

latter place are exceptionally large. On the higher levels matai and kawaka are common, with a sprinkling of maire all through. Totara is very scarce till within three miles of the Wanganui, where there is a belt of splendid timber: the trees are very close together, and they run up to 80ft. or 90ft. long in the trunk, and 5ft. or 6ft. in diameter. Mr. Kirk says that he has "seen no finer trees in any part of the colony." The totara-belt is about three miles broad, and seems to extend a great distance along the slopes of the Wanganui; I crossed it in two places, about eight miles apart.

Between Taumaranui and Upper Mokau, a distance of forty miles, the railway runs generally through open country, with occasional patches of bush on the slopes of the ranges. The Ongarue valley opens out into a plain near the top, and there are other flats and slopes over which the plough could pass; but the land does not seem to possess the essentials of fertility. The bed-rock is papa, but overlying it are thick deposits of pumice-rock and pumice-sand, with very little soil on the surface.

The bush on the slopes of the ranges between Taumaranui and Upper Mokau is of the ordinary mixed description, but greatly inferior to that between Murimutu and Taumaranui.

There are no useful minerals that I know of along the central route, but a large number of mineral waters of various kinds.

*Ngaire Route.*—For 84½ miles out of the total of 103 miles 58 chains, this line is practically the same as the Stratford route of 1884. Instead, however, of leaving the Foxton–New Plymouth Railway at Stratford, it leaves near Eltham, in the Ngaire district, and instead of continuing northwards from Nihoniho through the Mokau country to Hangatiki, it follows up the Ohura, and, crossing the intervening ridge, merges into the Central line in the Ongarue valley.

The Ngaire route is nearly all in the two main watersheds of the Patea and Wanganui Rivers. It does not cross the main ridge which divides the western rivers from those that fall into the sea to the southward of Mount Egmont. This ridge is crossed at Poro-o-tarao, on the portion of line common to the Taranaki and Central Routes.

Commencing at Eltham Junction, the first subsidiary watershed is that between the Makur and Mangaotuku, at 16 miles. For fourteen miles of this distance the line runs through a wide first-class settlement-country, with good soil, capable of supporting a large population. After this the valley gets narrow and swampy, and of comparatively little value for settlement. With the exception of a small portion of the Ngaire Swamp, and some clearings, all the country up to the 16th mile is covered with bush, chiefly rimu, kahikatea, and tawa. The bed-rock is papa, with volcanic and alluvial clay, and soil on the top.

The next ridge is at the 31st mile. It divides the watershed of the Mangaotuku from that of the Makahu and its tributary, the Pohokura. The first two miles leading into the Mangaotuku valley are very rough, and unfit for settlement. Then for six miles the valley is wider and the slopes easy: a width of about half a mile of good land could be brought under cultivation. Part of this section of the Mangaotuku valley is open, or covered only with scrub, a strip nearly three miles long being old Maori clearings. In the next six miles the valley gradually closes in and gets swampy, and for a mile or two at the saddle the country is very rough—the whole being covered with bush.

The next natural division comes at the 37th mile, where a broad ridge separates the Pohokura and Mangare Streams. It is also the watershed of the Patea and Wanganui Rivers. The valleys of the Makahu and Pohokura are very narrow: including the slopes of the hills, there is only a width of 20 chains fit for settlement. There are ridges at the 48th and 49th miles, but the next important point is at the 53rd mile, where the railway enters the valley of the Waingarara. The first two miles in this section are rough, but the remainder is good settlement-country—flat valleys and low ridges, with easy slopes; and the width is considerable. The bed-rock is papa and the bush mixed.

The railway next traverses sixteen miles of very rough country in the Waingarara, Tangarakau, and Heao valleys, the roughest section on the line. The country is so broken up and uneven as to be unfit for settlement of any kind. The valleys are covered with mixed bush, and the ridges with beech (*Fagus fusca* and *F. Solandri*). The rocks are papa conglomerates and fossiliferous lime- and sand-stones.

From the 69th to the 95th mile the railway follows a succession of flat valleys, intersecting low rolling country. The land is all good and fit for settlement, but there is not much of it. The bush ends finally at the 80th mile.

From the 95th mile to the terminus of the line in the Ongarue valley, 103 miles 58 chains from Eltham Junction, the country is pumice, as described in connection with the Central Route.

The quantity of agricultural land between Eltham Junction and Nihoniho not served by the New Plymouth–Foxton railway, but within five miles of the proposed line, is roughly estimated at 60,000 acres, and the Survey Department maps show two blocks of agricultural land in the Ohura watershed of 40,000—making a total of 100,000 acres within easy access of the proposed railway. It is possible that there may be more outside the five miles, particularly on the eastern side, but we have no definite information on the subject. There cannot, however, be much on the western side, for the line is close to the main watershed and the West Coast ranges.

Most of the good land opened up by the original Stratford route lies in the Mokau watershed to the northward of Nihoniho, and on that part of the line which would be left out under the present proposals. The survey maps show 90,000 acres classed as agricultural land, the most of which is limestone, like the Te Kuiti and Otorohanga country.

Two seams of coal, 5ft. in thickness, have been discovered on the Ngaire line—one at 61 miles and the other at 64 miles—and there are indications of coal at various places in the locality. The seams occur among the conglomerates and limestones of the Tangarakau valley. The coal is apparently of the same quality as that found at Mokau: probably this is the southern boundary of the Mokau coalfield. The deposits that have been tested on the Mokau River are about sixteen miles from Tangarakau.