

23. *Dr. Cockayne.*] Do you keep a record of the cost of planting out the trees?—Yes, to the halfpenny. Until quite recently I had to do the whole of the work myself, but now I have the assistance of a clerk.

24. Had you orders from the Department to do the work yourself, or did you do so of your own accord?—It was a recognized thing that I had to look after everything until the new departmenture.

25. Are you the general adviser on all matters of forestry for this Island?—Yes; the Domain Boards first communicate with the Head Office, and then their letters are sent to me to report on.

26. Have you anything to do with the instruction classes?—The work of education falls on me in connection with students in forestry.

27. *Mr. Adams.*] Is there anybody who could take the matter up if you were not doing it?—I do not know.

28. *The Chairman.*] What other duties have you?—I also look after the stores for the South Island, involving a sum of £7,000.

29. In the returns showing the cost of the nurseries for the year 1912 is any allowance made by way of interest on the money invested, or the rental value of the land?—No, that has not been kept. The amount shown is the actual cost.

30. *Dr. Cockayne.*] The Department has never taken into consideration the question of the compound interest?—Never. I have included any areas the Government have had to purchase; but the areas we have operated on in the South Island have been Crown land, and no allowance has been made in that case for compound interest.

31. Have you had any experience in this Island in regard to sowing *in situ*?—Yes, at Dusky Hill and Conical Hills, and the result has been a failure.

32. Have you ever tried burning the manuka scrub, and sowing on the same ground the seeds of eucalypti *in situ*?—Not in the South Island, but in my private experience I have been successful.

33. Have you seen the eucalypti on the Canterbury Plains which have been sown and raised *in situ*?—Yes, and I have charge of a number of those places.

34. What sowing *in situ* have you tried at Dusky Hill and the prison plantations?—The experiment we conducted under almost ideal conditions was the sowing of acorns. We were careful in selecting only the most vigorous seeds, and under ideal conditions the result was satisfactory.

35. Have you tried sowing any pines *in situ*?—I do not think they would be successful.

36. Are you aware that in a certain class of soil in New Zealand pines are coming up spontaneously?—In this country if you sowed *in situ* such trees as pines the leaders would be so interfered with that they probably would not get through at all; they are exceedingly delicate.

37. *The Chairman.*] Have you any suggestion to make as to the kind of country afforestation operations should be carried on in?—If we get any rougher ground than we are operating on at present we might as well stop planting.

38. *Dr. Cockayne.*] What kind of ground do they afforest in Germany?—Similar ground to ours, but they do not get the extremes of temperature we have here. An even temperature is a very important factor in successful tree-raising.

39. *Mr. Murdoch.*] Do you consider it best to have a central nursery for the South Island, or several scattered about in different places?—We have already established our nurseries, but when we started the system it would have been very much better to have had one big central nursery in the South Island. The trees sent down here from Dumgree have turned out very successful. It is quite possible for trees to be sent from anywhere in the South Island to Otago Central with success.

40. Then it would be advantageous to keep this central nursery here at Tapanui?—Tapanui is not a good place for a central nursery, the heavy soil being very much against it; and in bad weather the men have to be found work at other occupations, which makes our tree-planting unprofitable.

41. Where would you suggest for a central nursery?—I would not like to say unless an inspection of the areas could be made. Somewhere in the Timaru district might do.

42. *Mr. Adams.*] At Willowbridge, Studholme Junction?—Yes.

43. What became of the oaks planted at Hanmer some time ago?—They did very well; also the ash. The latter started a quick growth, but afterwards they went back. With the exception of the Dusky Hill plantation oak-growing has not been a success.

44. *Mr. Murdoch.*] Could a piece of poor country where the bush has been pretty well killed out, but where some may still be growing, be successfully planted with foreign trees?—Yes, in the case of any reserves which are pretty well worked out I think a system of underplanting could be successfully accomplished.

45. I refer to comparatively open milling-forests where the *Pinus insignis* has grown rapidly, exceeding everything. Have you seen such a case?—It is quite possible. It would grow very rapidly if sheltered.

46. *The Chairman.*] If a central nursery were established the cost of supplying trees to different parts of the Island would be cheaper than to establish nurseries at several places where separate staffs would have to be maintained?—Decidedly so.

47. And if you could double, or quadruple, your output the cost would be proportionately lessened?—Quite correct.

48. *Dr. Cockayne.*] From the data you have could it be definitely ascertained whether or not it would pay to abandon the present nurseries?—It would take a year to decide, and would require a series of experiments. No nursery should be started unless there is a large area of plantable land in the vicinity, and a nursery should not be isolated. I do not think the Government should attempt to afforest any area under 1,000 acres. There should not be only one plantation in its vicinity. I may say that the *Pinus Laricio* crop has been a failure this season all over the world, and it is our principal crop here.