The margin of the forest to the west of Tongariro consisted chiefly of totara, often well grown

and of fairly good dimensions, stretching for a considerable distance.

After crossing the Wanganui River the ordinary pines were found in great abundance, mixed in some places with good totara and maire. In a patch of forest at the back of Pouaru, kahikatea, totara, and matai of large size were thinly scattered through a dense undergrowth of matipo, broadleaf, and koromiko. Some specimens of totara were from 3ft. to 6ft. in diameter, kahikatea 3ft. to 5ft., and maire 3ft. to 4ft.

## THE MAIRE-PAI FOREST.

This is a mixed forest, somewhat broken, and destitute, so far as my observations extended, o beeches and rata.

On the ridge much of the timber is kamai, of small size, chiefly valuable for its bark, which contains 12 per cent. of tannin. On the slopes and in the lower parts good red- and white-pine occur, and fine matai with trunks 40ft. to 50ft. long and from 24in. to 30in. in diameter. Occasionally the rima and kahikatea were scattered, when they were usually of large size, from 4ft. to 6ft. in diameter. Patches of totara, with trunks from 2ft. to 3ft. in diameter, were met with in several parts of the bush. Tawa occurred in small quantity, and specimens of titoki, a rare tree in the district, were observed at an altitude of 1,500ft. Black maire was scattered through the forest, and sometimes attained exceptional dimensions; a group of three fine specimens measured from 25ft. to 30ft. in height to the first branch and 24in. by 24in. for their entire length. A larger specimen growing in close proximity was hollow; several specimens had short robust trunks 48in. by 48in. Tipau (Myrsine salicina) was plentiful and of large size. Although this forest contains a large quantity of really fine timber the proportion of scrub is unusually large.

## NGAREWI.

Descending to the valley of the Pungapunga I passed through a magnificient grove of totara. Unfortunately the rain was pouring in torrents and the swampy forest was converted into a quagmire, so that my examination was conducted under difficulties, and I was unable to form any definite idea of the quantity of totara, but have no hesitation in saying that I have seen no finer trees in any part of the colony. Grand columns from 60ft. to 90ft. to the lowest branch and from 3ft. to 6ft. in diameter at the base were to be seen on all sides; in the higher parts no other tree occurred, but on the lower levels kahikatea and matai of exceptional dimensions were sparingly interspersed. Totara of smaller dimensions was observed, mixed with red-pine and kahikatea, in other parts of the valley, and I was informed that it was equally plentiful in the Tuhua District.

## WAIMIHA.

A considerable extent of native forest, the title to which is still unsettled, lies between the Native settlement of Waimiha and Ascension Tunnel. The staple on the low ground and on the hills alike consists of tawa, often of exceptionally large size, with small kamai. Pines were mixed with the tawa throughout; in some places the totara formed large patches, the trunks varying from 2ft. to  $4\frac{1}{2}$ ft. and 5ft. in diameter, some of the specimens being unusually fine; numerous rimu with trunks exceeding 4ft. in diameter; matai and kahikatea being somewhat rare. A few good specimens of black maire were observed in different parts of the block. The excellent quality of the timber, its large dimensions, and its accessible position render this block of considerable value, more especially as the quantity of available timber in other parts of the district is extremely limited.

## AUCKLAND.

The northern provincial district comprises 17,000,000 acres, and includes the most valuable forests in the colony. The area covered by forest is estimated by the Chief Surveyor to contain 7,200,000 acres, of which about 1,606,350 acres, including reserves, are still held by the Crown.

Forest-areas are more evenly distributed in the Auckland District than in any other part of the colony, with the exception of Westland and possibly Taranaki. Still extensive areas in the Taupo, Waikato, and other portions of this provincial district are practically destitute of timber,

while large tracks of forest-land have been alienated.

A remarkable feature of the forests of the northern district is that, while they possess timber-trees not found in any other part of the colony, they comprise as well all the kinds found in other provincial districts: the rimu, matai, and kahikatea of Southland; the white and yellow silver-pines of Westland; the tooth-leaved, entire-leaved, and mountain beeches of Otago and Nelson; the totara and tawa of Marlborough and Wellington are associated with the kauri, tamekaha, and puriri peculiar to the North. Taking the intrinsic values of the different timbers into account, it would not be easy to find such a remarkable peculiarity in the distribution of timber-trees in any other part of the Australian Colonies.

The kauri is by far the most valuable timber-tree in the colony, and occurs from the North Cape to Te Aroha Mountain, a few small clumps and isolated trees being found as far south as Maketu on the eastern coast and Kawhia on the west. Its geographical distribution in the colony is practically the same as that of the mangrove and rock-oyster. As a general rule the kauri forms large clumps or groves scattered amongst other trees rather than continuous forest; but there are notable excep-