

late Engineer-in-Chief upon the subject that a survey was ordered to be made of that portion of it commencing about one and a half miles south of the Lewis Saddle, thence over the saddle and along the Caunibal Gorge to a tributary on the south side of the Marina River called "Derbyshire Creek."

However, the anticipations with reference to this locality given by Mr. Fowler in his report upon a "reconnaissance" survey of this part of the country were not supported by the results of the survey, which demonstrated that a tunnel of about twenty-five chains in length was indispensable, except by having recourse to grades of exceptional steepness, and that, in several places down the river between the Derbyshire Creek and the head of the Marina Plains, the line would pass along the bed of the river, or have to be benched out of the solid rock, as the banks rise nearly perpendicular from the water's edge. Further remarks in connection with the scheme of which this forms a part will be found under the heading of "Main Trunk Lines," No. 5.

I think I have now laid before you, by a description and explanatory notice, all the routes that have been examined for a line of railway in connection with what may be considered an "intercoastal line." I will therefore now describe the various routes that have been examined in connection with the proposed railway extension of the main trunk line northwards from its present terminus at Amberley, numbering them in the same order as that of the preceding or "intercoastal" lines.

MAIN TRUNK LINES.

Descriptive and Explanatory Remarks.

Line No. 1.—This was the first line examined the object of which was to connect Amberley with Foxhill, the present termini of their respective lines.

Starting from Foxhill (the course taken during the time of its examination) the route of this line follows that of the west branch of the Waiti River to its source in the "Spooners" range of hills, over which it crosses into the valley of the Motueka River; thence over another part of the same range into the valley of the Motupiko River, following the course of this river through the Big Bush, and over a rather low saddle into the valley of the Wairau River at Tophouse; thence up the valley of the Wairau and through the gorge of that name to Tarndale; from Tarndale it continues to follow the course of the Wairau River, until it reaches the source of its southern branch, and over the summit of a high range of hills into the valley of the Clarence River, which it follows in its downward course until it reaches the junction of the stream that flows from Jack's Pass; leaving the valley of the Clarence River at this place, and following the course of this stream, it passes over the saddle at Jack's Pass, in the valley of the Chatterton River, and outwards to the Hanmer Plains, joining intercoastal line No. 3 at the junction of the Wairau, Percival, and Hanmer Rivers.

Any further description of the direction of this line may be considered unnecessary, as the sketch map plainly shows the continuance of its route to Amberley Station, and which has been already described and referred to.

Reference to a line of railway by this route was made by the Minister for Public Works in his address to the House in the year 1874 or 1875, intimating that the West Coast line, namely, from Nelson to Greymouth (remarked upon in the first part of this report), could not be proceeded with until the line by this route had been examined.

Now it is from this remark alone that any information can be gleaned as to the object of this so-called "West Coast" line, and from which an inference might be drawn that the line had been intended as part of the general scheme of railway extension northwards from Canterbury. But, in my opinion, if this West Coast line was actually constructed, and formed part of the main trunk line northwards from Canterbury, no *through* traffic, in either passengers or goods, would at any time take place between Christchurch, or even from the more northern districts of Canterbury, to Wellington.

It might be remarked in this place that the portion of this line, namely, from the junction of Rivers Waiau, Percival, and Hanmer to Tarndale, was condemned by the late Engineer-in-Chief, for reasons that will be alluded to in connection with line No. 2 of the main trunk lines.

However, in addition to the objectionable grade of 1 in 12 over Jack's Pass on this line, the fact of the summit at the head of the Clarence River rising to a height of 4,493 feet, and therefore being 700 feet higher than Ward's Pass, is sufficient of itself to condemn this portion; and, further, that, along the whole length of this part of the line, there is not an acre of land fit for cultivation.

Other portions along the route are equally objectionable—namely, the Wairau Gorge, to pass which would require works of a most costly character, as the river flows along the bottom of high hills, the slopes of which are too steep to admit of a roadway being constructed along them. And, again, the ascents and descents to and from Spooners' Range, approaching Foxhill, which involve tunnelling, or grades of exceptional steepness, namely, 1 in 12.

You will observe, by looking at the sketch map in connection with this line, a branch from Tophouse and following the course of the Wairau River to Blenheim, a distance of about sixty miles; and, although I have called this a "branch" line, in reality it may be considered as entering into competition with that other portion of this line—namely, from Tophouse to Nelson. This will be referred to again when the Ports of Nelson and Picton are under consideration as connecting points by a ferry to Wellington in the North Island.

Line No. 2.—The route of this line, starting from a common point to No. 1 line—namely, from the junction of the Waiau, Percival, and Hanmer Rivers, instead of passing over Jack's Pass, takes a direction across the Hanmer Plains to Jollie's Pass, and rises on to the saddle with a grade of 1 in 15, and up which a dray road has recently been constructed; whereas the best grade to be had up to the saddle of Jack's Pass is 1 in 12.

From the saddle of Jollie's Pass the line, with a comparatively easy grade, reaches the Clarence River, along which it passes as far as its junction with the Acheron River. Here the line crosses the Clarence, and traverses the valley of the Acheron to its junction with the Guide River. At this point there is an alternative line, which leaves the Acheron, and follows the course of the Guide River to its