13 C.—3.

Pinus resinosa in the younger state is subject, in isolated cases, to attacks by aphis. At nine years it is perfectly healthy, and averages 1 ft. height-growth for each year planted.

Pinus excelsa are a poor uneven lot, and have been repeatedly cut back by the frost.

Thuja plicata were planted in 1906 on poor soil on an exposed situation, and do not average more than 4 ft. Where sheltered and in good soil there are specimens up to 14 ft. high. As this is a shadebearing tree it would probably prove a success as an underplant.

Three plantings of Pinus Jeffreyi have been made, the fourteen-year-old trees being 22 ft. At all stages they have proved to be frost-hardy, resembling Pinus ponderosa in this respect, but have

not made the same height-growth as that species.

Pinus ponderosa, variety scopulorum, is fairly frost-hardy, but in the early stages is a comparatively slow grower. For five years the average growth is $2\frac{1}{2}$ ft.

In sheltered situations the Pinus teocote continue to make strong headway, but have been killed

outright in frost areas.

Pinus patula, Pinus Massoniana, and Pinus Montezumae are all making a splendid show. Montezumae made about 2 ft. of new growth during the past season, and will probably give the lead to the others in a few years' time. The aphis has almost entirely disappeared from Pinus Massoniana.

Pinus pinaster are fairly numerous in places. Evidently the seed was mixed with that of Pinus

riaca. The trees are healthy, with a height-growth equalling that of Pinus ponderosa. An area of 135 acres of larch was thinned to about 8 ft. apart, costing from £1 0s. 3d. to £1 16s. 4d. per acre. On 34 acres the poles were carried out and stacked on the fire-breaks. cost of this work varies according to the length of time the trees have been cut, as dry larch weighs only a fraction of freshly cut timber. A block of larch, in mixture with redwood, was thinned, and the redwood have already responded to the improved conditions and have made a splendid new

A survey has been made of two areas of land adjoining the plantation which were set apart for afforestation purposes. These have been subdivided into blocks suitable for planting, and a camp will probably be established on the larger area in the near future. The available plan of the planted area is on too small a scale to include much detail, and it has been necessary to survey some of the blocks preparatory to preparing plans drawn to a 10-chain scale. The plantings on some of the older blocks are very complicated, and an accurate plan is necessary for the proper working of the

As a result of the reduction in the expenditure, only maintenance-work could be undertaken uring the summer months. For obvious reasons special attention was paid to the boundary firebreaks, and these are probably safer now than they have been for a number of years. The fire-breaks were kept in order by ploughing and disking, and where possible were widened 5 chains by cutting and burning off the growth outside the boundary-fences. As the trees become older it will probably be necessary to further extend these breaks, especially where the adjoining land is covered with fern and manuka. For a further insurance against fire underscrubbing a quarter of a chain wide will be proceeded with round the different blocks, the boundary having first consideration. After the dead branches have been carried out and burnt, the danger from fires entering the plantation will be considerably reduced. The underscrubbed areas will be widened when necessary.

An experimental burning of charcoal was made with 7 cords of larch wood. This timber is,

however, too light to make a profitable charcoal.

About 15 tons of hay was harvested in good condition. Rabbits were kept in check by trapping and poisoning. This work is now being undertaken by the Fire Ranger during wet and broken weather, a thorough poisoning being given periodically. The new arrangement will probably answer the purpose quite as well as having a man permanently employed as rabbiter, and at a less expenditure. The average number of men employed during the year was 16.03. A record of rainfall and temperature is attached, and also a summary showing area of plantation and how occupied.

Rainfall, Temperature, &c.

| | Month. | | | | Number of Days Rain fell. | Temperature. | | Number of |
|------------------------------|--------|-----|--|--------------|---------------------------------|------------------|-------------------|-----------------------|
| 1915. | | | | Rainfall. | | Maximum. Deg. F. | Minimum. Deg. F. | Days Frosts occurred. |
| | | | | | | | | |
| May | | | | 1.53 | 10 | 64 | 2 3 | 17 |
| June | | | | 6.94 | 20 | . 61 | 19 | 14 |
| July | | | | 5.16 | 12 | 5 9 | 17 | 1.7 |
| August | | | | 3.53 | 13 | 67 | 17 | 16 |
| $\operatorname{September}$ | | | | 3.93 | 18 | 69 | 22 | 9 |
| $ \frac{1}{\text{October}} $ | | | | $4 \cdot 12$ | 18 | 76 | 27 | 3 |
| November | | | | 6.96 | 22 | 77 | 30 | $\frac{3}{7}$ |
| $\mathbf{December}$ | | | | 1.00 | 6 | 81 • | 27 | 7 |
| 2000111001 | 1916. | • • | | 1 00 | | 0.2 | -, | |
| January | | | | 1.13 | 8 | 82 | 25 | 4 |
| February | | | | 0.76 | 7 | 85 | 34 | |
| March | • • | | | 3.00 | 10 | 83 | 2 8 | 1 |
| | Totals | | | 40.51 | 151 | | | 105 |