

142. What would you say would be a fair thing to charge for seasoned timber—1s. a hundred extra?—One shilling a hundred would not look at it. It would probably be 2s. to 2s. 6d.

143. An extra 2s. a hundred would make a difference in the cost of the ordinary cottage of £10?—Yes, about that.

144. But there would be better timber in the house?—Yes. In Christchurch they are more particular, and their timber is better seasoned.

145. *Mr. Field.*] I mentioned that the price of rough rimu in Wellington was 10s., and Mr. Clarke mentioned 14s. 6d. I was referring to the sawmilling price, while Mr. Clarke was referring to the timber-merchants' price?—I could not imagine it was selling at 10s. I said it was only assumption on your part, because I could not believe that it was selling at that price. What is going on in the sawmill is one thing, and in the trade another. Before I came into the box you were talking about kauri, and some one made the remark that we could get very little of it. The line you asked me to give detailed figures of is one of the worst lines we have to handle, hence our desire to get Oregon not only on account of the benefit to the consumer, but because it is better for us to handle.

HUNTER McANDREW sworn and examined. (No. 36.)

1. *The Acting-Chairman (Mr. Arnold).*] What are you?—District Engineer of Railways, Dunedin Section.

2. Have you been requested to make any report to present to this Commission?—No. I have simply come to give evidence, as requested by the Commission.

3. Have you any statement you wish to make?—I have taken out a few notes, but I do not know whether they cover the ground that you wish.

4. What timbers do you use for your sleepers?—On this section the majority of our sleepers are hardwood—jarrah. We use silver-pine and a small quantity of ironbark, a small quantity of grey-gum, and creosoted native timbers and softwoods.

5. You do not creosote in this district at all?—No, not in Dunedin. It is all done at Kew.

6. Can you tell us how many sleepers you have down in the Dunedin Section?—Roughly speaking, I should say about one and a quarter million—perhaps rather under that.

7. And they run about 25 ft. to the sleeper?—Yes, about 23 ft.

8. How many sleepers are you putting down on an average per annum?—Well, for the last three years the average has been 41,000, but it has been increasing. In 1907 we put down 35,000, in 1908 40,000, and this year about 48,000. That is for renewals.

9. Now, are the local woods absolutely unsuitable unless creosoted?—I would not say they are absolutely unsuitable, but the creosoting prolongs their life.

10. What do you say is the life of a local sleeper without creosoting?—Well, I could give you my ideas of the different kinds of timber. What I referred to just now was the softwood sleepers—rimu and kahikatea. I was not referring to silver-pine or totara.

11. What I want to get is the extended life caused by the creosoting process?—In that case, then, it may be well to state this: that on this Dunedin Section, owing to its being largely composed of curves, and sharp curves at that, from 5 to 7½ chains radius, the softwood sleepers are not particularly suitable. The action to which the rails are subjected under the traffic causes them to spread, and the spreading forces out the dogs, which necessitates very frequent regauging. That means bringing the rails into their proper gauge on the curve. That necessitates boring fresh holes for the fastenings in the sleepers, and after two or three gaugings you have got two holes in each intersection—one on each side—so that in three or four regaugings you have eight holes. These holes receive the moisture, which sets up decay. That determines the life of the sleeper. A sleeper which is perfectly sound except in the rail-seat is to all intents and purposes unserviceable as a railway sleeper. There is another matter which may be considered: the pressure on the rails has a tendency to force them into the rail-seat—what we call cutting the sleeper—and that interferes with the surfacing of your track.

12. And you use creosoted sleepers on the sharp curves?—We do use them if we cannot get anything else, but very sparingly. We use them almost entirely on the straights, and use the hardwoods on the curves. The hardwood resists both the cutting that I referred to and the spreading of the gauge to a much greater degree than the softwoods.

13. Is it a fair thing to say that a softwood sleeper has a life of about six years if it is not creosoted, and twenty years if it has gone through that process?—I would not like to make a general statement like that. I should prefer to pick out the timbers, and I would put them in this way, leaving out puriri, of which I have not had much experience: the order of value for general railway purposes is, in my opinion, as follows: If you include puriri, I put that first, then silver-pine, and I say that silver-pine has a life of from fifteen to twenty years on the straights, on the curves something like twelve to fifteen. That is uncreosoted—we do not creosote silver-pine or totara. Totara, in my opinion, has a life of from fifteen to twenty years on the straights, and from five to ten years on sharp curves. The creosoted softwoods are rimu, matai, and kahikatea or white-pine, and in my opinion the creosoted softwoods have a life of from fifteen to eighteen years on the straights, and on sharp curves from five to ten. With regard to uncreosoted sleepers, as far as my experience goes, rimu has a life of six or seven years, birch four to five, kamahi three to four; but I have not had much experience of kamahi. Matai is most irregular as a sleeper, and it has not a long life—probably three to five years—I have known them taken out in three years, and I should say the same with regard to kahikatea—three to four years. We have tried rata in small quantities, but not with success. That completes the list so far as my knowledge of softwood timbers goes.

14. Do you know what class of trees are being planted by the Government on the reserves?—No, except from the knowledge I have acquired from a visit to Hanmer. Principally larch was planted there.