. ROBINSON,
Superintending Nurseryman for the South Island.

TAPANUI NURSERY, OTAGO.

(Nursery Foreman, W. T. Morrison; area, 173 acres; altitude, 500 ft.; established, 1897.)

An unusually favourable season for nursery-work was experienced during the past year, and the result generally of operations has been most satisfactory. With the exception of an exceedingly dry spell during August the rainfall was rather above the average, and an abundance of sunshine with good showers well distributed throughout the year, thus doing away with the necessity of watering seedlings—quite an unprecedented occurrence in our experience here. The dry spell in August caused a good deal of anxiety in regard to transplanting operations; but subsequent growth in almost all cases has been good, owing to timely showers occurring at the critical period. A marked feature of the season's work has been the phenomenally good results from the transplanting of seedling *Pinus radiata*, which has usually been attended with a considerable percentage of loss. Probably the late lifting and immediate transfer of seedlings from beds to lines was responsible for this improvement. The trees are a good healthy lot, and the proportion of deaths will likely not exceed one in twenty.

Raising of Seedlings.—Seed-sowing operations were commenced on the 13th October and completed on the 1st November, the actual time occupied being seven days, intervening wet weather delaying the work. The resulting crop of seedlings is rather above the average, and all have made excellent headway. *Pinus radiata* has made rather too vigorous growth for successful transplantation, and it will be necessary in following sowings of this variety to delay the operation till about the latter part of November. A second sowing made in January has met with equal success, and although the seedlings are small the result will augment the previous sowing by almost 500,000 plants. An excellent crop of nearly two million *Pinus Laricio* eventuated from 125 lb. of seed, whilst equally good results were obtained from smaller sowings of the other species tabulated below. The