

quality and large size. On the clearings along the river great destruction of white-pine and rimu has taken place. Mr. Lockington's mill is situated about one mile and a half from Mr. Erickson's, and the same remarks apply to the neighbourhood of the latter as those made with reference to the former. At the time of my visit the trade in timber was very slack, but a very large quantity has been cut out in this district, both for the mines and the buildings in the Town of Reefton.

Leaving Reefton on the 10th August, I visited Mr. Perrotti's mill. It is situated about twenty miles from Reefton, in the head of the Grey River Valley. The country is flat, and timber easily got out by tramways, the grades being light, while there is a fairly large area available for supplies. The rimu obtained here is the best I have yet seen, the "figure" being particularly handsome. A great deal of valuable local information was obtained from Mr. George Baiteria, and this will be made use of in another section of my report. The timbers here are rimu, white-pine, miro, hinau, and rata (5 ft. diameter, up to 60 ft. long), also beech, which, as usual in this country, predominates. At present rate of output, averaging, say, 15,000 superficial feet per week, there should be here ten to fifteen years' supply. Silver-pine, sometimes called "yellow-jack" is also found here, but it is never a large tree. Parts of this district, near Caplestone, on the lower levels of the Paparoa Range, are also heavily timbered with beech. A large area of bush is found at the head of the Grey River, but here again the beech is the chief timber tree.

As the valley of the Grey River opens out, near Arahura, the timber increases in quantity, and is of better quality. Some very fine forests exist on the Arahura River in the direction of Orwell, and also on the banks of the Little Grey River. This is undoubtedly one of the districts in which extensive State forests should be reserved. The land is poor, and only fit for growing timber; indeed, my observation generally leads me to the opinion that the best timber is grown on land which is not quite suited to agriculture. This, at any rate, is the case in the South Island, and therefore it is the less excusable to destroy valuable timber merely for clearing purposes. These forest lands, when cleared, will, of course, grow grass; but it does seem a pity, when better country is available, to sacrifice the greater value of the trees for the lesser gained by grazing.

The valley of the Grey at Arahura, and up the river of same name, is about thirty to thirty-five miles wide, in the direction of Bell Hill and Jackson's, another valley through which the Midland Railway now runs. Here a number of sawmills are at work, and their produce is sent *via* the railway to Greymouth. Patches of fine cedar (kawaka) up to 24 in. in diameter are found near Arahura, but these are by no means numerous. Reference to this cedar, however, will be found in the section dealing with "Timber Trees of New Zealand."

I reached Greymouth on the 12th August, and next day inspected Stratford, Blair and Co.'s mill there, and another belonging to the same firm at Kiata, finding the timbers in these localities very similar to those just described. The sawmills near Kumara, together with the timber (growing and in stacks) were also carefully examined, Messrs. Wilson and Gillen courteously supplying every information. The country here is flat, tramway grades easy, and timber of excellent quality, but patchy. Considerable quantities of silver-pine have been obtained from three or four miles back from the railway, but the timber is small and faulty, being used almost exclusively for sleepers on account of being too small for the miller. The silver-pine is a true *Dacrydium*, and is closely related to its congener in Tasmania, the famous Huon pine (*Dacrydium franklinii*). Associated with the silver-pine, but some distance back, is found the kawaka, a fine timber tree, very light, and of handsome appearance. The rimu and white-pine here are not very large, averaging in height 25 ft. to 80 ft., and girth 2 ft. 6 in. to 3 ft. 6 in. The silver-pine is probably the most durable of New Zealand timbers, vying in this respect with the Huon pine of Tasmania, though it does not grow to anything like the size attained by the latter.

After returning to Greymouth I inspected sawmills on the Jackson's line, Midland Railway, being enabled to accomplish this in detail through the courtesy of the Greymouth manager, who gave me special facilities of travelling by train and trolley. The mill at Lake Brunner (known as "The Swede"), owned and worked by Messrs. Nyberg, Mitson, and Franson, is provided with a 22-horse-power engine, driving twin circular saws. This mill is well situated for supply, and, being close to the railway, the timber can be sent to market at reasonable rates for carriage.

The whole of the Jackson's Valley is well timbered with rimu, white-pine, matai, and miro, a few silver-pines being also found here and there. A large area of bush or forest land, the greater portion belonging to the Midland Railway Company, with timber of good quality, especially near Poerua, Te Kinga, Moana, Kaimata, Kokiri, and Stillwater, runs back for miles towards Bell Hill and the Arahura River. Red-beech is obtained up to 20 ft. lengths, and is here known by its native name, kamahi.* It is not, however, a true beech at all, and belongs to a different genus.

The Te Kinga mill, owned by Messrs. Stratford and Son, next came under notice, and here I found a 30-horse-power engine and good working plant. The timber is drawn from the valley of the Crooked River. The bush is similar to that already described. At Moana, Messrs. Stratford and Blair's, and at Kokiri, Messrs. Butler's mills, were inspected, and most valuable information was supplied by the gentlemen named.

On the 15th August I returned to Greymouth, and next morning left for Hokitika.

On Monday, the 17th August, I made an inspection of the Westland Sawmill Company, Mr. John Hornby, manager. The engine in use is 25-horse-power, and the average output 1,000,000 ft. per annum. The tramway is two miles long, a hauling-engine being used to bring in logs from the bush. The company has rights over about 400 acres of fairly heavy bush. In the vicinity there are also about 200 acres on which the silver-pine grows in fair numbers; but great havoc has been wrought in this forest by the sleeper-hewers. The total extent of timber-country available from the mill to Kapitea Creek is about 5,000 acres. Good country is also found on the Waimea, and about

* This tree has a large thin leaf, toothed like the beech, light under-surface of the leaf, sometimes purple tint.—Kirk's "Flora of New Zealand," page 133.