

ROBERT NAIRN sworn and examined. (No. 22.)

1. *The Chairman.*] You are a nurseryman?—Yes, a member of the firm of Nairn and Sons.
2. Do you grow trees on a large scale for forestry purposes?—Yes, of many different kinds.
3. What is the average time from the planting in the nursery until the trees are ready to send out?—From two to four years; pines about two years, and the deciduous trees from three to four years.
4. At what price per thousand does the nursery sell forest-trees?—By making a speciality of pines and forest trees generally we could beat the man engaged in general nursery work. They would be grown on cheaper land admitting of horse-labour. Under these circumstances it is a profitable industry. I can supply you with a price-list of our forest-trees.
5. From the building point of view, what timber do you consider most profitable to grow?—Many mistakes have been made in the past as to the character of the trees that should be planted, and now we are limiting the industry to trees that can be grown successfully for commercial purposes. *Laricio*, *insignis*, *ponderosa*, *Douglasii* can be grown under favourable conditions; the larch in valleys and in places where there is plenty of moisture.
6. What age would some be you have planted out?—Twenty years.
- 6A. At what distance apart?—Too far, according to present forestry ideas.
7. What about the gums?—More of the gums should be grown on the plains and on land which is of little value. In California, which has a climate similar to ours, they grow gums with great success.
8. What do you think of the poplar as a timber for certain purposes?—None of the authorities are favourable to its being used as a timber. I advocate the planting of *mnolifera* and *tremula*. The latter furnishes the soil with food, and forms first-class shelter.
9. *Mr. Lethbridge.*] What authorities did you look up as to the poplar?—Bailey, an American authority; and Nicholson.
10. What about its utility for paper-pulp?—They did not say anything about that.
11. *Mr. Murdoch.*] As a shelter-plant it is very good?—Nothing better. I advocate poplar *pyramidalis* for shelter for orchards.
12. *The Chairman.*] Would a belt of poplars 1 chain wide be an effective fire-break?—Yes, because it does not catch fire easily.
13. *Dr. Cockayne.*] Are you acquainted with Maw's work on forestry?—No.
14. He writes as follows regarding the black Italian poplar: "The timber is white, soft, and tough, and does not easily fracture. It is more nearly fireproof than any other timber, and for this reason should be often used for floor-boards." Do you think that wood would do for butter-boxes?—It should do very well, being cheaply grown, and light, and of a suitable colour.
15. Do you think a 4-chain belt around a pine forest would make that forest virtually fire-proof?—I think it would.
16. As regards the propagation of poplar, would it be cheaper to raise a thousand *Pinus Laricio* or a thousand poplars?—A thousand poplars, easily.
17. Would you grow the cuttings in the nursery?—Yes, packed quite close together. It may be necessary to strike them in the nursery first. They grow much quicker than *Laricio*. No preparation is needed for the planting of poplars. They are very much the cheapest; but the advantage of putting them in the nursery is that they would be prepared ready to put in their proper place straight away, and you can work amongst them better.
18. *Mr. Adams.*] Would not one difficulty be getting sufficient cuttings?—After the second year you could get as many cuttings as you wanted.
19. *The Chairman.*] Has your firm undertaken the planting of large areas by contract or otherwise?—I do not do that kind of work. It is limited to two firms in Ashburton, where land is very much cheaper than here.
20. That is a large factor in forestry operations, on account of the mounting-up of the compound interest in connection with the rental value. Have you gone into that aspect of the question?—It would not be possible to carry on such operations on a large scale close to a city excepting on poor land.
21. *Dr. Cockayne.*] Does it make any difference if you grow trees on good soil on the low lands for subsequent planting-out in other places, or on the actual spot where they are to finally remain?—It does not make much difference if your plants are well prepared. If you have a soil suitable for lifting purposes—soil with a dash of clay in it—the plants transplant better. It depends on the soil and not so much on the locality, and how they have been raised.
22. Is it now almost useless to grow *Cupressus macrocarpa*?—Not at all. Many are still grown, and very successfully, reaching to very large size. I have seen some diseased, but when grown from healthy seeds they grow up strong and well.

WILLIAM BLYTH BUCKHURST sworn and examined. (No. 23.)

1. *The Chairman.*] You are the Crown Lands Ranger for North Canterbury?—Yes. I have been here six years, and have a good acquaintance with the northern district.
2. Do you visit the scenic reserves occasionally?—Yes.
3. Have you heard any complaints about them becoming breeding-grounds for noxious weeds?—Yes, but not as a rule; only one or two instances. One was at Four Peaks, but it is not in my district.