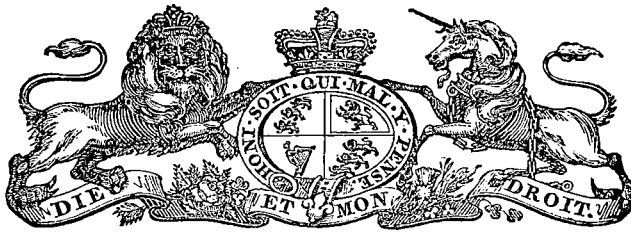


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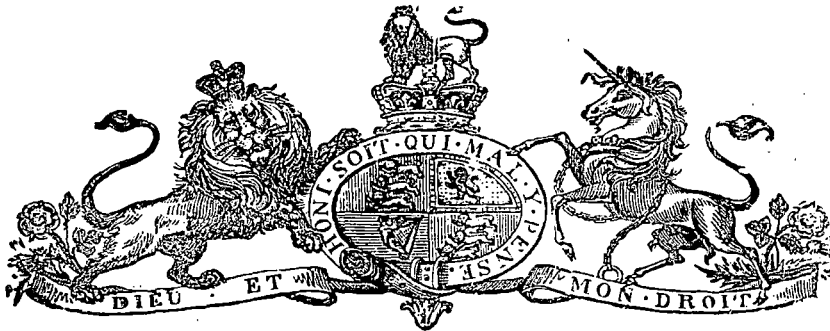
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DEFENCES OF TASMANIA :

COLONEL SCRATCHLEY'S THIRD PROGRESS REPORT.

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## DEFENCES OF TASMANIA.

*THIRD PROGRESS REPORT, dated 6 December, 1879.*

SINCE my arrival in Tasmania on the 18th November I have inspected the Volunteer Force, and enquired thoroughly into all matters connected with the scheme which is being carried out for the defence of the Colony in accordance with Sir W. Jervois' advice. In this third progress report I embody certain recommendations, which I have the honor to submit for the consideration of the Government.

Commencing with Launceston, I inspected the Volunteers twice, and found that the Artillery maintained its old superiority both in infantry and artillery drill; and that the Rifles had very much improved since my visit in last December. At Hobart Town, owing to unfavourable weather, I was only able to hold one inspection. On the whole, I noticed a marked improvement in the appearance, steadiness, and smartness of the officers and men both in the North and South. As to the drill of the Force I am able to report favourably.

Inspection of  
Volunteers.

The physique of the Hobart Town Artillery is still below the standard necessary for gunners in the present day. I drew attention to this matter in my progress report of the 7th December last year. It can only be remedied by the Government fixing a standard of height and chest measurement; and I have requested the Commandant to submit for consideration a regulation on the subject, which should include medical examination.

Physique of  
the Hobart  
Town Artillery  
and Launceston  
Rifles.

It is evident that more care must be exercised in the future in recruiting, as the object is not to fill the ranks, but to produce a body of Volunteers efficient in every respect,—skilled in the use of the weapons with which they are armed, and physically fitted to employ them to the best advantage, and to bear the strain which soldiers are exposed to in time of war.

At Launceston the two companies of Rifles are inferior in physique to the Artillery, whilst at Hobart Town the Infantry is superior to the Artillery; and again, the Rifle Companies at Launceston are not equal to the Companies at Hobart Town.

Although the operations on the 1st instant, in which the Rifles took part, were brought prematurely to a close by the interference of a crowd of people, who closed in upon the men, absolutely impeding their movements, I was enabled from personal observation to notice that they were well in hand and steady. They obeyed the orders of their officers promptly, and showed that they understood the object of the movements. Considering the fact that numbers of boys mingled with the Volunteers in the ranks, I should have expected confusion and a difficulty in rallying the men by companies after the "rushes" of the advance, but such was not the case.

Field-day on  
1st December  
at Hobart  
Town.

As the movements of the field day were intended to afford me an opportunity of seeing the infantry manœuvring in loose order, tactical rules had to be disregarded.

At the same time it is important that all instruction imparted should, as far as possible, be of a practical nature in order to illustrate those operations which, in time of war, would have to be conducted against an enemy. I have instructed the Commandant to arrange for this in the future.

As an inducement to the officers of the force to prepare for these special field days, I advise that they should be invited to write essays on the proposed operations, and I shall be glad to assist in the matter.

Shot and shell practice.

Want of an Artillery Drill Instructor.

With regard to the Hobart Town Artillery, I may observe that the practice with the guns in Queen's Battery, which took place on the 1st instant in the presence of His Excellency the Governor, was no better than I expected. It is but fair to take into account the disadvantages under which this portion of the Force is now labouring. At the present time the Hobart Town Artillery—200 strong—is without an Instructor.

It is only by the most careful instruction of each individual man that an efficient Artillery Force can be produced. In the event of an attack by ships upon the batteries, everything will depend upon the accuracy of fire from the guns on shore.

Without a competent drill-sergeant it is not possible even to attempt to train the men properly. I must, therefore, again bring the question of procuring a man from England prominently forward, and point out the danger of further delay. It will be a waste of money to have further shot and shell practice until the most likely men to make good shots have been thoroughly instructed in the theory and practice of laying ordnance, and in the use of the several projectiles and fuzes to be employed.

As far as the nature of his duties will permit the Staff Officer will attend to this instruction; but I wish it to be distinctly understood that an artillery drill-sergeant will have to be appointed, whose whole time should be given up to the individual training of the men.

At Launceston, shot practice has been retarded owing to the platforms in the old battery on the river not having been laid. The Commandant has been directed to attend to the matter forthwith, the necessary expenditure having been sanctioned.

Daylight drill.

The proficiency in drill to which testimony has been borne by a distinguished and experienced Commander of Volunteers—Colonel Anderson, C.M.G.—is creditable on account of the difficulty which exists in getting the Volunteers to parade during daylight.

The paramount importance of daylight drill has been alluded to in previous Reports. Drill by gaslight in a shed or on a parade will give men a fair knowledge of movements in close formation; but it must be borne in mind that in modern fighting loose or extended formations are an absolute necessity. They can only be practised in daylight; and until the officers and men are really proficient in such movements, they will not be fitted to meet an enemy with a certainty of success.

Annual encampments.

I am aware that, for reasons of economy, it is not possible to provide funds for an encampment in next year's estimates. I must, however, represent very strongly the good that would inevitably result from assembling the men under arms and under the restraints of discipline for a few days in each year.

Opinion on subject of commanding officers of volunteers in Great Britain.

In a recent Report upon the Volunteer Force of Great Britain, the necessity for camps of exercise is prominently noticed. The Commanding Officers of Volunteers in the mother country are unanimous in attaching the highest importance to camps, as affording the only means available to Volunteers for acquiring the knowledge and the habits of military life. They consider that a week in camp equals—in the amount of instruction acquired—that obtained otherwise throughout the whole year.

Moreover, camps afford the commanders an opportunity of testing the respective merits of the officers under them, a point which should not be lost sight of.

It is satisfactory to find that a second Rifle Range is about to be opened at Hobart Town, through the exertions of the Rifle Association, which are deserving of commendation. A little assistance will be required from the Government, which I trust will be granted. Rifle Ranges.

The same necessity for individual training in drill and firing exists with Infantry as with the Artillery. With arms of precision a range only 450 yards long is manifestly insufficient. In conducting the course of musketry instruction, firing at long ranges cannot at present be practised, and much of the knowledge acquired by the men is lost from the want of the means to put it to the test of actual experience.

At Launceston the range can be lengthened to 800 yards, with the permission of the railway authorities. I would point out, however, that the target and marker's butts are in very bad order. An item has been inserted in the Estimates for the necessary repairs, which should be executed without delay, otherwise firing will have to be discontinued.

On the 30th August last His Excellency the Governor authorised Captain Mason to take the preliminary steps for the organisation of a Corps of Volunteer Cavalry at Launceston, under the provisions of the Volunteer Act of 1878. I inspected a portion of this corps on the 4th instant. Judging from the appearance of the men and horses, I believe this corps will prove a valuable addition to the defensive arrangements at Launceston. Swords and accoutrements should be provided as soon as possible. Launceston Cavalry Corps.

The utility of a cavalry corps in Tasmania would be greatly enhanced if it partook more of the character of mounted riflemen than of regular cavalry. The men should be good horsemen, and expert with the sword and rifle. They should be trained especially with the view of acting, in time of war, as an Intelligence Corps. A good eye for country should be one of the qualifications for admission. As scouts, escorts, and orderlies, they would render valuable service. Reconnoitring and the conveyance of accurate intelligence should be carefully practised. Mounted riflemen to be preferred to cavalry.

The Military Estimates for next year have been carefully considered with the Commandant, and as I understand that they must be cut down, a considerable saving on this year's vote is proposed, whilst securing the maintenance of the Volunteer Force in an efficient state, but at a reduced strength. Military Estimates for the year 1880.

I have been guided in this reduction by the acknowledged principle that the *cadres* of the several corps should be kept intact, and that an adequate staff should be maintained.

The tendency in dealing with this question is to reduce the staff, and thus cripple the machinery provided for training and commanding the force. The fallacy of such a proceeding is obvious. A staff of competent officers and instructors is not easily obtained. It is owing to good fortune mainly that a staff has been formed for the Tasmanian force, and it is still incomplete.

The saving recommended is effected by reducing the number of men, and limiting the expenditure on their equipment. Thus, in time of war, there will be no difficulty in increasing the force as required, and the staff will be ready just at the time when it is most needed.

The maintenance of proper reserves of ammunition for the ordnance and small arms in the Colony is another matter which requires attention. The reserves should certainly not be less than 300 rounds of ball cartridge for each rifle, and 200 rounds of shot and shell for each of the garrison and field guns. Once these reserves are established, all issues made for practice should be replaced periodically—not less than once a year—out of an annual grant to be included in the Military Estimates. Care should be taken to issue from the oldest stock, in order that ammunition of the latest manufacture may always be in the reserve. Reserves of ammunition to be maintained.

A supply of ball cartridges should also be kept for the muzzle-loading Enfield rifles. The difficulty of obtaining ammunition during an European war was very forcibly illustrated at the time of the Franco-German war, when one of the Australian Governments had to wait more than a year before it could obtain supplies.

An estimate of the ammunition required is now being prepared, which I will shortly submit for consideration.

Annual  
allowance for  
practice.

The question of an annual allowance of practice ammunition for the artillery and rifles is one which requires careful consideration. In the Imperial Service the annual allowance is 90 rounds of ball cartridge for each soldier, and 100 rounds of ammunition per battery of artillery. Taking into account the fact that many volunteers do not remain in the force for any length of time, and that many men will probably never make good shots, I prefer not to fix any regular allowance. I am of opinion that it will be more advantageous, and certainly prevent a waste of ammunition, if latitude be given to the Commandant in the matter. Officers and men who take to volunteering in an earnest spirit, and are anxious to become really efficient, should be encouraged by extra supplies of practice ammunition; whilst only a reasonable quantity, sufficient to give a fair amount of training, should be granted to others. But in all cases, both officers and men should be thoroughly trained before they are permitted to fire with ball cartridge or shot and shell. I have already pointed out the necessity for this individual teaching in my remarks upon the shot and shell practice at Hobart Town on the 1st instant. Provision has been made in the annual Estimates which will be sufficient for the year 1880.

Torpedo Corps  
and sub-  
marine de-  
fences.

The Torpedo Corps has not been provided for in next year's estimates. It is necessary that I should point out that the delay in arranging for the submarine defences of the Derwent and Tamar is attended with a certain risk. It must be clearly understood that submarine mines form part of the plan of defence at both places, and that the defensive works alone will not prevent an enemy's vessel from running past the batteries and so render the scheme inadequate.

I advise that a small sum (£25) be provided in the annual estimates for experiments, which should be conducted by Captain Boddam and Mr. Henry under my direction. The submarine defences for such places as the Derwent and the Tamar are simple enough when understood; but they cannot be established without previous elaboration, without the requisite knowledge on the part of the persons placed in charge of them, and without the necessary appliances. A small plant for instruction has already been provided.

I propose that a room at the Barracks should be set apart for its reception. The employés in the Telegraph Department should be invited to attend for instruction. In 1881, out of this nucleus, a small corps could be formed, and by degrees the whole equipment for the submarine defences could be procured.

Careful soundings will have to be taken across the Derwent between Points Macquarie and Montagu, at the mouth of Sullivan's Cove, and in the Tamar. The rise and fall of the tide, the peculiarities of the bottom, and other points which affect the application of torpedoes, should be studied.

Batteries.

The progress made in the construction of new defensive works has been small. Queen's Battery has been thoroughly repaired and improved, and may now be considered to be in good working order. Its armament consists of 2 70-pounder muzzle-loading rifled guns and 5 8-inch smooth-bore shell guns. I would advocate the gradual replacing of the latter pieces by rifled guns, such as the converted 64-pounder gun, whenever funds were available.

The reconstruction of Alexandra Battery is in progress. Two 7-inch muzzle-loading rifled guns can be mounted as soon as the shell and powder rooms are completed. I have laid out the positions for the remainder of the guns,—one 70-pounder M. L. R. gun and two 8-inch S. B. pieces.

I have also given the staff officer full instructions to proceed with the necessary works ; and I strongly recommend that the gang of men be increased to twenty-five. At present only thirteen men are employed, consequently the progress is very slow. A larger gang would tend to decrease the cost, as only one overseer is needed. The work done at the battery is substantial and good, and reflects much credit on the overseer (Mr. J. Moore).

The battery at Kangaroo Bluff—intended for an armament of 2 6-inch rifled guns and three 8-inch S. B. pieces—can be commenced at any time, the plans being ready, and the positions of the guns having been fixed by me.

I should observe that both these batteries have been designed with all modern improvements, and with the view of introducing more powerful ordnance in the future. This could be done at any time with slight alterations in the racers, &c. Heavier pieces would take the place of the present rifled guns, which would be shifted to the flanks, now armed with the 8-inch S. B. guns.

Modern designs for the batteries. More powerful guns in the future.

With the concurrence of Sir W. Jervois I recommend that two 6-inch rifled guns, of the new pattern introduced by Sir W. Armstrong & Co., should be ordered for the armament of Kangaroo Bluff. As some time will elapse before these guns could be supplied, as little delay as possible should occur in sending the order for them to England.

New rifled guns for Kangaroo Bluff.

With regard to rifled field artillery, I have already reported that it is undesirable to procure any new guns for the present, because improvements are being made tending to increase their power without adding to their weight. There is also a growing feeling amongst many leading artillerists in favour of breech-loaders for field service. It was suggested a short time ago that 16-pounder muzzle-loading guns would be suitable for field operations round Hobart Town. In this opinion I could not concur. It is only necessary to add that at the present time the firm of Sir W. Armstrong & Co. have designed a 9-pounder weighing only 6 cwt. which is superior in power to the 16-pounder and weighs 16 cwt. The wisdom of delay in this matter is obvious.

New guns for field artillery.

The following articles are required for the equipment of the armament of both batteries, and I recommend that the Staff Officer should prepare requisitions, which are to be forwarded for my examination before being submitted to the Honorable the Colonial Secretary for approval :—Six sets of racers, elevating arcs for the 70-pounder and 7-inch rifled guns, hydraulic compressors and traversing gear for the 7-inch rifled guns, two wood traversing platforms to be made for the 8-inch S.B. guns, and four carriages for the same to be altered.

Completion of equipment of armaments for batteries.

The necessity for the foregoing articles can be explained by the Staff Officer. I have satisfied myself that they are required. The cost should be charged to the amount included for armament in the vote of £25,000.

My attention has been directed to a return of expenditure on the defences, which has been presented to Parliament. From the statement I find that the expenditure and liabilities to the 1st of October, 1879, chargeable to the Loan Vote of £25,000, amount to £4661 8s. 11d. Of this sum £2171 6s. 7d. have been charged to construction of batteries ; £72 5s. 1d. to armament ; £147 8s. 5d. to torpedo defences ; £1956 18s. 0d. to rifles and ammunition ; and £313 10s. 10d. to contingencies. I am informed that the expenditure has been audited in the usual manner.

Expenditure on defences. Charge made for prison labour.

The only exception I have to take to this expenditure is in the item of £503 15s. 6d. paid to the Superintendent of the Gaol for wages of the gang of prisoners employed at Alexandra and Queen's Batteries. In my opinion the charge is excessive, considering

the work done for the money, and it is, I think, wrong in principle. When I suggested in previous reports that prison labour could with advantage be employed on the defensive works, I did not anticipate that a charge would be made for this labour for the benefit of the revenue of the Gaol, and to the detriment of a national undertaking paid for out of a loan.

**Prison labour should be employed on national defences.** I still remain of opinion that prison labour should be employed on the national defences, but the charges must be limited to the cost of supervision and of conveying the men to and from the work. If this cannot be arranged I advise that the works should be executed with free labour alone.

**Necessity for armourers and inspection of rifles.** It is very important that some steps should be taken for the periodical inspection of the rifles in store and in possession of the Volunteers by qualified armourers. It is evident that unless some professional supervision is exercised beyond that of captains of batteries and companies, there is a great risk of the arms becoming deteriorated. In all the Australian Colonies there are armourers attached to the staffs of the local forces.

**Quarters for Instructor at Launceston.** I understand that Mr. Chisholm, the master gunner at Hobart Town, and Sergeant Young, the infantry instructor at Launceston, are both qualified to perform the duty. It has been represented to me that Sergeant Young does not live in public quarters. The full value of an instructor's services cannot be obtained if he lives at a distance from the drill ground. In the present case this instructor could look after the arms in return for free quarters.

**Military library and prizes for rifle shooting.** The necessity for keeping down the estimates has led to the omission of two very important items: a military library, and prizes for the encouragement of rifle shooting. The former will be the means of enabling the officers to learn something of the theory of their profession, and a commencement should be made when funds are available. The grant of prizes by the Government would be a direct encouragement to the Volunteers to pay more attention to rifle shooting.

I have confined myself in this report to such matters as are of essential importance, and I am satisfied that we have now made a decided advance in the establishment of a sound and reliable defence organisation for the Colony. In all that is being done we are following upon the lines laid down by Sir W. Jervois.

**Recapitulation of recommendations.** I will conclude with a recapitulation of those matters which require attention, in the order of their importance:—

1. Provision of Artillery Instructor at Hobart Town, and daylight drills.
2. Repairs to Rifle Range at Launceston.
3. New Rifle Range at Hobart Town.
4. Increase in number of workmen at Alexandra Battery.
5. Reserves of Ammunition.
6. Completion of equipment of armaments for batteries.
7. Swords and accoutrements for Cavalry at Launceston.
8. Armourers.
9. Torpedo Corps.
10. Order for 2 6-inch rifled guns for Kangaroo Bluff.
11. Encampments.
12. Military Library.
13. Prizes for rifle shooting.

Lastly, I desire to express my high appreciation of the very efficient manner in which Colonel St. Hill has performed the duties of Commandant. No doubt the fact of his being an imperial officer has rendered the task more easy, but I cannot but recognise the rapid progress made in the training of the volunteers, which is due to the exertions of himself and the Drill Instructors, and also to the cordial co-operation of the Officers of the force. I am glad to find harmony and good feeling prevailing amongst the Officers, and that all ranks continue to be animated by the desire to render themselves thoroughly efficient.

Services of  
Colonel St.  
Hill and  
Captain  
Boddam.

I also wish to make special mention of Captain Boddam's services. This officer has cheerfully undertaken, in addition to his staff duties, which have been very satisfactorily performed, the onerous and responsible charge of the construction of the batteries. He is also ready to assist in organising the Torpedo Defences.

In Colonel St. Hill and Captain Boddam the Government has two officers who could not be easily replaced.

P. H. SCRATCHLEY, *Colonel, R.E., Inspecting Officer.*