

1892.

NEW ZEALAND.

REPORT ON NEW ZEALAND FORCES.

Presented to both Houses of the General Assembly by Command of His Excellency.

The ACTING UNDER-SECRETARY FOR DEFENCE to the Hon. the DEFENCE MINISTER.

SIR,—

Defence Office, Wellington, 1st July, 1892.

I have the honour to submit for the information of His Excellency the Governor, Commander-in-Chief, the annual report upon the Permanent Militia and Volunteer Forces of the colony, together with a report from Mr. Bell, Engineer for Defences, dealing with the general progress and construction of harbour-defence works, from which it will be seen that, while economy has been carefully studied, the works have made satisfactory progress.

Permanent Artillery.—The officers, non-commissioned officers, and gunners of this branch of the Force maintain a good state of efficiency in gunnery, ordnance, small-arms drill, and theoretical instruction; signalling by day with flags, and by night with lamps, &c.; and the state in which the batteries, guns, and appliances are invariably kept reflects considerable credit on all concerned. A new system of drill for breech-loading rifle, muzzle-loading rifle, breech-loading and quick-firing guns, on garrison mountings, has been compiled by the Master-gunner and Staff Artillery Sergeant, and is now in general use throughout the colony, and insures a uniform system. These drills are compiled from the drills in vogue in the Imperial service, but they have been modified to suit colonial requirements, as garrison mountings in the colony differ in many respects, but the Imperial principle has been strictly adhered to.

Instructors to Volunteer Corps and Schools.—In addition to utilising the services of the officers, non-commissioned officers, and men extensively in instructing the Volunteers, which has been very satisfactorily carried out, and appears to be thoroughly appreciated by the citizen-soldiers, the Permanent Militia have, during the past year, rendered most useful service in drilling the State and other schools in the four centres, and arrangements are being undertaken by the Volunteer Drill Sergeants-Major at the smaller centres; and the requests of the various School Boards are being attended to as far as practicable.

Barracks.—I regret to have to report that an epidemic of typhoid fever broke out in the Mount Cook Barracks in February last. Nine men were attacked, two died; but the cause of the outbreak has not been satisfactorily accounted for. As soon as the disease appeared in the form of an epidemic, the men were moved to Shelly Bay, placed under canvas, and, when the winter set in and it was too cold and stormy for tents, the men were moved to the upper portion of Mount Cook, into rooms formerly occupied by the prison officers; where they still remain, while necessary sanitary and other improvements are being carried out in the Mount Cook Barracks. It has been stated that the outbreak of fever was entirely due to the old and dilapidated state of the barrack-rooms; but such is not the case, as the two barrack-rooms in which the men attacked were housed are comparatively of modern date, having been entirely rebuilt within the last fourteen years. As soon as the men were moved into camp the disease quickly disappeared.

Work done.—The work done during the past twelve months has been chiefly that which is necessary to make efficient gunners—namely, general artillery duties, service of ammunition, making up and storage of projectiles and cartridges, keeping the various emplacements and mountings clean and in a serviceable condition, mounting and dismounting guns, removing and storing ammunition, care of stores, magazines, barracks, &c., shipping guns, projectiles, and ammunition, and, generally, in all duties involving maintenance of batteries and armament in efficient order; while drills in all arms, lectures, &c., have been carefully attended to. Battery and station practices have been carried out with muzzle-loading guns, including firing at moving objects where ranges are available, as well as the usual carbine practice.

Artificers.—The artificers attached to each battery have rendered good service, as, in addition to periodically overhauling the guns and mountings and doing all necessary repairs, they have made many improvements in the fittings of both guns and carriages, thereby saving considerable expense and adding to efficiency. It appears to me that as these men cannot rise to be non-commissioned officers, their pay should be increased at certain periods of service, as in this respect they are on a worse footing than their comrades.

Transfers.—During the past year nine gunners have been transferred to the Police, and five to the Prisons Department; the men thus transferred invariably give satisfaction in both the police

and prison service, having been well grounded in discipline and subordination from the time of their enrolment in the militia.

Conduct.—The conduct of the Permanent Militia has been, on the whole, good, though I regret to have to report that one gunner was convicted of embezzlement.

Instructors.—The Master-gunner and two assistants (instructors) belonging to the Royal Artillery continue to give satisfaction to all ranks, while the non-commissioned officers of the Force generally are well spoken of, and eulogised as instructors, by the Volunteers and others who receive instruction at their hands.

Torpedo Corps and Submarine Miners.—The officers, petty officers, non-commissioned officers, and men of the corps have been practised in their duties as torpedomen and submarine miners periodically. The whole of the Government launches and torpedo-boats at the four centres are now in charge of, and are worked by, members of the corps. A class of men are now preparing for examination to obtain certificates in engine-driving. Eight men have already passed since this course of instruction was first initiated, and these men are now in charge of the various engines, boilers, and machinery at the different submarine mining stations.

Practical Work.—The following practical work has been carried out by members of the corps during the past year: The wreck of the wooden barque "Willie McLaren," 870 tons, with 1,000 tons of coal, which was an obstacle to the navigation of Wellington Harbour, was successfully blown up by an explosion of gun-cotton charges. The wreck of the iron sailing-ship, "Lyttelton," 2,000 tons, which impeded the navigation at Timaru, was also successfully demolished by the same means. Rocks which have always been an obstacle in the way of navigation at Nelson Harbour were removed by successive charges of gun-cotton, and as a proof of the success of these operations it may be mentioned that the sailing-ship "Pleione," on her last visit to Nelson, which was after the removal of the rocks, though drawing more water than on her previous visit, was enabled to be berthed at the wharf immediately upon her arrival from England, whereas on her previous voyage she had to lay outside some four weeks and discharge 300 tons of cargo before being taken inside the harbour. There are still some more rocks at Nelson that require to be removed, and the work will probably be undertaken during the summer.

Mine-fields.—Considerable progress with the surveys of the mine-fields at Wellington and Auckland has been made, and both these fields will shortly be completed.

Casualties.—The following casualties occurred in the Permanent Militia during the year: Deaths, 2; resignations, 11; discharges, 10.

Recruits.—31 recruits have joined. They are of the usual stamp, robust, active, intelligent, and subordinate, and their conduct and progress in their duties is all that can be desired. The system of recruiting from men who have at least one year's efficient service in the Volunteers is answering well, and there is no abatement in the number of applicants. It has not been found practicable yet to give those men transferred to the Police and Prisons Departments an annual course of a fortnight's gun-drill, but the necessity for this is still manifest, and it is to be hoped will ultimately be brought into operation.

Volunteers.—On the 31st December last, the active strength of the Volunteer Force of the colony was 6,582 of all ranks, as against 6,700 at the close of the previous year, and of these numbers 5,376 earned capitulation last year, as against 4,939 the year before. This will no doubt be somewhat surprising to those sceptics who continually assert that the Volunteer movement is dying out, that the men are disheartened and disgusted with their treatment, and receive no encouragement; but these fallacies are completely upset by the substantial increase of 437 efficient for the past year. No reliance can be put on the actual strength shown on paper, as many of the men whose names are retained on the rolls are absent from the colony, but as regards the number of those who have earned capitulation there can be no miscalculation.

Cavalry and Mounted Rifles.—There are 6 cavalry corps (North Island 4, South Island 2), with a total of 359 sabres; while of mounted rifles there are 9 corps (North Island 6, South Island 3), with a total of 478. All these corps are drilled both as cavalry and infantry; they are all well mounted and good horsemen.

Naval Artillery.—There are 17 batteries (North Island 7, South Island 10), with a total of 1,155 of all ranks. These corps are visibly improving year by year, and there can be no reason for doubting that they would be most valuable auxiliaries to the Permanent Artillery and Torpedo Corps in time of need. Under instructors from the Permanent Militia, the majority of these corps have made considerable progress in big-gun drill, torpedo- and submarine-work, boat-drill, signalling, knotting and splicing, and the reports received from the instructors in these different drills is very encouraging, and reflects credit on the officers, non-commissioned officers, and men concerned. During last year 107 were passed as efficient in submarine mining, as against 72 in the previous year, and the same number passed in heavy-gun drill, as against 48 in the previous year. We therefore have 214 from these naval artillery corps receiving the extra £1 and efficiency badge—half the number for gun-drill, and half for torpedo- and submarine-work.

Artillery (Field and Garrison).—There are 12 batteries (North Island 4, South Island 8), with a total of 633 of all ranks. The guns in use with the field batteries are now obsolete, and should be replaced as soon as possible. The mounting of 64-pounders at the drillsheds for the use of the garrison batteries has been much appreciated, and has added considerably to the efficiency of the corps.

Engineers.—There are 3 companies of engineers (North Island 1, South Island 2). Each corps has purchased, and maintains, extensive appliances and tools, and they have made considerable progress during the year in engineer-work, under instructors from the Royal Engineers, and the Torpedo Corps Inspector reports favourably on all these three corps.

Rifles.—There are 65 rifle corps (North Island 21, South Island 44), with a total strength of 3,751. These corps, while steadily improving in drill, maintain their reputation for good shooting; but in many of the town corps the commanding officers, owing to over-anxiety to increase their

numbers, do not appear to pay sufficient attention to the physique of their recruits, and in some corps men are to be seen in the ranks to all appearances unfit to bear arms, owing to youth and non-development; but these are the exception and not the rule. The attendance at drills during the year has considerably improved, and would be very much better if employers of labour would encourage their employes by occasionally giving them two or three hours' leave, but this is seldom done; and I do not think the difficulty will be got over till statutory Volunteer holidays, or half-holidays, are proclaimed throughout the colony. It is clearly proved from the good attendance given to night parades by the Volunteers, after having undergone a hard day's work at their various avocations, that the same good attendance would be given to parades held during the day if the employers did not prevent their men from attending.

Cadets.—The strength of this portion of the Force at the end of the past year was 2,111, being a decrease of 1 on the previous year. There are 38 corps (North Island 8, South Island 30). The cavalry carbines on issue to these corps are most unsuitable for boys, being clumsy and too heavy, and have a tendency to make the shoulder droop. It has therefore been decided to issue no more of these arms to cadet corps. The services of the members of the Permanent Militia have been placed at the disposal of the various Education Boards to act as instructors in the different schools for the purpose of teaching the children setting up physical drill, and marching without arms, while dressing the boys in uniforms is left quite optional. There can be only one opinion—viz., that these drills must be beneficial to the lads attending them.

Honorary Reserve Corps.—There is one corps in Christchurch, with a total of 57; they are armed with Martini-Henry rifles, and are excellent shots, but I have never had the pleasure of seeing them on parade.

Ambulance Corps.—Almost every corps can now boast of its detail of trained ambulance men, and medical officers deserve great praise for the trouble they have taken in training and making efficient in this particular branch so many men of their respective corps.

Easter Camps.—Three small local camps were held last Easter at Wanganui, Christchurch, and the Bluff, at which about 500 attended; but, owing to the bad weather experienced everywhere, very little drill could be carried out, and as it turned out it was fortunate that arrangements had not been made for bringing a larger number of Volunteers together. There is always a considerable risk of inclement weather when Easter falls as late as it did this year.

Capitation.—As regards capitation, I am of opinion that it should be divided up into so much for each parade, as described in last year's report, and so do away with the hardships that now exist, of the regular attendants of each corps having to continue to attend parades after they have earned capitation, to admit of the drones of the corps becoming efficient. This is unfair, and no doubt must militate against recruiting. The necessity of two-thirds of the corps being present to earn capitation might, I think, be modified to one-half with advantage. Owing to the courtesy of the senior naval officer of Her Majesty's ships in these waters, the Volunteers have had the opportunity on two different occasions of drilling with the officers and men of H.M.S. "Ringarooma"—viz., at Nelson during Jubilee, and at Auckland on the Queen's Birthday. These drills do an immense amount of good, and are much appreciated by the Volunteers, tending to considerably increase recruiting, and arousing an emulation in all ranks to attain a higher state of efficiency.

I have, &c.,

A. HUME, Lt.-Col., N.Z.M.
Acting Under-Secretary for Defence.

REPORT UPON HARBOUR-DEFENCES FOR THE YEAR 1891-92.

Temporary Prisons and Convict-labour.

THERE has been no new departure during the year. The material points deserving notice in connection with the temporary prisons in which the convicts are housed on the works, and with the nature and value of their work, were fully dealt with in the reports for 1889 (H.-16) and 1890 (H.-15), and the remarks therein printed hold good as applying also to the present year; but some additional remarks relative to the subject of convict-labour will be found below.

Designs of Works.

These have continued to be based upon the principle also detailed in the two reports above quoted.

Progress of Year in Land Works.

The work of the year has been chiefly comprised in carrying to completion those works which had reached an initiatory or advanced stage of progress at 31st March last, and in continuing the remodelling of certain of the 1885 temporary works on the lines indicated in last year's report.

The general aim has been to endeavour to close up gaps in the lines of the approved scheme of defence, so far as entered upon or authorised.

In the early part of the year an inspection of all the defence works, and especially those immediately in hand or proposed at the four ports, was made by the then incoming Minister of Defence; and in his Public Works Statement (the Hon. Mr. Seddon also holding the portfolio of that department) the policy to be pursued with regard to the harbour defences was thus referred to: "In order to enable me to decide upon the policy to be pursued as regards the defences, I have during the recess made a minute and careful inspection of the whole of the batteries and other works at each of the four fortified ports, and have also studied the proposals of the experienced officers of the Royal Engineers who have from time to time specially advised upon the defences of the colony. To a very considerable extent I find that the recommendations of these officers have been carried out, and the greater portions of the powerful armaments ordered from England have

been emplaced in well-constructed batteries, with proper magazines, casemates, and other accessories, while satisfactory progress has also been made with the dépôts, equipment, and preparations for the submarine mining and torpedo defences. The vote proposed for the present year provides only for those works which it is absolutely necessary to carry to completion in order to put the defences of the harbours in a fairly-sound position. In this connection Auckland has been specially regarded by the Imperial authorities as a possible naval base in these seas; and it is therefore advisable that the colony should, as far as possible, endeavour to justify the selection by providing such efficient defences to the harbour as will enable Her Majesty's ships to confidently take advantage of it. The same argument to a large extent applies to Wellington also; and more especially in view of the recent special augmentation of the Australian Squadron and permanent stationing of war-vessels in New Zealand waters."

The lines above indicated have been as closely as possible followed during the year. The smallness of the vote, however—£7,000 only—has prevented any substantial works being entered upon, and has necessitated the convict-labour being employed to a greater extent than usual on earthworks and other details not demanding outlay of moment for material, in order to keep within the mark. The expenses of the purely disciplinary supervision of prisoners are of such comparatively heavy and fixed nature that this class of labour ceases to be profitable in such operations as the defence works when the available margin of funds for material and direct construction is brought below a certain limit.

The works at Otago Heads, mentioned in last year's report as having been definitely stopped at date 31st March, 1891, were resumed (in so far only as required by submarine defence) by authority in the following October. The prisoners did not leave the Heads during the interregnum, but were employed at general roadwork and stone-breaking at the charge of the Harbour Defences vote.

Amounts voted for Harbour Defences.

The subjoined schedule of the amounts voted for harbour defences since their inception in 1885 to the present year shows the rapid shrinkage of funds made available.

								£
1885-86	...	...	...	...	...	...	...	200,000
1886-87	...	...	...	...	...	...	...	142,500
1887-88	...	...	...	...	...	...	...	80,000
1888-89	...	...	...	...	...	...	...	56,541
1889-90	...	...	...	...	...	...	...	16,452
1890-91	...	...	...	...	...	...	...	13,000
1891-92	...	...	...	...	...	...	...	7,000

Inspections.

There have been no special visits of Imperial officers of eminence to the defences of the colony as a whole; but the captains of Her Majesty's ships visiting New Zealand waters have inspected some of the works, &c., in a more or less formal manner, and have communicated their impressions to the Hon. the Minister.

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, no progress has been made during the year, as such works were not brought within the scope of authorisation; and the remarks under this head in the report of last year hold good. The same applies to questions of additional armament.

Mounting of Ordnance.

The racer for an additional 8in. B.L. 13-ton gun has been laid during the year, and the emplacements for two 64-pr. converted guns and one 64-pr. R.M.L., and for two Q.F. guns, have been constructed, while the emplacement for a third Q.F. gun has been commenced. The two 64-pr. converted guns have been mounted; the 64-pr. R.M.L. can be mounted at short notice, as can also the three Q.F. guns.

Excluding the above, there still remain, out of the heavy ordnance at command in the colony, the following:—

8in. B.L. 13-ton guns	...	...	...	...	...	...	2
6in. B.L. 5-ton guns	...	...	...	...	...	...	1
7in. R.M.L. 7-ton guns	...	...	...	...	...	...	1
64-pr. R.M.L. 64-cwt. guns	...	...	...	...	...	...	2

The works for which the above B.L. guns are intended have not been authorised or entered upon, and the ultimate disposition of the above M.L. guns has not yet been finally determined. Of the ten Q.F. guns, emplacements are complete (and guns capable of being mounted) for nine; three additional emplacements are in hand, as these guns can serve more than one position on emergency.

There are also ten Q.F. guns on travelling-carriages, available as they stand for field-service. It has been advised that six of these should be dismantled from their carriages and used as pivotally-mounted guns in fixed positions. The pillars for such mountings were made locally some years ago to the service pattern, but the necessary additional special fittings have not yet been authorised, and the final disposition of these guns is therefore indeterminate.

Submarine Defence.

The requirements for enabling the submarine defence of the ports to be rendered properly effective were generally pointed out at some length in the report of 1890 (H.—15), and it is therein

stated that at that time "there was much responsible and difficult work yet to accomplish when funds were available." In the report for the following year, 1891 (H.—24), it is stated that "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 funds and authorisations for the present year have equally forbidden the undertaking of these essential works, so that there is no progress to be reported in this important matter.

As regards, however, actual marine operations, the largest and most difficult of the minefields has been surveyed in detail during the year, and the Torpedo Corps will be engaged forthwith in the practical preparations which follow upon the definite hydrographical and special information placed at their command by the completed survey and the plans and tables deduced therefrom.

As regards the detail survey of the remaining minefields, it is the intention to have them also completed at as early a date as possible.

The usual training of the Torpedo Corps, and testing of appliances and stores, has been kept up under the Inspector of Submarine Mining; and this body of men, though small in number, are now brought to a satisfactory degree of efficiency in the specialised work connected with submarine defences. Practical experience has been obtained during the year in the blowing-up of wrecks and harbour obstructions at various ports.

At the commencement of the present year the inquiries into the circumstances attending the unfortunate explosion of gun-cotton at Shelly Bay, by which two Torpedomen lost their lives, were proceeding. The findings of the Imperial naval officers, who acted as Royal Commissioners, and of the civil Courts, and the evidence adduced in either case, were duly forwarded to the Government, and it does not appear necessary, therefore, to refer to this matter further than to duly chronicle it in the events of the year.

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 the officer in command of the submarine-mining branch, and are all kept in excellent arrangement and condition.

The guns, magazines, artillery stores, ammunition, &c., are under charge of the Permanent Artillery, and are reported on by the officers of that branch.

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

Maintenance of Batteries, &c.

The completed batteries, works, and stations, which have been handed over to the Artillery or Torpedo Corps, have been maintained, and various minor works required in connection with these executed during the year. The extent of this maintenance is small, the care given in original construction obviating the occurrence of any serious calls for repairs or replacements.

General Information.

Further information and suggestions connected with the perfection of the equipment and the fighting-powers of the guns and submarine-mining appliances in possession of the colony, and embodying also the latest ideas and results derived from experiments and trials of various improvements in means of defence at Home, have been forwarded during the year by the Agent-General and the Military Adviser.

As regards information in the colony, the presence of Major-General Schaw, R.E., C.B. (late Assistant Inspector-General of Imperial Defences at the War Office), has enabled me to continue to submit all questions of importance to so recognised an authority; and I would desire again, as in previous reports, to express the continued obligations of the department to this distinguished officer, whose experience and advice have always been so readily placed at its service.

Commandant of the Forces.

The departure from England for the colony of the Commandant is announced at the close of the year. The arrival of Lieut.-Colonel Fox will presumably bring the harbour defences, equally with more directly military questions, under special consideration.

Land for Sites.

In the early part of the year the award of the Compensation Court for land taken for the submarine dépôt at Auckland had to be discharged. The amount of the award was £1,500, which, with all due regard to the Court, was an exorbitant price. Contingent expenses of witnesses, law charges, &c., have brought the sum-total on this account to close upon £1,650, thus causing a serious handicap in the small vote of £7,000 at the outset of the year's operations.

There have been no further transactions of moment during the year in regard to sites, and there are no actually existent outstanding claims, except for a long-pending settlement with Natives for land at Otago Heads, delayed through non-sitting of a Native Land Court. The amount involved is about £200.

Expenditure.

With regard to expenditure during the year, provision for both matériel of war from England—which has always been charged to Loan Fund—as well as all charges for prison-labour and

material on works (which during the last few years has been provided for by a vote on the Consolidated Fund), was made for the year by a single vote out of Loan Fund of £7,000, against which appears a net expenditure of £7,347, or an excess of £347.

This excess is primarily accounted for by the heavy charge for land at Auckland above mentioned, and partly by the reduction of the originally-proposed vote of £10,000 to £7,000 when the year was one-third past.

The liabilities at the 31st March may be set down at £893 upon material and £834 upon works, which will merge in any vote that may be passed for the current year's expenditure.

The total outstanding liabilities at the 31st March may therefore be set down at £1,727. The full originally-ordered equipment of material having been received and paid for, provision for further orders of such is now made in the votes for the maintenance of the permanent forces, and consequently the liabilities are vanishing. The amount stated is for provision of certain submarine gear short of original establishment. The liabilities for works are merely the amounts of outstanding items and wages which would be due if the works were stopped, with an allowance for contingencies; for, as the works are carried on by prison-labour, they are capable of being wound up at any moment by the simultaneous discharge of the convicts from the temporary prisons, and of the outstanding accounts. And there are no actually existent liabilities for land-purchases, beyond the amount above mentioned.

The values of lands acquired, owing to the exigencies of negotiations, in excess of actual requirements, and of the engines, plant, &c., on the works, amount, at a low valuation, to about £10,000. This sum is an asset against the cost of the defences and against the liabilities at any date at which the works might be discontinued.

The total actual expenditure on harbour-defences up to the 31st March, 1892, together with the liabilities at that date, amount to, in round numbers, £478,000, of which it so happens at this year's balance that exactly one-half, or £239,000, represents cost of material of war from England and miscellaneous charges connected therewith, and the other half, or £239,000, the cost of works in the colony. Of this latter sum, about £36,500 represents cost of land, and the remainder, £202,500, the cost of forts, batteries, submarine defences, steam-launches, reports of Royal Engineer officers, engineering, supervision, and all other charges.

The usual return is attached to this report, giving, under some principal subdivisions in tabular form, the total expenditure upon the harbour-defences of the colony from the first steps taken up to the present date.

31st March, 1892.

ARTHUR BELL, M.Inst.C.E.,
Engineer for Defences.

HARBOUR DEFENCES.

Table I.

RETURN showing the EXPENDITURE on HARBOUR DEFENCES, in detail, from their Commencement to the 31st March, 1892, also Liabilities at that Date.

Classification.	1879-79.	1879-80.	1880-81.	1883-84.*	1884-85.	Total Expenditure up to 31st March, 1885.†	1885-86.	1886-87.	1887-88.	1888-89.	1889-90.	1890-91.	1891-92.	Total Expenditure from 31st March, 1885, up to 31st March, 1892.‡	Great Totals Expenditure 1875 to 31st March, 1892.§	Liabilities known to exist at 31st March, 1892.	Grand Total Expenditure and Liabilities at 31st March, 1892.
I.—MATERIAL FROM ENGLAND.																	
R.L. guns and carriages, &c. ...	...	...	...	...	...	...	35,149	38,034	11,189	17,770	...	...	...	102,142	102,142	...	...
R.M.L. guns and carriages, &c. ...	...	26,357	...	...	...	26,357	4,203	...	...	354	...	...	...	4,557	30,914	...	...
Field-guns and carriages, service pattern ...	...	...	...	...	...	...	...	900	...	...	...	...	...	900	900	...	...
Machine-guns and carriages ...	...	...	...	...	...	...	...	1,746	6,393	5,674	...	...	...	13,813	13,813	...	...
Ammunition... ..	10	799	...	...	...	809	3,504	3,352	11,890	4,975	...	...	...	23,721	24,530	...	...
War Office stores: Miscellaneous equipments ...	4,830	...	...	...	...	4,830	...	3,976	486	121	392	129	...	5,104	9,934	...	...
Military Adviser to Agent-General ...	...	...	...	...	...	...	514	1,986	523	344	330	342	291	4,330	4,330	100	...
Torpedo-boats ...	...	...	...	6,300	4,736	11,036	...	...	...	...	...	...	...	...	11,036	...	...
Whitehead torpedoes and air-compressing machinery ...	...	...	...	...	...	...	8,104	685	...	375	4	...	...	9,168	9,168	...	...
Submarine mining stores for submarine defence of ports ...	...	...	...	...	...	...	...	873	12,055	2,096	3,260	Cr. 619	...	17,665	17,665	...	...
Miscellaneous charges: Freight, insurance, shipping, &c. ...	857	416	...	...	2,227	3,500	339	2,027	3,539	3,370	900	...	...	10,175	13,675	793	...
Totals ...	5,697	27,572	...	6,300	6,963	46,532	51,813	53,579	46,075	35,079	4,886	Cr. 148	291	191,575	238,107	893	239,000
II.—WORKS IN THE COLONY.																	
Defence works generally: Batteries, dépôts, launches, engineering, and miscellaneous charges ...	713	532	905	912	2,638	5,700	58,081	74,429	25,806	12,770	9,195	10,257	5,410	195,948	201,648	634	202,282
Purchases, &c., of land: Sites for dépôts and batteries ...	...	...	...	...	...	...	17,273	11,421	1,578	2,240	1,671	689	1,646	36,518	36,518	200	38,718
Totals ...	713	532	905	912	2,638	5,700	75,354	85,850	27,384	15,010	10,866	10,946	7,056	232,466	238,166	834	239,000
Totals I. and II. ...	6,410	28,104	905	7,212	9,601	52,232	127,167	139,429	73,459	50,089	15,752	10,798	7,347	424,041	476,273	1,727	478,000

* There was no expenditure for the years 1881-82 and 1882-83.
 † At this date (31st March, 1885) the actual construction of defence works commenced. The expenditure in the colony prior to this date was—(a) For surveys and other expenses incidental to the visits of Colonel Seratchley, R.E., and Major Cautley, R.E., to report upon the defences of the colony; (b) the salaries and travelling-expenses of those Imperial officers; (c) the landing, transport, storage, and care of R.M.L. guns and ammunition, and of torpedo-boats; and (d) other miscellaneous charges.
 ‡ This column represents the expenditure on all accounts incurred since the actual construction of the defence works commenced—namely, from 31st March, 1885, to 31st March, 1892.
 § This column represents the sum of the separately-shown expenditures of the two periods assigned in the two preceding notes. The total expenditure on submarine stores was £468; but £1,117 was recovered, chiefly by insurance on cable, &c., lost in the "Assaye," making a credit balance of £649.

ARTHUR BELL, Engineer for Defences.

Table II.
RETURN of VOLUNTEERS to the 31st December, 1891.

District.	Corps.	Cavalry.	Corps.	Mounted Rifles.	Corps.	Naval Artillery.	Corps.	Artillery.	Corps.	Engi-neers.	Corps.	Rifles.	Corps.	Hono-rary.	Corps.	Total.	Corps.	Cadets.
Auckland ..	..	..	..	..	2	150	2	105	1	48	5	319	..	..	10	622	..	..
Thames ..	..	..	..	..	1	60	..	..	..	..	..	..	..	..	1	60	..	..
Waikato ..	1	67	1	48	..	..	..	..	..	..	..	..	..	..	3	164	..	..
Waikato ..	..	..	..	49	..	..	..	..	..	..	1	55	..	..	2	104	..	..
Poverty Bay ..	1	52	..	..	..	..	..	..	..	..	..	..	..	..	1	52	..	..
Napier ..	..	..	..	..	1	57	1	63	..	..	2	121	..	..	4	241	1	63
Taranaki ..	..	..	..	..	..	..	..	..	..	..	1	63	..	..	1	63	1	42
Patea ..	..	..	..	127	..	..	..	..	..	..	..	..	..	..	2	127	..	..
Wanganui ..	1	63	2	..	1	67	..	..	..	..	2	129	..	..	4	259	1	106
Rangitikei ..	1	48	1	48	..	..	..	..	..	..	3	162	..	..	5	238	..	..
Wairarapa ..	..	..	..	..	..	..	..	..	..	..	3	147	..	..	3	147	3	133
Wellington ..	..	..	1	62	2	145	2	47	..	..	3	226	..	..	7	480	2	121
Total North Island ..	4	230	6	334	7	479	4	215	1	48	21	1,271	..	..	43	2,577	8	465
Nelson ..	..	..	..	..	2	120	1	60	..	..	3	159	..	..	6	339	2	112
Marlborough ..	..	..	1	58	..	..	..	..	..	..	2	140	..	..	3	198	2	101
Westland ..	..	..	..	..	1	68	..	..	..	..	6	387	..	..	7	455	2	94
Canterbury, North ..	1	75	1	38	1	66	2	112	1	37	9	435	1	57	16	520	4	263
Canterbury, South ..	..	..	..	..	1	66	1	57	..	..	5	250	..	..	7	373	2	86
Oamaru ..	..	..	1	48	1	75	1	49	..	..	4	237	..	..	7	409	5	299
Dunedin ..	1	54	..	..	3	190	2	92	1	64	11	650	..	..	18	1,050	11	604
Invercargill ..	..	..	..	..	1	91	1	48	..	..	4	222	..	..	6	361	2	87
Total South Island ..	2	129	3	144	10	676	8	418	2	101	44	2,480	1	57	70	4,005	30	1,646
Total all New Zealand ..	6	359	9	478	17	1,155	12	633	3	149	65	3,751	1	57	113	6,582	38	2,111

TABLE III.

RETURN of VOLUNTEER CORPS attending LOCAL ENCAMPMENTS (EASTER), giving STRENGTH of CORPS and NUMBERS present and absent.

Camp.	Corps.	Present.	Total present.	Absentees.	Strength of Corps.
Wanganui ...	Wanganui Navals	34	...	35	69
	" Rifles	21	...	39	60
	Albert "	12	...	37	49
	Garrison Band	19	...	3	22
	Palmerston North Rifles	44	...	20	64
	Manchester Rifles	8	...	43	51
	Staff, District	1	...	...	1
			139		
Christchurch	Canterbury Mounted Rifles	38	...	4	42
	Christchurch City Guards	42	...	2	44
	Richmond Rifles	21	...	14	35
	Christ's College Rifles	9	...	34	43
	Christchurch "	30	...	13	43
	Sydenham "	1	...	41	42
			141		
Oamaru ...	North Otago Mounted Rifles	25	...	23	48
			25		
Invercargill	G Battery	30	...	10	40
	City Guards	41	...	10	51
	Bluff Naval Artillery	80	...	12	92
	Garrison Band	16	...	4	20
			167		
Henley ...	Otago Hussars	30	...	24	54
			30		
		...	502	368	870

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