

The forest rises from the sea-beach to near the crests of the Longwood Ranges, and in some places is rather broken by deep hollows. Between Riverton and Orepuki there is a large extent of level land, in which the timber presents similar features to that of the Seaward Forest, but in many it is of somewhat larger dimensions, although in this respect there is a great amount of variation. This may be seen alongside of the railway-line. A few miles from Riverton much of the standing timber is of fair or even large dimensions, although in some cases the trees are scattered, but after passing Colac the trees are thickly set, straight and clean grown, of long length but of small diameter, rather too small, in fact, for profitable conversion: again, between Pahia and the Round Hill the trunks are above the average in diameter and length, while the quality is remarkably good. So far as I was able to examine the forest, it was composed of red-pine, white-pine, matai, miro, totara, akamai, broadleaf, and iron-wood—the most abundant being generally the red-pine and akamai.

The silver-beech descends nearly to the sea-level, about Lake George, where it is confined to the neighbourhood of the lake. In all probability it will be found in larger quantity on the upper portions of the Longwood Range. It is plentiful on the eastern and northern margins of the forest, and, notwithstanding its perishable character, is largely used for fencing purposes. The ironwood or rata (*Metrosideros lucida*), is but rarely utilized in the district; it is dense, heavy, and durable, but its great weight increases the cost of conversion to such an extent that it is rarely seen at the saw-mill. Like its congener, the pohutukawa of the north, it exhibits a marked preference for the vicinity of the sea, but ascends the mountains to the altitude of fully 3,000ft., and is not unfrequent throughout the Southland forests. It is especially plentiful on the Native reserves of Oraka and Kawakaputaputa, where it will doubtless be utilized for shipbuilding at no distant day.

The akamai or kamai of the bushman is plentiful, and in some sections of the Longwood attains large dimensions. Although durable it cracks badly when exposed to the atmosphere; but there is reason to believe that this peculiarity is largely due to the felling and conversion of the logs during the period of active growth. The bark contains over 12 per cent. of tannin. If this timber could be generally utilized for sleepers or similar purposes I am convinced that the value of the southern forests would be increased some 15 or 20 per cent.

In the vicinity of the Orepuki gold mines the forest is of a mixed character, the rimu or white-pine attaining large dimensions, and affording timber of excellent quality; broadleaf is also common, with black-pine and miro, affording an abundant supply of high-class timber for both gold and coal miners. About Pahia, and between Pahia and the Round Hill diggings, the timber is of still larger dimensions. Totara is met with, but was not abundant in any part of the forest visited by me.

I am unable to state the extent of the forest-area reserved for mining leases, but it is very small when compared with the total.

#### THE HOKONUI OR DUNSDALE FOREST.

This fine forest occupies the northern slope of the valley of the Hedgehope, about twelve miles from Gore, and extends in a north-west direction to within ten miles of Limekilns. It contains about 34,000 acres, of which 21,000 acres have been set apart as a permanent forest-reserve, portions of the remainder having been alienated from time to time. The forest is somewhat broken, but not to such an extent as to render the removal of logs a matter of difficulty. In some respects it bears a close resemblance to the forest at the base of the Longwood Range, but the timber is generally of larger dimensions, the soil being of somewhat better quality.

In some parts of the forest red-pine logs of long lengths, and squaring 24in. by 24in. and 26in. by 26in., are not unfrequent, and are well grown; white-pine, although not abundant, is usually of large dimensions; matai or black-pine occurs in larger quantities than usual, and is for the most part of large size; kamai often attains exceptional dimensions; ironwood is comparatively rare in those parts of the forest which I was able to examine, but its absence was more than compensated by the occasional occurrence of clumps of tooth-leaved beech of good growth, and by a fair sprinkling of totara of medium size. Thickly-set red-pines of long lengths, but small diameter—characteristic of the Seaward Forest and the lower parts of the Longwood—are altogether wanting; but the quality of the timber is not surpassed by that of any Southland forest, while the large proportion of matai and totara increases the value of the block.

The destruction of any large portion of the forest would involve serious results to many settlers in the valley of the Dunsdale and the Hedgehope, as well as in the lower part of the Titipua. The Hedgehope takes its rise near the north-eastern corner of the forest, and, after flowing through the low lands on its eastern and southern sides, is joined by the Dunsdale Stream, and continues its course until it falls into the Titipua. Under existing circumstances the lower parts of the valleys are liable to floods. At the date of my visit numerous indications were observed of the roads having been recently covered with water. The denudation of the slopes now covered with forest would cause the floods to be of more frequent occurrence and of greater magnitude, so that serious losses would speedily result, and the prosperity of the district be directly affected. On the other hand, the gradual replacement of large portions of the existing forest by deciduous trees, especially oaks, would tend to mitigate the evil, and at the same time be productive of good commercial results.

#### THE TIMBER-INDUSTRY OF SOUTHLAND.

The number of sawmills now in operation in the district is thirty-six, giving employment to about seven hundred men and boys, including those working in the bush.

It is not easy to give precise statements as to output, wages, &c., owing to the reticence of sawmillers in affording information on these points. Making a fair allowance for loss of time, the average amount paid weekly for wages will not be less than £1,200, and may be fairly estimated at