

tracts are in progress for the station-buildings and fencing. It is expected that the portion of main line from Featherston to Woodside, and this branch, will be ready to open for traffic by the 14th May next, adding thereby about 9 miles to length of working railways.

*Opaki Section of Main Line.*—With the view of affording work for the unemployed in and around Wellington, arrangements were made, on 17th March, for beginning the formation of the above, immediately beyond the Carterton contract. Thirty men were accordingly sent from Wellington, and have been employed in bush-clearing and earthwork.

*Working Railways.*—Several additions to station-buildings have been made, and seven platelayers' cottages built; 2 new single Fairlie locomotive engines have been erected, also 30 timber trucks, 20 cattle wagons, and 25 low-side wagons. Four six-wheel composite carriages have arrived, fitted with Cleminson's patent radial axles; two of these have been erected, and, so far, give great satisfaction.

#### WELLINGTON-FOXTON RAILWAY.

*Crofton Section.*—The work on this was begun on 1st September, 1879, in order to give employment to men who were out of work. One hundred men were taken on at once, and by the end of a month this number had increased to 320. The average number employed from October to February was 330, since which the force has been reduced to about 120, and further reductions will be made in April, as many portions of the work are being finished. Very good progress has been made throughout, and it may be considered that fair value has been obtained in the quantity of work done; it extends over a length of 4 miles 55 chains—namely, from 1 mile 10 chains to Johnsonville Station, 5 miles 65 chains.

#### SURVEYS.

*Wellington to Johnsonville (7 miles).*—This has been completed, and the line finally located.

*Johnsonville to Paramatta Point (Porirua Harbour).*—This line has been selected and pegged out. Careful examination has been made of the country between Johnsonville and the West Coast, and trial lines have been surveyed on both sides of the valley leading to Tawa Flat and around the shore Porirua Harbour to the narrowest part at Paramatta Point, proposed as a crossing-place.

*Paramatta Point to Waikanae River.*—Trial lines are now being surveyed to secure the best line between these two places.

*Masterton to Woodville, by way of Alfredtown.*—An exploratory survey of this line has been made, the report on which tends to show that the proposed line will be no improvement on that originally surveyed by way of the Forty-Mile Bush. A few extracts will give an idea of the character of the country, and of any line that might be taken through it—viz.: "For the first 6 miles the line passes over ground favourable enough for a line of railway; but from this point to the 20th mile, at the Township of Alfredtown, a distance of 14 miles, it would be subjected to many sharp curves, with side-hill cutting the whole way. This is no doubt the worst part of the whole line, and is, in my opinion, sufficient in itself to condemn the route, as there is no avoiding the valley of the Wangāehu River. . . . The worst or most difficult part of the line has been levelled over, showing the ruling gradient of this line to be 1 in 25 . . . and the constructive works to carry this grade would be found to be as costly as tunnelling. . . . Nothing of this kind occurs upon the Forty-Mile-Bush line . . . the ruling gradient upon which is shown to be 1 in 52 . . . and at most will not exceed 1 in 50. . . . The distances of the respective routes are as follows: Forty-Mile Bush line, 47 miles; Alfredtown, 58 miles. . . . I consider the route *via* Alfredtown to be altogether an impracticable one. . . . From every point of view in which the subject may at present be considered, the Forty-Mile Bush line is infinitely the more preferable of the two.—T. M. Fox, C.E."

A sketch-map attached to this report shows the relative positions of the Alfredtown and Forty-Mile Bush routes.

#### MAPS.

One plain outline map of the North Island and four diagram maps on enlarged scale, showing railway lines and railway stations, &c., are attached to this report.

I have, &c.,

JOHN BLACKETT,  
Engineer in Charge, North Island.

The Hon. the Minister for Public Works.