

conversion may have that appearance of spending money twice over which is in all countries—and in none more than in England—so frequently brought against the administration of fortifications; but it must be admitted that to leave the very costly and elaborately-mounted guns which the colony has acquired under the inefficient and unlasting protection of the hurriedly-improvised works of 1885 would be unwise policy. The only suitable sites had been occupied and covered by these temporary works; and on the permanent armament being emplaced it became very necessary to convert the temporary works into protection of a more permanent character. This has been designed at the least possible expenditure of labour and money.

#### *Progress of Year in Land Works.*

Fair progress has been made during the year on the lines of the approved scheme, and all four harbours are at date considerably more capable of effective artillery resistance to any hostile attack than at the commencement of the year.

More work would have been done but for the decision of the Government in power, in November, 1890, to employ prison-labour in road-making and other works in the region of the West Coast sounds. This occasioned the removal of drafts of the best men on the defence-works, amounting to nearly 50 per cent. of the available numbers in each case, from the gangs employed at Wellington, Lyttelton, and Dunedin. The full complement has never since been made up, and, indeed, the numbers have remained almost as left by those drafts. When it is considered that the labour employed on the defence works is entirely confined to that of convicts, and that the inferior sort of convicts will not work energetically unless there are good workers of the better sort among them, it will be readily gathered that the removal of all the best men for a period of five months, or nearly one-half the year, has materially handicapped the progress of all the defence-works at the three ports mentioned. The works at Otago Heads have been stopped as from date, and the staff paid off.

#### *Inspection by Captain Moore, R.N.*

Although not upon formal credentials, the whole of the defence-works of the colony have quite recently been carefully and critically inspected by Captain Moore, of the Royal Navy, the officer specially despatched to Australia by the Imperial Government to confer with the authorities of the Australian Colonies upon the defences of Thursday Island, Albany, and other strategic harbours. Captain Moore will no doubt officially communicate to the Government his opinions. To the departmental officers he has freely stated his approval of, and satisfaction with, the majority of the works. It may be of additional interest, when so much has been said and written about the lavish expenditure on defences in New Zealand, to record that Captain Moore was, by permission of the late Minister of Defence, supplied with the figures, in the minute detail kept by the department, of the cost of each battery and work, and that he expressed his surprise at their lowness and economy as compared with practically similar works constructed in Australia, as to which he had obtained the figures from the authorities on the other side.

#### *Land Works uncommenced.*

With regard to those land works included in the complete scheme of defence upon which operations of construction have not yet been commenced or brought to any definite stage of design, little progress has been made during the year, and the remarks under this head in the report of last year hold good. It may be added that, under the recently-received instructions with regard to defence-works to be proceeded with during the present year, this position of affairs will not be altered. The same remarks apply to any questions of additional armament.

#### *Mounting of Ordnance.*

Three thirteen-ton 8in. guns and one seven-ton 7in. gun have been permanently mounted during the year, and emplacements for further heavy ordnance and quick-firing guns on hand in the colony are advancing to completion.

#### *Submarine Defence.*

The usual training of the Torpedo Corps, and preparation and testing of appliances, has further advanced the power of defence by mines at the two principal harbours, and there now remains only the actual mine-field work and its accessories to enable utilisation to be made, in case of necessity, of the excellent stores with which the dépôts are supplied. The exigencies in this respect were fully pointed out in last year's report, but funds have not permitted during the past year the completion of equipment, &c., therein mentioned, the absence of which must handicap the attainment of the full result that the *matériel* is capable of giving if the facilities and conveniences established as essential by long-continued experience in submarine-mining work carried out at R.E. stations of the Imperial army are wanting. The close of the year has been unhappily marked by the fatal explosion at Shelly Bay dépôt, in Wellington; but, as inquiries, both of a military and civil nature, into this unfortunate accident are at date in course of progress, it would not be proper to comment upon it.

#### *Stores.*

The whole of the valuable submarine stores and equipments in the colony are in the charge of the Torpedo Corps at the various stations, and are inspected at periodical intervals by Captain Falconer, the officer in command of the submarine-mining branch, and are all kept in excellent arrangement and condition.

The steam-launches, and all other plant, gear, stores, and appliances employed in and for the general carrying-on of the defence-works, have been maintained in an efficient and satisfactory condition throughout the year.