

with cutting-head on the suction-pipe are in course of preparation, and it is anticipated that they will be shortly completed, when tenders can be invited for the construction of the machine.

TRAMWAYS.

Takapuna Tramways.—During the year the construction of the Takapuna Tramways, which had been in hand throughout the previous year, was satisfactorily completed, the certificate enabling traffic to be run being given in December last. Proposals for altering and improving the siding accommodation at the Bayswater end were approved, and the work has been duly carried out. Improvements to the grades and curves have also been effected.

Auckland Electric Tramways.—Plans of the Remuera duplication were approved in July, and construction immediately put in hand. The work was all finished and ready for traffic by the end of year. Plans for the Morningside extension were approved in March, but so far no work has been done. Drawings of ten new bogie-cars were approved, nine of which have been completed. The company has another fifteen cars on order. Three of these were completed and under examination at the end of year. Ten of these fifteen cars are being manufactured in the Dominion, and five are being imported. Air-brakes have been fitted to thirty cars.

Wellington.—An extension of the Karori tramway to the Karori Park has been carried out during the year. The construction of an electric tramway to Wadestown has also been carried out. The duplication of a portion of the Kilbirnie route has been completed, likewise of two portions of the Thorndon Quay route.

The construction of a second car-shed at Thorndon has been carried out.

The removal of the centre poles supporting the overhead equipment along the single tracks forming the Thorndon Quay and Oriental Bay routes has been completed, with very great convenience to the working of the tramway and the safety of the public. The whole of the cars are now able to travel over these routes without restriction.

The construction of the connecting-link between the tramway in Willis Street and that in the vicinity of the General Post-office has been put in hand. When completed, the Brooklyn cars will run through to the General Post Office, which will form the termination of the first section on that route.

During the past year several new cars have been put in commission and several old ones have been reconstructed with a view to increased accommodation. As completed, these cars were duly inspected.

Christchurch.—Burwood route : This section has been electrified.

Burwood route extension to Beach : This section has been relaid with heavier rails.

Cashel Street route (High Street to Canal Reserve) : The construction of this section has been completed, and the line is now in use.

Antigua Street line to Spreydon : The construction of this section is nearing completion. Various loop-lines have been made or extended on the New Brighton, Edgeware Road, Cashmere Hills, Riccarton, Bealey Avenue, Cathedral Square, Worcester Street, Princes Street, Woolston, and Addington routes. A new lay-out is being put in at the car-shed entrance, Moorhouse Avenue.

A number of cars have been built and passed for traffic.

Invercargill.—During the past year the work of construction of the tramways in the town was put in hand by the Borough Council.

DEFENCES.

Various works in connection with defences have been carried out at Auckland, Wellington, and Dunedin.

CONTRACTS.

A complete schedule of contracts entered into during the year for the construction of works and also for the supplies of materials and the performance of various services is given in Appendix C.

I have, &c.,

R. W. HOLMES, M.Inst.C.E.,
Engineer-in-Chief.

The Hon. the Minister of Public Works.