- 157. Have any experiments been made ?—Years ago we did a little bit.
- 158. In your opinion settlement must precede the railway ?—Not "must" precede the railway; but I should say settlement can quite well precede the railway, as it has done in many parts of New
- 159. Should it precede roads?—No. Access is absolutely necessary. That is one of the strong features of the pumice country—the ease with which it can be roaded for giving access to the holdings.

160. Improved access will improve the chances of success ?—Yes.
161. Take the outward freight: could not you carry clover hay to market?—You cannot anywhere in New Zealand. If you start growing it, even if you transport for nothing from the pumice country, you could not sell any very large amount of clover hay.

162. What about oaten chaff?—Yes, it is a saleable commodity up to a certain point.

163. Have you ever known the coming-in of a railway to increase greatly the land-values of a district ?—I am afraid it does. That is one of the things one rather fears, and is in one's mind—that settlement should precede the railway. It is essential, in our opinion, that the country should be developed with the value of the land based at nil. One is rather afraid that if the railway precedes settlement, there will be an inducement to put on a quite fictitious value that will rather restrict than develop settlement.

164. Why does a railway increase the value of land?—Mainly through the transport facilities.

165. Do you honestly believe that this country can be successfully opened up to settlement without a railway?—I am very dubious whether it can be successfully opened up, railway or not—that is, as a whole; but I do not view that railway transport, at any rate for a good deal of the country, is essential to the development of the country. Of course, if it is true that the land at the present time can be broken in for, say, £7 or £8 an acre, and that the final value of the ground stands only somewhere about that level, well, then it means that any possible margin is small, and in order to increase that margin it will be necessary to reduce the costs of breaking it in. But if, on the contrary, the potentialities of the land are as great as I view some of it to be, I do not consider that the railway is at all necessary at the present time.

Arnold Hanson examined. (No. 16.)

1. The Chairman.] What is your position ?—I am Chief Inspector of Forestry under the Forestry Department, and I represent the Department before this Committee.

2. I understand that your experience is on the technical side rather than otherwise?—My work has been mainly in the assessing of timber. I have been engaged in forestry operations in Europe,

in Canada, and in the United States, and I have been in New Zealand for eight years.

3. You have heard a good deal of the evidence tendered to the Committee. The question is the construction of a railway from Rotorua to Taupo. That railway has been stopped by the present Government, and Mr. Vaile and others are petitioning the Government to carry the railway on. Can you give us any evidence relative to the timbers lying in the vicinity of this railway route? We wish to ascertain whether the timbers will give revenue, in addition to any development of the land, which would warrant the Government in reversing its decision and constructing the railway ?--Our interest mainly centres in the State plantations. There are some native forests, like the Paeroa Block, and the Tauri-Tutukau and other blocks, but in my opinion they hardly affect the railway question. The Paeroa is rather an isolated block; and as to the Tauri-Tutukau, one can argue that it should be served by the Taupo Totara Co.'s line. As to the timber down the west of Taupo, there is a company treating for the formation of a line in from Kakahi. If that line is formed, naturally the proposed Rotorua-Taupo line will not affect it. We are mainly concerned with the plantation area lying from Lake Rotorua down past Taupo, and on the Kaingaroa Plains. The Rotorua plantations and the Waiotapu plantations are getting to the production stage.

4. When do you think the first timber will be available to be taken off those plantations?—You

could take the Rotorua and Waiotapu timber to-day.

- 5. To what extent ?-The way we calculate is this: On an actual investigation we get a survey estimate of 250 cubic feet per annum per acre—that is, from the time when the plantations become approximately twenty years old till they are forty years old. After that the plantation is cut out, and we start over again. That means that you can take an average plantation at its main productivity
- for small material at thirty years of age, but not for sawn timber.

 6. What age would it require to be for sawn?—We base our estimates for that on forty years. As I said, we are mainly concerned with the plantation areas. The Rotorua plantation is so close to Rotorua that it is hardly affected by the railway one way or the other. The Waiotapu plantation, we might say, would be benefited by a line running along it, while the position as to the Kaingaroa plantation is at present doubtful. When I say that the Waiotapu plantation might be benefited by the line, it all depends upon where we are going to take the timber. At present we may say that we do not know. If there is to be a paper-pulping plant, the shipping people will naturally decide where the plant shall be established. We can say that it will probably be on the coast of the Bay of Plenty, and, on that coast, probably at Tauranga, because they must have coal, and they must have a deep-water harbour. In that case it means that the timber will have to go to the Bay of Plenty coast somewhere.
- 7. And in that case the timber will not come along a Rotorua-Taupo line at all ?-You will find that three-quarters of the plantation country drains towards the Rangitaiki River. It naturally slopes The Matahina line runs to within eighteen miles of the northern part of the Kaingaroa. It practically follows the Rangitaiki River. The location is easy—there are no plantations. difficulties. I believe the line is approximately twenty-four miles long. From there there is another