

## EWEburn NURSERY, OTAGO.

THE past year's rainfall (19.58 in.) is the heaviest recorded since the commencement of the nursery. The lowest fall was in 1889-90 (13.42 in.).

Only 78° has been registered as the maximum heat, and the lowest (16°), on the 25th August. The thermometer fell below freezing-point on no less than 205 nights throughout the year, as against 166 nights for the preceding year.

Exceedingly cold sunless weather has been experienced throughout the year, consequently the general growth of nursery stock is not up to the average. Seedling trees and larch have been very backward, and are barely of sufficient size to prevent their being thrown out of the ground by the coming winter frosts, although a thin coating of straw will be spread over the seed-beds. *Pinus Austriaca* has not germinated so well as usual, consequent on the partial failure of this seed-crop in Europe last year. When the seedlings are weakly, and a sunless summer follows, considerable numbers "damp off" during the warm weather. *Pinus ponderosa* germinated well, and have since made fine sturdy plants.

The following species of trees were sown for experimental purposes, and the results to date are placed on record: *Pinus Canariensis* has done exceedingly well so far, but as it is not quite hardy its suitability for this rigorous climate cannot be decided until the winter is over. It, however, surpasses any other variety here for quick growth, and makes good straight plants. *Pinus Sabiniana* has not done well. It is a very hard seed, and all have not germinated. It is of much the same habit as *Pinus Benthamiana*, and if as hardy as that species should do very well here. *Pinus excelsa* has done very poorly, and does not seem to be a variety suited to poor dry soil. *Pinus rigida* has done fairly well, but until it has stood a winter little can be said for or against it. *Pinus Halepensis* has done very well, and seems to be a variety easily grown and vigorous. *Robinia pseudo-acacia* has grown about 10 in. high, and it should make a very good tree for growing on "salty patches," so prevalent here. *Eucalyptus coriacea* has done fairly well, having made good growth, and so far the recent frosts have not affected it.

Seed-sowing commenced on the 25th October, and as the weather was broken it was not completed till the 12th November. The date of sowing was somewhat later than last year, owing to the unfavourable season then experienced.

*Two- and Three-year-old Trees.*—*Pinus Austriaca* still remain on seed-beds, and have made splendid growth. It is intended to line these out instead of "lining in" close as heretofore. Some sown somewhat earlier were lined in close, but these have not done well, as the weather at the time was unfavourable for planting, which caused an unusually high percentage of loss. *Pinus ponderosa* is still on seed-beds, and has done very well. It is intended to send the strongest direct to the plantation. A large number have made from 6 in. to 8 in. growth this season. *Pinus Benthamiana* has also done well, and is still on seed-beds. As a rule this tree does well here, but is difficult to transplant. Last year 2,000 were sent direct to the plantation, and they have with one or two exceptions made good progress. A similar experiment will be carried out this next season. Larch has also done well this year—in fact, it is the most even crop raised of this species. As a rule they lose their leaders and are inclined to spread, but are more upright this season. Rowans have as usual done well, and have made about 15 in. of growth.

The work of lifting trees for Survey Paddock Plantation was commenced on the 1st August, and completed on the 30th October. The number of trees lifted and sent to the Survey Paddock Plantation was 81,125.

The weather experienced during transplanting was very cold and frosty for a time, and the ground being wet made it much harder to work. In all 132,308 trees were lined out, 203,560 trees were also lined in close. The cost of lining in trees was 5s. 3½d., and the cost of lining out 7s. 2½d. per thousand. These figures include lifting, sizing, and puddling.

The number of trees of all ages to date in the nursery amounts to 964,671, and the number of trees grown at nursery since the commencement is 1,463,811, the value of same being £2,261 18s. 9d.

The number of trees sent out from the nursery during the season was 120,947, supplied to the following places: Survey Paddock Plantation, 81,125; Tapanui Nursery, 14,500; Eweburn Reservoir, 24,722; Stock Department, Waipiata, 200; and Kokonga School, 400. The number of trees sent out to plantations, &c., since commencement of operations amounts to 342,107, the total value being £1,009 18s. 9d.

The shelter plantations around the nursery have made excellent growth this season, and the effect will very soon be felt to advantage. Although it is only about three years since these were planted, some have reached a height of 12 ft., while others in salty patches have not reached half this height. When the trees are high enough to make shelter the results in lining out will be more satisfactory.

The present living-accommodation for the workmen is much too small for requirements. During the planting season it is essential that the hands live on the premises, as few men can be got in the immediate neighbourhood, and long walks to and from work are not conducive to good working results. As frequently occurs here, when the men live at a distance one or two will turn up to work on a wet day, and should the weather clear a start could be made at lining out, but unless the full complement of hands are present this work is hindered, and costs more money, as well as time being lost at the proper season.

It would also be a convenience to have a sizing-shed erected, where this work could be carried on in comfort during wet cold weather. Handling trees in Maniototo under cover of a tent, as is done at present, is neither pleasant nor profitable work when the hands and feet are numbed with cold.