the north and south ends, with headquarters at Ohakune, and, though working under great difficulties on account of the deplorable condition of the roads during the winter season, very fair progress has been made The Mangaturuturu, Toanui and, Hapuawhenua viaducts are of this section. The two latter are to be erected by the Public Works Department's own workmen, the iron and steel work being already in course of preparation at the Mangaonoho workshops, and the former by Messrs. Anderson, the contract date for its completion being 7th February, 1908, the same as for the Manganui viaduct

At the present time there are approximately 2,700 men employed on the three sections in hand, the respective numbers being about as follows — North end, 900; central section, 600; south end, 1,200.

The present position may be summed up thus —

Total distance, Auckland to Wellington	426	miles
Already constructed and open for daily passenger traffic ..	335	,,
Rails laid on a further	34	,,
Formation practically complete on a further	10	,,
And in hand on a further ..	32	,,
Untouched	15	,,
Total	426	,,

The untouched portion is left so merely because the works upon it are of an easy and unimportant character and can readily be finished by the time the heavier work now in hand is done

Probably all the earthworks will be finished as soon as the large viaducts are ready, so that on the completion of those structures really depends the date of the opening of the railway for through traffic. It seems quite probable, therefore, that the prediction of the Minister for Public Works and Railways that through trains will be run by about the end of 1908 will be realised It will also clearly be possible to take the through journey during this coming summer, by coaching from Raurimu to Waiouru. A coach already runs from Raurimu to Makatote, and will doubtless run on to Raetihi as soon as the road is in sufficiently good order for vehicular traffic At Raetihi connection can be made with the Pipiriki-Waiouru coach.

THE MEN IN CHARGE

The construction of the Main Trunk Railway has occupied the attention of a succession of Ministers for Public Works but the Hon Wm Hall-Jones, the present Minister for Public Works, and Railways, has had the principal control of the undertaking for a longer period than any other Minister—namely, from March, 1896, to the present date The practical work of construction has also claimed the efforts of many engineers. The work is being carried out at present under the direction of Mr. P. S. Hay, Engineer-in-Chief of the colony, who is also entitled to the credit of designing all the fine steel viaducts as well as most of the bridges along the Line. The works at the northern end are under the general control of Mr. C. R Vickerman, District Engineer at Auckland, with Mr. J D. Louch Resident Engineer, at Raurimu in the immediate local charge. Mr J. J Hay, Resident Engineer, Ohakune, is in charge of the works on the central section, and the construction at the southern end is under the supervision of Mr F W Furkert, Resident Engineer, Taihape, who recently succeeded Mr. G. L. Cook in that capacity These officers are assisted by a large staff of assistant engineers, overseers, timekeepers, and other minor officials The general administrative work is under the control of the Under-Secretary for Public Works, Mr. H J H Blow

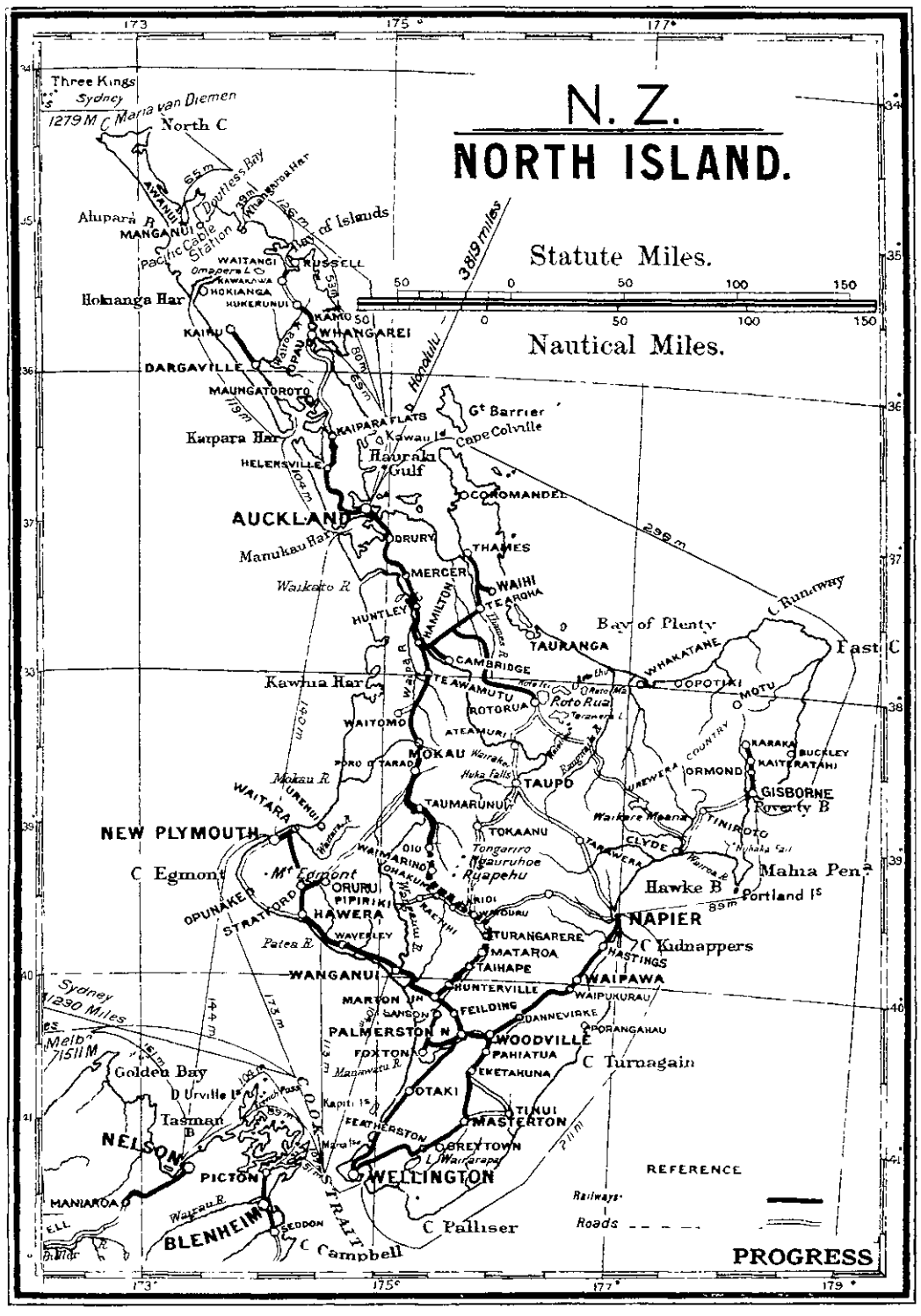
THE PROBABLE TRAIN SERVICE

The completion of the railway being within measurable distance, interest, of course, attaches to the probable nature of the train service to be run over the Line By the time through trains are run it is expected the Union Steamship Company will have one, or possibly two, fast turbine steamers in the ferry service between Lyttelton and Wellington, and the time-table arrangement will probably be made with a view of securing a rapid mail and passenger service from one end of the colony to the other Already we have a train leaving Invercargill in the morning and reaching Christchurch the same night A fast steamer could await the arrival of this train at Lyttelton and still deliver mails and passengers at Wellington by 9 or 10 o'clock the following morning As already stated the distance between Wellington and Auckland is approximately 426 miles, and taking into consideration the rough nature of much of the country traversed and the extent of comparatively new track, as well as the great height to rise to the interior plateau, it is expected that the through journey will occupy about 20 hours. A train leaving Wellington for Auckland about noon would be convenient for the arrivals by the southern steamer, and would give Wellington commercial men two or three hours of the business portion of the day to despatch their correspondence This train could reach Auckland by 8 a m the following morning in time for letters to be distributed by the letter-carriers' first delivery This would give a 48-hour through passenger and mail service between Auckland and Invercargill The express on the return journey would probably leave Auckland in the evening and reach Wellington about 4 p m the next day, thus allowing passengers to connect at leisure with the southern steamer leaving three or four hours later This steamer would be timed to reach Lyttelton so as to connect with the first express, which leaves Christchurch at 8 a.m. and runs through to Invercargill

Special rolling-stock is to be constructed for the Auckland-Wellington mail trains The engines for the run between Palmerston and Taihape (or between Wellington and Taihape should the Government purchase the Wellington–Manawatu Railway) will be of the new Class A type shown in our illustration A similar engine would run between Taumarunui and Auckland, but for the heavy section and steep grades between Taumarunui and Taihape a special locomotive will be used, of a stronger and heavier type than any hitherto in use on the N Z Railways It will be of the four-cylinder balanced compound type, capable of hauling a loaded train up a grade of 1 in 50 at an average speed of 20 miles an hour, and will weigh, with tender, over 90 tons. An outline drawing of this engine appears in this issue. All the engines will be furnished with tenders so as to provide ample coal and water accommodation and enable them to run long distances without stopping.

The cars will be of two classes, the first-class of the standard saloon type in use on the New Zealand Railways 47 ft. 6 in long with verandah at each end, height from floor to ceiling 7 ft. 8 in., containing a roomy lavatory and furnished with a plentiful supply of drinking water The seats will be of the popular single, reversible back type, arranged two on one side of the central aisle and one on the other Each seat will be numbered, and any passenger desiring to do so will be able to obtain from the guard a ticket reserving any one seat for his sole use for the whole or any part of the journey The carriages will be lighted by gas, stored at high pressure in reservoirs fixed to the under frame of the car, each lamp giving a light equal to 25 or 30 c p. Each car will accommodate 32 passengers The second-class cars will be of the same size and type, with similar lavatory conveniences. The seating accommodation will provide for 52 passengers, arranged on the standard longitudinal system, and the seats will be provided with cushions.

A dining-car will be attached to each train, similar in size and exterior appearance to the passenger cars, and will be fitted with a large gas-cooking range, dresser, cupboards and all



MAP OF THE NORTH ISLAND, SHOWING THE RAILWAY SYSTEM. THE UNCOMPLETED PORTION OF THE MAIN TRUNK RAILWAY IS SHOWN BY A DOTTED LINE.