



MOTORING ROAD BETWEEN LAKES ROTOITI AND ROTOEHU, HOT LAKES DISTRICT.

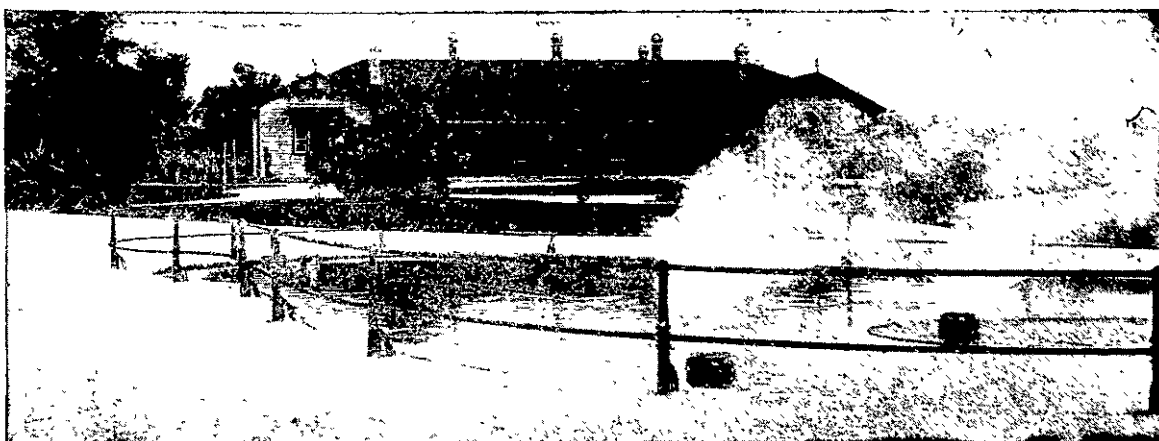
Motoring in New Zealand.

New Zealand offers manifold attractions to the motorist, and is probably a more varied field for this class of travelling than any other country of its size on the globe. The traveller in the back blocks often has imperfectly formed roads to contend with and numerous rivers, particularly the snow fed rivers of the South Island, some of which are unbridged, but, taking it as a whole, the colony is surprisingly well roaded for such a young country, and the delightful scenery far more than compensates for any difficulty of travel. The motorist can take his car from practically one end of the colony to the other, and on the way he views scenes of such wonder and grandeur as no other part of the earth can show him in such a limited compass. An American traveller, Mr. Glidden, who not long ago brought his touring car to New Zealand and motored through both islands, was loud in his expressions of delight at the marvellous variety of the natural scenery which he was enabled to visit. He travelled in all some 4,000 miles over New Zealand roads, and except for the unbridged streams which he encountered here and there, was thoroughly pleased with the condition of the main vehicle routes of the colony.

The accompanying pictures are examples of places in the principal tourist districts which can be readily reached by motor car, but these localities are only a very small fraction of the many interesting spots available to the touring motorist.

In the North Island there are some splendid runs along the main arterial roads right through the

island. Chief of all is the route from Auckland through the beautiful and historic Waikato valley, through Cambridge, and then on to Rotorua and over the pumice roads of Geysersland to Lake Taupo, with its sea-like expanse of blue waters and its grand background of volcanic peaks—Tongariro, Ngauruhoe and Ruapehu. From Taupo there is a mountain road via Tarawera and Ruanui to Hawkes Bay and the pretty town of Napier, and again from Napier either northwards to the green Wauroa and the lovely mountain lake Waikaremoana, one of the most exquisitely beautiful sheets of water in the world—or southwards through the rich Wairarapa valley to Wellington city. There is also the western route from the plains of Taranaki to Wanganui and



IN THE GOVERNMENT GARDENS, ROTORUA.

Wellington, and motor cars have been taken from Auckland to New Plymouth by way of the King Country and Mokau and the coast of North Taranaki but this road is sometimes rather difficult for the motorist.

In the South Island there are thousands of miles of splendid motoring roads, particularly in the Canterbury province. For grand scenery—woodland, mountain and lake—there is no finer route than that from the pretty town of Nelson down through the Buller Gorge to Westport, Reefton, and Hokitika; thence across to the Canterbury side by way of the Oira Gorge through the heart of the Southern Alps.

These gorge roads often try all the motorist's nerve and promptitude of action in emergency, but they are kept in excellent order and are easy to travel.

North of Christchurch there is Hanmer with its hot springs, and South Canterbury motorists can travel right up to Mt. Cook "Hermitage" (Government Hotel) near the foot of giant Aorangi, and close to the terminal faces of several enormous glaciers.

Southward again are the great blue glacier-formed lakes, Wakitipu, Wanaka, Hawea, Manapouri and Te Anau. All of these can be reached by motor car, and the fortunate motorist can in this way penetrate right to the heart of some of the most wonderful scenery that this globe of ours can show.

The Friction of Metal on Metal Without Lubrication.

May be taken at one-sixth of the weight up to 40 lb per sq. in.; at one-fifth of the weight up to 100 lb per sq. in., Brass on cast iron one-fourth of the weight up to 800 lb per sq. in., wrought on cast iron one-third of the weight up to 500 lb per sq. in., well oiled with tallow at one-tenth of the weight; well oiled with olive oil at one-third of the weight. 800 lb per inch forces out the oil. Friction of journals under ordinary circumstances one-thirtieth of weight. Friction of journals well oiled sometimes only one-sixtieth of weight.

A propos of the reference we made in our last to a process of making briquettes of saw-dust and shavings for firewood, we have to add that Messrs. M. Glover & Co., patentees and sawmill engineers, Leeds, have devoted much time and skill to the perfection of machinery for sawing, splitting, and bundling waste wood, and also for automatically moulding and compressing sawdust, shavings, and other inflammable ingredients into neat, small briquettes, so as to make convenient fire-lighters at little expenditure. Many firms engaged in industries in which wood is extensively employed now find a profitable method of utilising surplus power and waste wood, in producing a saleable commodity in the shape of bundles of firewood.

This seems to prove again the old truth that new methods for the prevention of waste have often proved more remunerative than new methods of production. In dealing with materials, no less than in dealing with finances, it is of the utmost importance to stop the leakage. There are few by-products to-day that are wasted, but in many industries it is certain that remnants are not always used up to the greatest advantage. Where the remnants are metal, and can be re-fused, and then remade into some other useful form, the waste is minimised. In the case of wood remainders, however, the object is to use them so as to leave little ultimate loss.