## ART. LVIII.—The Rotorua Railway and District, By James Stewart, C.E.

[Read before the Auckland Institute, 14th September, 1891.]

When I was requested to contribute to the usual series of lectures which it is to be hoped is now a permanent feature in the annual work of the Institute, and the subject of tonight was suggested (no doubt because it is one in which I have been personally engrossed during the last ten years), I felt, notwithstanding the interest the public is supposed to take in all things pertaining to Rotorua, that it would be extremely difficult to treat the matter in a popular manner, and at the same time to steer clear of a tiresome repetition of things you have all heard before.

It would be out of place, to use a mild term, to attempt here any description of the wonders of the Lake district, which has been more or less a favourite subject with every writer on the topography of New Zealand ever since the establishment of the colony. All that is necessary now is confined to subjects connected with the bearings of the railway on the district, and the capabilities of the district to respond to the influences of rapid, cheap, and certain means of communication.

The tourist traffic to Rotorua had so gradual a development that it is impossible to fix any date at which it may be said to have commenced; but just in proportion to the facilities for conveyance and residence offered to the public so did the public respond, and this may be taken to be certain of continuance, up to a limit determined by the population interested, eventually, let us hope, to be, for all practical purposes, unlimited by having the population of the world at large to draw on, for we may easily conceive it to be soon possible for the teeming millions of the Northern Hemisphere to contemplate a journey to Rotorua with less thought of difficulty, arrangement, and even expense than twenty years ago used to confront those in New Zealand who wished to view Rotorua and Rotomahana.

Previous to 1872 accommodation for travellers at Ohinemutu was a whare owned, and the business run, by five Maoris. The business capacity of this firm was very limited, and there is a tradition that, on receipt of every item of 1s. 6d., they at once divided the money, each receiving 3½d., and tossing for the remaining odd halfpenny. European enterprise soon stepped in, and the native element gave way, so far

as hotel-keeping was concerned, and confined itself to making the most of the travellers otherwise, an art in which they

have acquired great proficiency.

The early route of travel was by Maketu, a small native settlement about eighteen miles east of Tauranga; thence packing by native tracks to Rotoiti, Te Ngae, and Ohinemutu; or from Rotoiti direct to Waitangi, on Tarawera, en route to Rotomahana. The costs and charges up to this time were, until the final squaring-up by the party, an unknown quantity, and largely depended on the aptitude for commissariat management of the leaders, and the energy of the then indispensable

Under the public-works policy of 1870 and succeeding years, a coach-road was formed from Tauranga to Rotorua and Taupo, and through to Napier; also from Maketu to Rotorua, vià Te Taheke, on Rotoiti. From the early part of 1873 may be dated the possibility of through coaching and waggon-traffic. Fares were high, and the cost of freight quite warranted the charges made for the necessaries of life at Rotorua. For years £14 per ton was the charge to Rotorua, and double that to Taupo. Under this tariff, any bricks used in the first fireplaces and rudimentary chimneys at Ohinemutu cost for freight 1s. each.

With the exception of a very few parties who found their way overland, via Waikato, Tokoroa, and Horohoro, the Tauranga-Rotorua Road was the exclusive route from the Auckland District for about eleven years. The length is forty-two miles, and it traverses very broken country, crossing the north-eastern and eastern drainages of the great wooded range which, from Maketu northwards to Cape Colville, rises to a great height, more or less abruptly, and is deeply furrowed by ravines, one of which, the Manga Orewa, is, where it

is crossed by the road, nearly 500ft. deep.

In the beginning of 1880 Mr. F. J. Moss, then M.H.R. for Parnell, made his way back from Rotorua by an almost disused track, called the Ara Kaharoa. He was aided and guided by Wi Maihi te Rangikaheke and other chiefs of the Ngatirangiwewehe, that hapu being favourable to the opening of the road, but whose authority extended only about half-way from the eastern side. The Ngatitukorehe hapu, which had authority on the western side, at once acquiesced in the proposal, and the writer, then District Engineer, was directed by the Government to make the necessary explorations to open up a road between Cambridge and Rotorua. Previous to the exertions of Mr. Moss we can trace no evidences of desire on the part of the people of Auckland to have direct communication with the lakes. Whether this was owing to an impression that an insuperable native difficulty barred the way, or

the result of indifference, it is hard to say; but, as we have seen, the native difficulty, if it ever existed, vanished on being faced in 1880. Two or three years previously the Ngatitukorehe hapu began to assert their independence of the isolating decrees of Tawhiao, and it is probable that previous to that period the Native Office would not have moved in the matter, or allowed any one else to take it up.

Tourist traffic rapidly developed in the seventies, and became a matter of great importance to Tauranga and Taupo. The result to Tauranga cannot be said to be an unmixed blessing, as it seemed as if everything else was neglected for the trade caused by coaches, waggons, and steamships. And when, in the natural course of things, a better route was

found the reaction was naturally very severe.

The new road viâ Cambridge and Oxford avoided all the ravines which pierce deep into the mountain-range. It leads up the western ascent, on the dividing-ridge between the Waiohotu and one of the branches of the Waimakariri streams. The descent on the eastern side is between the Waiteti and Manurewa. The road was first available for saddle-traffic in 1881, and was opened for coaches in the summer of 1883 and 1884. It at once became popular, as involving no sea-voyage, and, although the coaching at first extended from Hamilton, a distance of sixty-six miles, the road was, for all able-bodied tourists, easy and pleasant compared with the extremely broken country traversed by the old route.

During all the time of lavish expenditure on railways, in the years when loans were raised with the same facility with which the money was scattered and got rid of, when it became an exercise of ingenuity to discover fresh fields for expenditure of the quota which each provincial district claimed as its due, no mention was ever made, or hint of any kind given, of the desirability of having railway-communication with Rotorua, or direct communication of any kind in fact, for we have seen it was in 1880 that Mr. Moss moved in the matter of the road, and the halcyon days of spending for the

sake of expenditure were then just about closing.

It was reserved for private enterprise to inaugurate what will yet prove to be, all things considered, the most profitable railway in the colony, and a blessing to hundreds and thousands of the suffering and distressed in many lands. And it came about in this way: In the years 1879 to 1881 large purchases of native land were effected in the country, extending from about twenty-six miles south of Cambridge, towards Rotorua. Some of the claims under alleged agreements to sell extended to the lake. Eventually, in 1881, blocks to the aggregate area of about 260,000 acres became the property of

a syndicate called the Patetere Association; and it was a matter of vital importance to dispose of these lands to the best advantage, or to any advantage. At that time all business matters were in a flourishing condition. There was a demand for land, and no difficulty was foreseen in the realisation of the property, provided easy access could be established. Between March and July of 1881 several communications took place between the writer and members of the Patetere Association with the view of promoting a railway to open up the new This meant a line passing up the Thames Valley from the Waikato-Thames line of the Government to the Mangakaretu Block, or to where Putaruru Junction now stands. This was the first inauguration of the Thames Valley and Rotorua Railway, into which the proposal at once developed on being placed before the leading Auckland citizens. It was at once recognised that the Government could not move in the making of this line, which was in the first instance. avowedly intended to open up large blocks-in all, about 400 square miles—of private property; but the Legislature had made provision for such cases by the District Railways Acts of 1877 and 1878. Under the provisions of these Acts, on the landowners of a district agreeing to be rated to a certain proportion of the annual cost of a railway proposed to be made through it, and on approval of such railway by the Governor, the Government was empowered to contribute a certain further proportion of income necessary to recoup the shareholders. Borrowing-powers were given, and several lines had at that time been constructed in the South Island under these Acts. As a further means of assisting private railways, an Act was, in 1881, passed through the Legislature, called the Railways Construction and Land Act, by which, instead of an annual contribution by Government towards interest on cost, waste lands to a value of 30 per cent. on cost of construction, not to exceed £5,000 per mile, were arranged to be transferred to the company, which, out of the increased value of such lands, consequent on the making of the railway, was presumed to be able to make a very good investment.

In the case of our railway it was found desirable to divide the line into two sections, and proceed under the provisions of each of the two Acts. Thus, from Morrinsville to Lichfield, about forty-two miles, was placed under the District Railways Act; and from Putaruru to Rotorua, nearly thirty-two miles, it was found possible to work only under the Railways Construction and Land Act. For the first section the lands were all rateable, and the district comprised over half a million acres, including the whole of the Patetere company's lands. Of the necessary land required for endowments for the second section in terms of the Act, the Government held at the time only

about 29,000 acres of certainly the best of the open country, but very far inferior to the forest land for settlement purposes. The prosecution of the second section was therefore contingent on the Government acquiring further lands in the forest, or of the company being able to negotiate with the

native owners for the same.

The formation of the company was proceeded with; and the rapidity with which £70,000, in as many shares, was subscribed, and the large portion of these held by Auckland merchants and others having no interest in the lands proposed to be opened up, amply redeems the bone and sinew of the commerce of Auckland from any charge of apathy in regard to its interests in Rotorua, whatever may with propriety be said of our representatives at that time, and for many years afterwards. The total shares subscribed amounted to about 125,000, and of these only 37,000 were held by those interested in the land. The others were taken up in numbers of from twenty to three thousand by people whose only interest lay in the opening-up of the lakes to Auckland.

In February, 1882, orders were given for the survey of Section I. and the exploration and preliminary survey of Section II., for the purposes of estimate and compliance with the Acts. These were immediately put in hand, and we may now proceed to describe the country through which the Thames Valley and Rotorua Railway was designed to pass.

The three rivers, Piako, Waitoa, and Waihou or Thames, occupy and drain one and the same great valley, which extends inwards in a perfectly straight direction, about southeast, from the head of the Firth of Thames to a distance of about sixty miles, having an average breadth of probably eight. Morrinsville is situated about the middle of the length of this great plain, and on its western side. From this station, on the Waikato-Thames Railway, the Rotorua Railway starts, and keeps in the Piako Valley for about seven miles; then, crossing over diagonally, reaches the great Matamata levels between the Waitoa and Waihou, and follows the main valley of the latter until the hills are reached beyond Oxford. At this point the Thames is divided into three branches—the Oraka on the western side of the valley, the Waihou in the middle, and the Waimakariri on the eastern border. middle one has the parent name, and perhaps the greater volume of water, but the Oraka has by far the longest course, and should be considered the parent river of the system. rises in an almost imperceptible trickling of water from one little pool into another in a valley in the wild recesses of the Rotohokahoka forest, not quite eight miles in a direct line from Rotorua. A clear stream, flowing on silver sand, is soon formed, and after a course of about a mile it falls into the

coffee-coloured lagoon called Rotohokahoka. Thence it issues by an underground passage of a few chains in length, forming a stream called the Pekapekarau. This, after a course of about four miles in a wild ravine, is named the Takapuhurihuri, on which the falls and rapids common to all these streams are situated. Being joined by the Paihau the stream becomes the Oraka, which successively receives the Mangakotaha and the Mangatapu, retaining its name, and joining the Waihou below Okoroire. The streams mentioned all run in very deep ravines, and in each and collectively some of the wildest scenery out of the alpine ranges may be seen. The streams are never-failing, and abundant in volume. There is one corresponding locality in all of them, where they form, in almost all cases, clear falls of about 50ft., and a long descent in rapids among the boulders below. A little to the south of the rise of the Thames above described the watershed between the Thames and Waikato systems is first formed, and the head of the Mokaihaha may be seen. The falls of this stream are probably the largest in the whole series, and can be heard a long way off in the dense forest, wherein sound does not usually travel far. It is remarkable that, although the Mangatapu and Wairakau drain apparently into the Oraka, they contribute very little water, although they are among the largest ravines in every respect in the whole range. There are evidently rents and chasms, which lead the rainfall of probably thirty or forty square miles of forest into the Waihou. On the eastern side of the valley the three great dens of the Waimakariri furrow the flanks of the range, much as the Oraka does on the south-west. Between these immense gullies are elevated flat lands, sometimes a mile or more wide. And there also the open country dove-tails into the forest. The flats and ridges push the fern far up the flanks of the range, and the forest holds its own in the ravines to a distance of two or three miles from the border-line Then there are any number of dry awaawas of the solid bush. at a high level above all streams, marking the course of former watercourses, but bearing now no traces of running water. These, with the uplands, are all excellent soil, and only want some arrangement for a small but constant supply of water to become the most enjoyable of medium-sized holdings; while for the smallest class of farms, of from 50 to 100 acres, the forest plateau and sloping flanks offer advantages which, all things considered, are now hard to be equalled in the Auckland District. The formation is pretty much alike on both sides of the range, but the scale is less on the eastern, as might be expected from the less rise from Rotorua basin than from the Thames Valley—about 900ft. in one case, and 1,500ft. in the other.

The country which had to be explored for the railway may, in extent, be described as a plateau extending from Hiwiroa to the north of the coach-road above Tapapa, to Horohoro, a length of twenty miles, having, on the table-land, an average breadth of three to four miles, and about as much more on each flank, bordering on the open country. Probably a fair average of the whole would be about ten miles, giving an area of about two hundred square miles, or 128,000 acres, of workable country, depending on roads and railway for access. The table-land is of very uniform elevation, being from 1,800ft. to 2,000ft. above the sea. Owing to the formation, which is an enormous upheaval of rhyolitic lava, full of fissures, some filled with sand, others open, there need be no wonder that surface-streams are almost unknown, and, where they are found, exist only during part of the year. Each nucleus of settlement will require to be supplied with water by means of a hydraulic ram, after the manner of the railway water-supplies to be described. The soil, when wet, is a rich brown, almost black, or chocolate loam, 1ft. to 2ft. thick, resting generally on the grey soft rock, with often a stratum of small yellow gravel between. The soil takes grass, and holds it well, as evidenced by a rough clearing burnt off nearly six years ago, and sown with grass-seed of not the very best kind for the purpose.

The whole of this very desirable field for settlement can be thrown open by the construction of the railway, and an ordinary bush-road from Kaponga northwards to the Oxford-Rotorua Road—a length of about four miles—and a road from Kaponga to Horohoro as settlement advances, joining the Taupo Road, a length of sixteen miles. Good roads are, how-The soil is so soft ever, somewhat expensive in that country. and deep that it works with traffic in wet weather into a black mud, and often impassable holes. The soft grey rock, however, when applied in sufficient quantity, makes and maintains a surprisingly good road-surface. Any scheme for settling that country should include large temporary, and smaller permanent, reserves of the natural forest-first, for affording winter-feed for the settlers' cattle before they can clear ground enough to supply that want; secondly, for general public purposes; but principally for climatic reasons. planting on a large scale, in clumps and belts, as the native bush is cut down, should be enforced. The timbers are Totara is very rare, excepting towards Horoordinary kinds. Rimu and the other pines, excepting, of course, kauri, are plentiful. The great bulk is tawa, some of which is very large, and could be put to many useful purposes. The climate in the open land of Patetere is very dry and bracing, and one of the most enjoyable parts of New Zealand to live in. On the forest plateau the air is very moist; and all the summer, and through the driest seasons, the magnificent *Todea superba* fern, which cannot exist without much moisture, lives and thrives in great beauty. There are numerous lagoons, which retain water for a great part of the year, and the facility with which the soft rock can be cut into reservoirs and rendered watertight by means of a thin skimming of cement will cause the water difficulty to be of very little account in the settlement of the land.

The whole country bears evidence of the action of water in a remarkable degree. The numerous and deep ravines which have been cut out of the solid rock can only be the result of enormous floods of water laden with sand. Many shallow and dry channels exist, filled with large waterworn boulders. Dry awaawas are more sparingly found than in the low open lands, but they are otherwise very similar, and without a trace of running water in their beds. In the great Te Toto Ravine, leading eastwards from Kaponga, a dyke of hard rhyolite is seen standing up and crossing the valley like a natural bridge. It is pierced with a waterway 8ft. or 10ft. high, and a deep hole below, always full of water. But water is never seen flowing through it now; and what the condition of the country could have been when that ravine was scooped out, and the hard dyke pierced, is not easy to describe. All over the plateau also are to be found isolated rocks, rearing their storm-beaten pinnacles 30ft. or 50ft. above the surface, the remains of masses which have resisted the grinding and denuding process which levelled the plateau and carved out the ravines as the country yielded, probably gradually, to the upheaving forces. The strata of yellow pumice-gravel and surface-soil, being conformable to the rock, are no doubt due to subaërial deposits made after the erosive action of water had ceased; and very little change has taken place since then, other than the forest growth, of which there is evidence of more than one generation.

Up to the time of commencing the railway survey very little was known of the interior of the plateau beyond the Kaharoa Track, traversed by the intended road. Two other native tracks existed—one from Kokako to Ngongotaha, and another from Te Whetu to the Utuhina Valley. The surveys for the land-claims had included lines run through the forest in some places, and the great "Rohe-Potae" of the Whaite Kuranui Claim had just been cut; but information derived from those engaged in that work was of the mistiest, principally owing to their want of knowledge of the great height of the table-land. The writer's road explorations in the forest and open lands of Patetere supplied a good foundation on which to work. It is not necessary to describe in detail the opera-

tions of the various survey explorations. The hopes and fears, expectations and disappointments, which alternated in the experience of about twelve months of hard and harassing work, eventually secured the location of a route favourable in everything but grades. A limit of gradient of 1 in 40 was aimed at, and a route was actually graded to the plateau via Kokako; but the works and curves would have been heavy. It was determined that none of the deep ravines were suitable, on account of the want of access which would have resulted to a great part of the line should it be located half-way down the sides of one of these. Besides, the amount of works and danger from slips were such as could not be entertained or risked.

By the adoption of 1 in 35 for the maximum grade, it became possible to breast the ascent on the west side, mainly in a dry valley between the Mangatapu and Mangakotaha ravines. And in the descent to the lake-basin two of the gullies—Te Uhi and Manurewa—are not too deep to be embanked, and the heavy fall of the country is overcome by grading diagonally

downwards until the levels near the lake are reached.

It is unnecessary also to enter into the records of the railway company and the purchase by the Government of all the district railways in the colony. Those are matters of history, and, presumably, of no general interest now. When the Government determined to push the line to Rotorua, and the writer's firm was engaged as the engineers, it became necessary to at once locate the line for contract. For this purpose a set of very stringent conditions were imposed in addition to a limit of time. These comprised the compensation of grades for curvature, so that, as the haulage would be increased by curves, it would be diminished at these places by proportionately reducing the grades. Also, all stations were required to be straight in alignment and level for a length of 15 chains. These conditions, and the retention of the ruling grade of 1 in 35, rendered the work of location in that dense forest one of very great nicety and labour. It was effected, but with hardly a foot to spare in the critical parts of the grading on both flanks. Ten chains is the minimum radius of curvature, and this only occurs three times, and each at a place close to a station. The preliminary survey from Putaruru to Rotorua showed about 116 curves. These the contract location reduced to 49, many of them being a mile and upwards in radius.

The heavy grading on the western side may be taken at from 1 mile 15 chains below Ngatira to five and a quarter miles above, where the plateau is reached at 1,748ft. above datum. The plateau is just five miles broad as traversed by the railway. At Kaponga, 1,910ft. above datum, the descent begins, and the maximum grade is used on a length of six miles, ex-

clusive of Tarukenga Station. Ngatira Station and Rotorua Terminus are practically on the same level, being 961ft. and

959ft. respectively above datum.

The works vary in character to a large extent on different sections. On the lower part, near the Oraka, there are fourteen bridges, covered by a length of three miles. Only one of these—the Oraka viaduct—has permanently flowing water under The others are all built in case of extraordinary floods, which may be caused by the bursting of rain-clouds in the hills. seeing that two of the larger of the ravines—the Mangatapu and the Wairakau—drain down this valley. After leaving the Mangatapu and its bridges no permanent stream requiring a bridge is found until a small one is crossed about one and a half miles from the lake. Thus a length of line of just twentyone miles has no understructures excepting culverts and pipes and two under-bridges put in for road-crossings. The remaining six miles along the flats rounding the lake will have six small bridges, and the works and grades are of the easiest, until the line, rising gently from the Utuhina, cuts into the hard pumice gravel of the terminus in the new township of Rotorua.

The line was opened to Oxford, thirty-one miles from Morrinsville, on the 8th March, 1886, and that place became the resting-place for the night. The rapid increase of the tourist traffic during the short remainder of the season was remarkable, and taxed the resources of the hotel severely. On the 18th June, following the awful calamity of the Tarawera eruption took place, and marked a standing-point in the prosperity of the whole country. Very few ever considered what the great influx of foreign capital caused by the tourist traffic, and the very small outlay given in return for it, really meant to Auckland. But the hard times we all hear of, and too many of us experience, date from that time.

The line was opened to Lichfield on the 21st June, eleven days after the destruction of the Terraces. The surveys of the second section were completed by Christmas of that year. Although the Ngatira contract was ready, and had been approved in May, 1886, it was not until March, 1887, that a tender was accepted for it. At the same time the natives of Rotorua were granted work at that end, and during about fifteen months they were employed in forming about six miles and a half, which they performed in a most satisfactory manner. The Ngatira contract was completed in June, 1888; and a most unaccountable delay took place until February, 1890, when work was resumed on the Kaponga contract, which is now drawing to completion. This leaves 13 miles 32 chains to complete the line to Rotorua.

The proposals of the Public Works Statement made last

week lead only to a present extension to Tarukenga Station, at the crossing of the line with the coach-road, a length of 4 miles 62 chains, although the Statement puts it at only three miles. That length includes the heaviest works to be found on an equal distance on the whole line, and comprises the rocky grading down Te Toto Ravine and the crossing of Te Uhi and Mangarewa Gullies. The coaching length from Tarukenga to the old township of Ohinemutu is nearly eight miles. The through journey can be easily performed in one day, but nothing short of the complete railway-line will ever satisfy the demands of invalids, or be commensurate

with the requirements and amenities of the district.

There is no better constructed railway in the colony than The rails are of steel, and the heaviest in use here. this line. The stations and buildings are most ample in accommodation. The same remark applies with greater force to the watersupplies, which are fixed with regard to the necessary expenditure of steam on the various parts of the line. water-tanks are brick towers, and are of a description to be found on no other railway in or out of New Zealand, unless it is true, as has been reported, that they have been copied in Victoria by a bricklayer who worked at all of ours. mata tank holds 20,000 gallons, at an elevation of 15ft. above rails, and is supplied from a well by wind-power. The other four-at Oxford, Putaruru, Lichfield, and Ngatira-are 6,000 gallons capacity each, and are supplied by hydraulic rams, which force up from 3,000 to 4,000 gallons per diem. field, Putaruru, and Ngatira are supplied from the Ngutuwera. Oraka, and Mangakotaha Streams, and to heights of 100ft., 120ft., and 340ft. respectively. At the middle of the Kaponga contract the contractor has put down for his own use a ram which forces a splendid supply of the purest and coolest water from the Mangatapu to a height of 310ft. and a distance of five-eighths of a mile. Two more supplies will be required for the extension, besides the terminal one at Rotorua, when the line reaches there. It is proposed to install a supply at Kaponga from the Ohinenui, a stream two miles off. The height to be forced is 210ft. This will provide a water-supply for the nucleus of the expected settlement of the plateau; and by adding, when required, a second ram, for which provision is made, 20,000 gallons may be sent up every day. posed temporary terminus at Tarukenga will be supplied from the Okakari Creek, 1 mile 30 chains distant, and the required The overflows of waste water from Lichfield, lift is 310ft. Putaruru, and Ngatira are led so as to be of service to the settlements and lands adjacent. This has been of immense benefit to those thirsty lands, and serves to show how easily the water problem may be solved all over that country.

The total length of the railway, including the branch to Lichfield, is  $73\frac{1}{2}$  miles. The average cost of this when finished, including the rolling-stock sold by the company to the Government, will be about £4,300 per mile. The cost of Section I. alone, handed over in working-order to the Government, was £3,600 per mile. The cost of Section II., finished to Rotorua, but without any rolling-stock, will be £5,300 per mile. When it is remembered that the average cost of the New Zealand railways is about £7,500 per mile, and that Section II. is of more than average in amount of works, we have every reason to feel satisfied with the result on financial grounds.

The total length of the railway-journey from Auckland to Rotorua will be 170½ miles, and at the present rates the fares would be £1 15s. 8d. first class, and £1 3s. 6d. second class. At the same journey-speed as at present run between Auckland and Lichfield the time required would be ten hours forty-seven minutes, but there would be no difficulty in reducing it to eight hours by reducing the number of stopping-places, and

retaining the present maximum running-speed.

Such is a brief, and, I fear, rather disjointed, description of this very important railway. The delay in the expected early completion is a severe blow to many of us, as we were led to think that at last a broad view was likely to be taken of bonâ fide railway requirements, albeit somewhat late in the day, instead of the craving for local expenditure—no matter on what which has so long been the rule. The course of action decided on has not caused much surprise to those who have had long and varied experience of the wheels within wheels which give motion to our railway policy. The jealousy between the old and new townships of Rotorua is to blame for the delay since 1888, including the present indefinite postponement of completion. Persistent attempts have been made to prevent the line going past the old township, and this after an expenditure of between £20,000 and £30,000 on the Government Sanatorium, and many thousands besides on the purchase of the new

There are now in Auckland invalids who cannot go to Rotorua because of the coach-journey. There are no doubt thousands in other lands in the same position. Last year the officially-reported number of tourists was over 2,500. The money turned over in the country by that number would probably be £100,000. Ten times that result would speedily follow complete railway-communication. That is the sordid view of the matter. Let us hope that it will soon appeal to the powers that be, if nothing higher will, and that the long-looked-for completion of the line will be undertaken before the

intended new contract is finished.