EXPORTS.

Products.	1905 £	1855 £	Increase at 1905. £
Wool	5,381,333	93,104	5,288,229
Grain	294,574	82,302	212,272
Frozen meat	2,694,432	19,339*	2,675,093
Butter	1,408,557	5,786	1,402,771
Cheese	205,171	2,163	203,008
Phormium Fibre	696,467	4,674	691,793
Gold	2,093,936	40,442†	2,053,494
Kauri gum	561,444	4,514	556,930
Provisions, Tallow, Timber, etc.	2,167,616	173,324	1,994,292
Total volume of trade	£15,503,530	£425,648	Total Increase £15,077,882

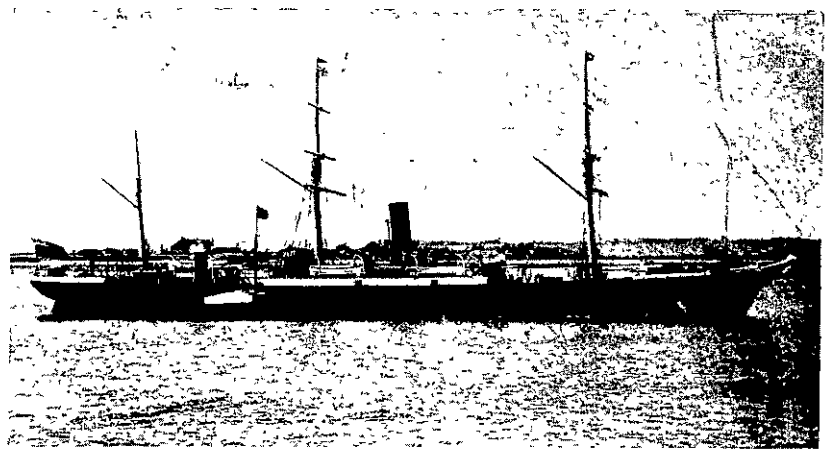
*For the year 1882 when first shipment was made.
†For the year 1857 when first shipment was made.

IMPORTS.

Total value 1905, £12.828,857 ; total value 1855, £813,460.
Total increase, £12,015,397.

TRANSPORT.

Vessels.	Tonnage, 1905.	Tonnage, 1855.	Increase
Inward	1,139,410	88,614	1,050,796
Outward	1,141,552	79,825	1,061,727



THE OLD RUAPEHU, 4,163 TONS, BUILT AND ENGINED AT GLASGOW IN 1883 BY JOHN ELDER AND CO., FOR THE NEW ZEALAND SHIPPING CO. LTD.

Photo supplied by N.Z. Shipping Co.

TROLLEY LINE HANGING IN AIR.

CONTEMPLATED SUSPENDED RAILWAY FOR THE GERMAN CAPITAL.

THE problem of providing for the requirements of the rapidly growing street traffic has recently come to the fore in many European capitals ; and even in Berlin, which has long been so highly praised for the excellent means of conveyance it enjoys, the inadequacy of the present tramway and railway system is keenly felt. New projects have therefore been suggested ; and one of the proposals most interesting and most likely to be adopted is to instal a high-speed railway on the monorail suspended system.

While the number of inhabitants of Greater Berlin has increased by 2½ times during the last thirty years, the passenger traffic on its tramways, omnibus lines, and metropolitan railways has increased by 20 times. It is not unlikely that the total passenger traffic will have been doubled as against the present figures, after another ten years. Now, as the tramway traffic has practically reached its permissible maximum in certain streets, while the output of the present metropolitan railways, also, is not susceptible of any further material increase, the only possibility of coping with these conditions is to provide for new high-speed railways of great capacity, special care being taken to avoid as far as possible any further crowding of the already congested streets. The most congested district is obviously that part of the town which is to an ever-increasing extent becoming a centre of business, while being less and less used for dwelling purposes. The new high-speed railways will accordingly have to distribute traffic over a larger area ; and this result can be reached in the simplest way by installing a north-south railway line to counteract the present mainly western-eastern course of traffic.

The railway system suggested by the Continental Company for Electrical Undertakings is the monorail suspended railway system which has been in successful operation for some time between Elberfeld and Barmen. A special advantage of this system is its elegance in aspect, the girders being placed at about twice the height of ordinary elevated railways, while being of hardly more than half their breadth and of more open construction so as to take up much less of the air and light of the street. Its ease of dealing with curves (curvatures of 160-foot radius being travelled through at the same speed as those of 650-foot radius in the case of the ordinary type of elevated railway) gives this system still another advantage. The necessity of the purchase of ground is furthermore greatly reduced as compared with elevated railways. While a perfectly noiseless operation is impossible, the noise produced by suspended railways is much slighter than that of either elevated or surface railways.

The projected suspended line, starting from Gesundbrunnen Station on the metropolitan railway, would traverse Berlin southward as far as Brietzer Grenze (Rixdorf), where the other terminal station would be installed. As both terminals would be arranged in the shape of reversing loops, the two tracks of the railway would constitute a closed, uninterrupted cycle, including no switches (so far as passenger traffic is concerned) ; a total of seventeen stations has been provided. The length of the line, exclusive of the reversing loops, and intermediate stations, will be 11.9 kilometres (7.4 miles) ; the maximum gradient is to be 1 .30. The upper level of the rails will range from 32.8 to 70.5 feet above the level of the street. The latter figure is necessitated by the fact that the suspended railway will have to pass at an oblique angle above the western line of the metropolitan railway, where space for an additional story to that railway is to be allowed for. The same crossing results in the necessity of the high gradient of 1.30. Among other important constructions on the open track, there will be the bridging of the river Spree, where the stream will be traversed by a single span consisting of parabolical girders. Blocks of houses have to be pierced at two places. The stations are to accommodate trains made up of three cars, means, however, being provided to allow of a further extension.

At the terminal stations all tracks are arranged in such a way as to call for only forward running of the cars. The double track terminates in a reversing loop, whence two secondary tracks are branched off, to allow of any manipulation of cars that may be necessary without interfering with the service. The shed tracks connected to the reversing loop are intended for the installing of reserve cars to alter the length of the trains. The type of switch used will follow very closely the model of the Barmen-Elberfeld line.

To support the runway, there are to be used exclusively what are called central supports or else forked supports, both of which types readily lend themselves to a rich ornamentation. As on the other hand the streets to be traversed by the railway are all very straight and slightly over 62 feet in breadth, the general aspect of this suspended railway should seem to be rather less objectionable than that of any other type of overhead high-speed railway.

The same type of car, accommodating 85 passengers, with 46 seats, is to be used throughout. Each car is provided with a special controlling device enabling it to run either singly or in connection with other cars, irrespective of the order of the latter, composite trains being controlled by the driver of the head car. To insure safety of operation, the electrically operated "Atalis" automatic block signal is to be used, which has given every satisfaction on the Barmen-Elberfeld suspended railway. A special advantage of this type of block signal, apart from its reliability, is that in case of mistakes, all there can be occasioned is a delay of trains, but never a mistake in the signals interfering with the safety of the trains. To allow of communication between the station-guards and train drivers, telephone plants will be provided.

Only one class of cars, with separate compartments for "smoking" and "non-smoking," is to be provided at the beginning ; and the service will be started with single-car trains, running as 5-minute intervals, except during the early morning and late evening hours, for which a ten minutes' service is contemplated. A reduction to a two minutes' service will, however, be effected in case of necessity.

With a maximum speed of a little over 31 miles and an average speed of slightly over 18½ miles per hour, the total distance from Gesundbrunnen to Rixdorf will be traversed in 22¼ minutes.

In the case of a two minutes' service with three-car trains, it will be possible to convey 7,500 passengers per day in either direction, corresponding to a minimum yearly output of 40-50 million individual journeys. It is however intended eventually to increase the size of the trains to six cars, while the possibility of reducing the intervals of service below two minutes might also be considered.

Mars and the Camera.

Since the announcement last May that Mr. Lampland, at the Lowell Observatory, Arizona, America, had succeeded in obtaining photographs of Mars showing some of the much-discussed "canals," the opponents of the canal theory have frankly recognised their importance as unimpeachable affirmative testimony. At the request of the editors of "Knowledge," Mr. Lampland has forwarded specimens of the actual photographs, and in the June issue of that periodical some of these are reproduced. Of these reproductions the markings believed to be artificial waterways constructed by the Martians are plainly discernible, and on the actual negatives no fewer than eleven "canals" can be traced. Apart from their value in the canal discussion, the photographs are a remarkable achievement, and were obtained after many failures, by a series of short exposures on a continuous firm similar to that of a cinematograph.

The best remedy for a sluggish liver is not to be one.