

Horses not up to average, but a great improvement on last year. Harness in good order, but not very clean; requires some slight repairs. Gun carriages very dirty, and no apparent attempt at cleaning. Discipline very bad. Field movements, standing gun drill and marching past, fairly performed. Driving competition badly done. This may be partly accounted for by the nature of the ground. The Captain is unable to put the battery through the ordinary drill. The competitive gun practice was held on the previous day on a very good land range.

*Toronto Field Battery.*

Major Gray in command; Lieut. Mead; Surgeon Diamond; Veterinary Surgeon Smith; Inspected at New Fort, Toronto, where the battery were encamped, on the 27th June. Clothing, arms and accoutrements in good order. Horses very good. Harness well fitted and in excellent order. Intelligence and smartness of the non-commissioned officers and men above the average, and knowledge of the stores very good. This battery has an excellent system of weekly lectures. Competitive gun practice held the following day. Field movements, standing gun drill and marching past, all very well performed. Driving competition held same day and excellently done. The spare gunners have been organized into a very efficient band.

*Wellington Field Battery.*

Major Macdonald in command; Lieuts. Nicol and Crowe; Veterinary Surgeon Grange. Surgeon Macdonald. Inspected at Elora on the 1st July. Clothing, arms and accoutrements in good order. Horses very good and well matched. Harness clean and in good order. Field manoeuvres, standing gun drill and marching past, all very well done. The intelligence of the non-commissioned officers and men and their knowledge of stores were good. This battery is in a very efficient condition. Competitive gun practice held the same day and driving competition on that following. The score of the battery was again this year a very high one. The gun carriages of all the field batteries visited by me this year require painting badly.

I was very favorably impressed with the discipline of this battery, which reflects great credit on its officers. On the day of my inspection the battery was continuously employed from 5 a.m. till 7.30 p.m., in marching to and from practice ground, carrying on practice, general review and sham fight, all the details of which were well carried out.

*Trenton Garrison Battery.*

Capt. Day in command; Lieut. Bonter. Inspected at Trenton on the 26th June. A fine body of young men. Company drill and rifle exercises very fairly performed. Clothing clean and in good order. The battery has in its possession one 32-pounder S.B. gun and one 18-pounder S.B. on travelling carriage.

Three gun detachments were very well drilled by three non-commissioned officers recently instructed at the School of Gunnery. They were not, however, able to "change rounds" owing to the very limited period of instruction. The officers of the battery are unable to instruct. The knowledge of ammunition and stores was poor owing to none having been supplied the battery. The 32 pounder gun has no sights nor ammunition. The 18 pounder gun carriage requires fitting as the gun cannot be shifted.

*Sarnia Garrison Battery.*

Captain Adams. Lieut. Ellis. Inspected at Point Edward, near Sarnia, on the 12th August. An average body of men. Clothing, arms and accoutrements in fair order. One squad only has been instructed in gun drill which was not well performed, remainder instructed only at squad and rifle exercises. Ten men only have previously attended the annual drill. The battery has no guns in charge. There are two 32-pounders, one at Point Edward and one in Sarnia, but not in charge of the Captain.

Two field guns, fitted for boat service, are lying at the G.T.R. Station and in charge of the Railway Company.

*Cobourg Garrison Battery.*

I proceeded to Cobourg to inspect this battery on the 23rd July, but having been taken ill on the night of my arrival I was compelled to return to Kingston without seeing the battery. The battery was inspected by the Deputy Adjutant General, Lieut.-Colonel Van Straubenzee, and who kindly superintended the competitive practice for me, the score having been kept by Lieut. Drury "A" Battery.

*Port Hope Garrison Battery.*

Major Guernsey in command; Lieut. Adams. Inspected at Port Hope on the 13th September. A fine body of men. Clothing clean and in good order. Arms and accoutrements in good order. Gun drill well performed. Company drill and manual exercise indifferent. Staff Sergt. Walters of "A" Battery acted as gunnery instructor.

Owing to a severe gale which lasted three days I was unable to have the competitive gun practice, there being no land range.

Gun carriage and gun require painting.

I have the honor to be, Sir,

Your obedient servant,

W. H. COTTON, Captain and Lt.-Colonel.

The Inspector of Artillery,  
Kingston.

REPORT OF LONDON FIELD BATTERY BY MAJOR HOLMES, "A"  
BATTERY.

SCHOOL OF GUNNERY, KINGSTON, Ont.

21st September, 1877.

SIR,—I have the honor to report for your information that on the 6th of July last I proceeded to London, Ont., according to order, for the purpose of superintending the annual gun practice of the London Field Battery. I regret to say that owing to the construction of new water-works for the City, the pipe line of which intersects the range formerly used, it was impossible to carry on the practice, no other range suitable for the purpose being at hand. Through the kindness of Major Peters commanding, I was enabled to inspect this battery which paraded for the purpose on the 8th July, and which I am glad to say shows a decided improvement every year in both drill and discipline. I made a careful examination of the guns, carriages, harness, &c., and beg to report everything in very fair order with the following exception: Carriages and limbers require painting; range plate for trail brackets are required, none issued to this battery.

Axle-tree seat steps needed, none was issued on this pattern, carriage being mark 1.

Service cartridges 180 required to complete equipment of service ammunition. Spurs for mounted non-commissioned officers and drivers should be issued, none on charge.

Spare harness, whips, &c., require a good deal of repair, very little having been done since first issued.

The harness used for annual drill (8 double sets) being the only complete sets now on battery charge.

Harnessing very good, with the exception of a few mistakes which are apparently common to every battery; driving good.

The field drill was smartly done under the command of Lieuts. Williams and Heath. The junior Subaltern has not yet qualified but intends doing so as soon as possible.

Gun drill good; Nos. 1 and gunners showed a fair knowledge of their duties, as well as of ammunition and use of stores belonging to the battery.

Uniform of the battery in good order, but the officers evidently require some changes in theirs, it not being at all of regimental pattern.

I have the honor to be, Sir,

Your obedient servant

(Signed.)

J. G. HOLMES,

Lieutenant and Brevet-Major,

Adjutant, S. G., Kingston.

To Lieut.-Colonel T. B. STRANGE, R.A.  
Inspector of Artillery.  
Quebec.

REPORT OF THE ASSISTANT INSPECTOR OF ARTILLERY FOR THE  
MARITIME PROVINCES TO THE DOMINION INSPECTOR OF ARTIL-  
LERY, QUEBEC.

HALIFAX, 21st November, 1878.

SIR,—I have the honor to submit reports as follows of Inspections I have made of Batteries at Digby, St. Andrew's, Yarmouth, Liverpool, Lunenburg, and the Mahone Bay Battery, and 1st and 2nd Brigades of Halifax Garrison Artillery.

On the 22nd October I inspected the Digby Garrison Battery of Artillery, Capt. Daley in command, Lieutenants E. Dodge, and E. Biden. The Deputy-Adjutant General of the District inspected at the same time.

Present on parade, 1 Captain, 2 Lieutenants, 29 men. Total 32.

I regret I cannot report favorably of this battery, as their general appearance on parade was indifferent, and they showed scarcely any knowledge of artillery drill. I attribute this to the want of a properly qualified instructor, which I trust may be rectified next year, either by the officers qualifying themselves at one of the Schools of Gunnery or by the Captain of the Battery obtaining the services of an efficient instructor. The men appeared anxious and willing to learn the duties of artillerymen, and I am of opinion that, provided the means of instruction were afforded them, a fine Battery of Garrison Artillery might be maintained at Digby.

On the 30th October I inspected the St. Andrew's, New Brunswick, Garrison Battery of Artillery, Capt. Polleys in command.

The Deputy Adjutant-General of the District inspected at the same time. This battery, recently organized, presented a soldierlike appearance on parade; clothing and arms clean and in good order, accoutrements well fitted and fairly cleaned. They performed some company movements well and afterwards proceeded to their annual gun practice, which was carried on in accordance with the regulations of the Dominion Artillery Association.

The practice was good, and the gun drill very good, considering the short time since the battery has been organized. The state of the battery generally, reflected credit on their officers and instructors.

On the 12th November I inspected the Yarmouth Battery of Garrison Artillery, Lieut.-Colonel Rowley in command, Capt. Jolly. The Brigade-Major of the District inspected at the same time.

The physique of this battery is good; very recently formed. They have been partially instructed in squad and company drill by the 2nd Lieutenant, but have had no gun drill. The spirit among the officers and men seemed good, and I trust arrangements may at an early day be made to obtain for them the services of a qualified instructor, as there is evidently in Yarmouth all the material required for an efficient Garrison battery.

There were present on parade, 2 officers, 34 men. Total 36.

On the 14th November I inspected the Liverpool, Nova Scotia, Garrison Battery of Artillery. In command, Captain Grant, Lieut. J. Spur. Physique fair; recently formed. They have been partially instructed in squad and company drill, but have had no gun drill. Officers and men seemed anxious to learn the duties of artillerymen and only require an instructor to make them an efficient Battery.

The Brigade-Major of the District inspected at the same time.

There were present on parade—2 officers, 34 men. Total 36.

On the 15th November I inspected the Lunenburg and Mahone Bay Batteries of Artillery at Lunenburg.

Lunenburg Battery, in command of Captain Brown, Lieut. B. Morash.

Mahone Bay Battery, in command of Captain James, Lieut. Bourgoyne.

The Brigade Major of the District inspected at the same time.

The physique of these batteries is excellent, and their appearance on parade was soldierlike. They have a good knowledge of company drill, but have no appliances for artillery drills. The officers expressed themselves to me as most anxious to do artillery work, and I beg most strongly to recommend that this fine body of men may have guns and stores sent them so that they may become useful artillerymen. There is a very good drill shed at Lunenburg, in which varied artillery drills might be carried on, and I suggest that two 64-pounder R.M.L. converted guns on standing carriages be sent to Lunenburg and the same to Mahone Bay, together with a few stores for elementary work in the drill shed at Lunenburg. There were present on parade, 2 officers, 39 men; total 41; Mahone Bay Battery, 2 officers, 39 men; total 41.

On the 10th of October I inspected the 1st Brigade of Halifax Garrison Artillery, Lieut.-Colonel Mitchell in command, and on the 10th I inspected the 2nd Brigade Halifax Garrison Artillery, Lieut.-Colonel Macpherson in command. The same remarks apply to both of these brigades. The physique of the men was good, they were steady on parade and fairly well turned out as regards clothing and accoutrements. I saw detachments from each battery at gun drill, commanded by the battery officers, who with their men shewed a fair knowledge of the drill of the guns in their charge.

I regret to find in the Halifax drill shed no stores for shifting ordnance exercises, in fact no appliances wherewith to instruct or interest the artilleryman in his work beyond a few 32-pounder smooth-bore guns mounted on traversing platforms. The Brigades of Halifax Artillery contain the material for as fine a force of Garrison Artillery as could be desired, but if the most ordinary appliances for instruction (which in England are possessed by the smallest volunteer artillery corps) are not given them a high state of efficiency cannot be expected. I trust this deficiency may be remedied, especially as regards Halifax and St. John, N.B., at both of which places are excellent drill sheds, and I feel confident that the results in increased efficiency will amply justify the trifling outlay required for the few stores referred to. These brigades have not carried out their annual gun practice, owing to the ammunition having only very recently been received, and I should recommend that, as the winter season has set in, the ammunition be retained until the spring and then used for competitive practice.

I have the honor to be, Sir,

Your most obedient servant,

(Signed) PRICE LEWES, Lieut.-Colonel,  
Assistant Inspector of Artillery.

*Engineers.*

This branch of the Militia is sadly in want of materials, and means of instruction. They are without entrenching tools and the common appliances of their arm. Lieut.-Colonel Scoble at Toronto, Major Kennedy at Montreal, and Captain Perley at St. John, N.B., are able and zealous officers, anxious to produce efficiency, if the means were available.

The two Engineer Companies at Montreal might with advantage be placed under the senior officer of the arm at Montreal.

I was not notified by any of the Deputy Adjutants General of the districts, of the proposed dates of inspection of Engineer Corps, and have therefore had no opportunity of judging accurately, but from want of the appliances before mentioned, and from previous inspections of some of the companies, I believe them to be little more than efficient Infantry. The Toronto Engineers, Lieut.-Colonel Scoble, have to a certain extent, I am informed, supplied material at their own expense.

## Armament.

The annual returns of the Boards of Survey obviate the necessity of detailed reports from me on the existing armament and stores in charge of the Artillery.

The Director of Stores reports on those in reserve. But as regards future armament, I would again solicit attention to the advisability of adopting the Palliser system for converting in this country the 400 old smooth-bore guns into rifles, as already recommended by the General Officer in command, page xix of last year's report, since which the remarkable power developed by the chambered seven-inch Palliser gun converted in England, render it a suitable armour plate piercing gun for coast defences, though for land fronts and entrenched positions along our extended frontier, I feel certain no better or cheaper plan could be adopted than the gradual conversion of our smooth bores, into 80-pounder, 64-pounder and 40-pounder rifles, at the trifling cost of about £120 per gun, while many old wood and iron carriages, platforms &c., could be utilized, and new wooden carriages have been made in this country at a less cost than that of importation.

The relative cost of constructing wooden carriages and traversing platforms at Quebec, and importing iron or wooden ones is shown in the following estimate.

DETAILED ESTIMATE showing cost of Gun Carriages and Traversing Platforms<sup>s</sup> (Wrought-iron and Wood) purchased from Royal Arsenal, Woolwich, compared with cost of manufacture of Wood Carriages and Platforms at Gunnery School, Quebec.

	Priced Vocabulary, Canadian currency. No 2 Balance Sheet + 5 per cent.		Built at Quebec with present shop and tools.	With more convenient work-shops and imported tools.
	£ s. d.	\$ cts.	\$ cts.	\$ cts.
Carriage, sliding, wrought-iron, dwarf with coils single plate, 7-inch M.L.R. gun (page 218).....	178	3 0 =	910.31	.....
Carriage, sliding, wrought-iron, dwarf with coils, double plate, 7-inch M.L.R. gun.....	149	15 0 =	76.515	.....
Carriage, sliding, wood, with wrought-iron stool-bed, coils and elevating screw, for guns of about 100 cwt (page 222).....	50	8 0 =	257.17	250.00 200.00
Carriage, without stool-bed, coils or elevating screw.....			160.00	.....
Wrought iron stool bed coils, elevating screw, with pan (page 204, £2 10s.; page 244, 19s. 10d.; page 299, £7.).....	10	9 10 =	52.00	.....
Carriage, wood, garrison, common standing, for 64-32 pounders, with wrought-iron stool-bed, coils, elevating screw and Allen's brakes (page 221).....	35	2 8 =	179.51	170.00
Carriage, without stool-bed, coils and screw.....			100.00	175.00
Carriage, wrought iron, 64 pounder common garrison (page 218).....	69	13 0 =	355.85	.....
Platform, wrought iron, dwarf, traversing, for double plate carriages (page 286).....	192	0 0 =	981.10	.....
Platform, wrought iron, dwarf, traversing, for single plate carriages.....	150	0 0 =	766.50	.....
Platform, wood, dwarf, traversing (page 287).....	68	18 0 =	351.54	370.00 350.00
Price of wrought-iron carriage and platform, as above, in England, double plate.....		1,746.25	.....	.....
Price of wrought iron carriage and platform, as above, in England, single plate.....		1,676.81	.....	.....
Cost of wood carriage and platform, built in Quebec Gunnery School.....			620.00	550.00
Cost of wood carriage and platform, built in England.....		\$608 71 & frgt. =	639.14	.....

\* About 5 per cent. should be added to the prices in this column for freight and shipping charges.  
† By utilizing material of old carriages now on charge and comparatively useless.

## RESUMÉ—Comparative Cost of Home Manufacture and Importation of Garrison Gun Carriages.

	Imported from England.	Home Manufacture
	\$ cts.	\$ cts.
It will be seen by the following table that a wrought-iron, double plate, sliding carriage and platform will cost, with freight, &c., added, in round numbers about.....	1,700 00	
The same, of wood.....	639 00	
do Made in Quebec as proposed.....		550 00
Wrought-iron carriage, for 64-32 pounders, about.....	375 00	
Wood carriage, built in Quebec.....		170 00
do for 64-32 pounders, imported, about.....	190 00	

The manufacture of such material would not only be a saving of expenditure, but would be a benefit to the country by employing our own artificers and expending the money in the Dominion.

## ENGINE WORKS.

I beg to recommend strongly the report of Messrs. Gilbert, & Co., Canada Engine Works, to favorable consideration; trusting that if I can report satisfactorily on the proof of the gun now nearly completed at Montreal, the Government will not hesitate to order the gradual conversion of the 400 smooth-bore guns now comparatively useless on our fortifications, and that a sum of money will be placed on the estimates to meet this expenditure as well as that for 17 7-inch Palliser rifles in lieu of 17 64-32-pounders previously ordered from Woolwich by the Dominion Government.

The differences of cost between the home manufacture and importation speak for themselves. The efficiency of Canadian manufacture will, I believe, be established by the proof of the gun now being constructed, as well as inferentially from the fact of the success in the United States of the Palliser principle of conversion and construction. I would, however, for the future, manufacture in conversion of 64-32 pounders, recommend that the A tube be prolonged about two feet six inches beyond the muzzle of the cast-iron gun, which would allow of sufficient length for the use of pebble powder, which being slower burning and exercising less strain on the gun, yet gives a higher initial velocity than the *poudre brutale* for which the short Woolwich guns were originally constructed. With the addition of the chamber I believe the 64-32-pounders could be made to penetrate considerably more than five inches of iron as it has already done. The cost of this change would be inappreciable, and the practical inconvenience of increased length, nil, as the preponderance already existing would allow of an increase of four feet of A tube if required for ballistic purposes. I believe it would also be advisable in lieu of studs to adopt the expanding base ring system so successfully experimented upon at Shoeburyness, and already introduced in the United States as invented by Captain Butler, U.S.A. It will be seen that a system of gradual conversion will enable us (at a minimum of cost and maximum of efficiency) to avail ourselves of the scientific experiments carried on at Shoeburyness and elsewhere.

## Forts.

During the past year considerable repairs have been done on the land fronts at Quebec in connection with the Dufferin improvements, and also to the forts at Lévis, but many important repairs to the Citadel which are much needed have been postponed. The details are given in the report of the annual boards of inspection at Quebec, Kingston, St. Helen's Island, Montreal, and elsewhere. Lieut.-Colonel Irwin has sent in a report on the batteries to be erected at Vancouver Island, British Columbia.

## Gunpowder.

In accordance with the directions received, I examined the samples of gunpowder, R.L.G., Nos. 1 and 2 and L.G. Nos. 1 and 2, supplied by the Hamilton Powder Factory and find that the sample No. 1, R.L.G. compared favorably with the R.L.G. samples of Waltham Abbey manufacture, supplied by the Store Department, bearing date 1864 and 1861.

Herewith result of Mortar Eprouvette test (A.)  
9-pounder M.L.R. for average range (B.)  
Test for velocity by Boulenge's Chronograph (C.)  
Densimeter test (D.)  
Flashing test.  
Chemical and other tests.

It must be borne in mind that the R.L.G. is a comparatively slow burning powder, and that the results by the mortar eprouvette are more favorable to a quick powder.

The arm used in connection with the Boulenge's chronograph is a U. S. A. Remington small arm.

The samples of powder have to be ground down to suit size of bore. The glazing is, of course removed at points of fracture of grain, thereby altering rate of combustion, and producing other irregularities.

It is therefore advisable that a 9-pounder M. L. R. field gun be lent to the Hamilton Powder Factory for use with their chronograph, if it is intended to carry on the manufacture of R. L. G. in this country, which I would recommend for reasons that will no doubt be patent to you.

I inspected the Hamilton Works and find that they have every facility for the manufacture of ordinary military powders, as well as pebble. They do not refine their saltpetre, but import it refined. It was analyzed in my presence and compared very favorably with the L. G. supplied by Hall & Son, and gave about equal results for R. L. G. Waltham Abbey and Hamilton powders. But the Superintendent is quite willing to undertake the refining on his own premises, if required. Certain little mechanical details relative to the avoidance of splinter fracture of grain he can modify.

I would therefore urge upon the Government the advisability of commencing the manufacture of a sufficient supply of R. L. G. at the Hamilton Works, but would not recommend the manufacture of L. G. to be commenced as it is an obsolete powder. It would be however very desirable that a chronograph be provided and placed at the School of Gunnery at Quebec.

I have the honor to be, Sir,

Your obedient servant,

T. BLAND STRANGE, Lieut.-Colonel,  
Inspector of Artillery and Warlike Stores.

CITADEL, QUEBEC, August 22nd, 1878.

SIR,—I have the honor to report that I have tested the samples of powder sent from the Hamilton Powder Mills, with the 8-inch eprouvette mortar, and also by flashing on glass plates.

I enclose a comparative table of the distances in feet obtained by firing the 68-pound steel shot with a charge of 2 and 3 ounces of powder, shewing the power of the Hamilton powder compared with the English manufacture.

The L. G. powder of the Canadian make compares very favorably with that of English manufacture. The R. L. G. does not seem quiet so strong, but the test is a rough one.

The L. G. powder of the Hamilton Works is glazed, that of English manufacture is not.

A slight residue remained in the bore of the mortar after firing the Canadian L. G. The flashing tests however were very satisfactory.

I have the honor to be, Sir,  
Yours very truly,

(Signed.)

C. E. MONTIZAMBERT,  
Captain and Brevet Lieut.-Colonel.

To the Inspector of Artillery  
and Warlike Stores,  
Quebec.

(A.)

RECORD of Proof of Gunpowder by Mortar Eprouvette 8" 63 lbs. Steel Shot.

Makers' Name.	No. of lot.	Date of Manufacture.	Description of Grain.	Rounds Fired.			
				1 — Feet.	2 — Feet.	3 — Feet.	Average feet.
Hamilton Powder Mills.....			L. G. No. 1.	252	259½	265	258½
			L. G. No. 2.	260½	261½	252½	258½
			R. L. G. No. 1.	252	262	255	256½
			R. L. G. No. 2.	242	254	254	250
Hall & Son.....	872	1861	L. G.	247	250	247	248
	873	do	L. G.	248	243	253	248
	878	do	L. G.	267	271	275	271
	893	do	L. G.	230.5	233	236	233.2
Waltham Abbey.....	907	do	L. G.	269	256	262	262.1
	781	1864	R. L. G.	265	280	261	268.2
	782	do	R. L. G.	289	272	294	285

(B.)

RESULT of Practice with Imperial R. L. G. powder, 6 rounds at 1,000 yards, wind blowing up range.

No. of Round.	No. of feet under.	No. of feet over.	Average.	Variation from Average.	Remarks.
1st.....		45	85 ft. over.	-40	
2nd.....		80	do	-5	
3rd.....		97	do	+12	
4th.....		86	do	+1	
5th.....		130	do	+45	
6th.....		72	do	-13	

Canadian Powder, 6 Rounds, 1,000 yards, No. 1.

1st.....		106	81 ft. over.	+25
2nd.....		110	do	+29
3rd.....		82	do	+1
4th.....		60	do	-21
5th.....		69	do	-12
6th.....		60	do	-21

## Canadian Powder, 6 Rounds, 1,000 yards, No. 2.

No. of Round.	No. of feet under.	No. of feet over.	Average.	Variation from Average.	Remarks.
1st.....		124	55 ft. over.	+69	
2nd.....		99	do	+44	
3rd.....		76	do	+21	
4th.....		23	do	-32	Direct hit.
5th.....	10		do	-65	
6th.....		8	do	-47	do

## (C.)

Powder tested by Boulange's Chronograph, 9th and 10th September, 1878, at Hamilton Powder Works, Windsor, Province of Quebec, by Lieut.-Colonel T. B. Strange, Dominion Inspector of Warlike Stores.

R.L.G. and L.G., reduced by hand mill to grain suitable to R.L.R. small arm.

U. S. Remington, .58 cal.

Charge 77 grs. powder.

Charge 470 grs. bullet.

R.L.G. Waltham Abbey, 16-5-64 I.V. = 1,031 ft. per sec.

R.L.G. Hamilton Works, 10-9-78 I.V. = 1,115 ft. per sec.

L.G. Hall & Son, England, 1861, I.V. = 992 ft. per sec.

## (D.)

Densimeter test of L.G.

Density of Hamilton Powder Company, 1878 = 1.777.

Density of Hall & Son, Powder Company, 1861 = 1.696.

## (E.)

Gravometer test.

Curtis & Harvey, L.G. = .995.

## (F.)

Chemical analysis for impurities in saltpetre shewed a slight superiority on the part of the Waltham Abbey R.L. over the Hamilton, which appeared however in this respect far superior to Hall & Son.

(Signed) T. B. STRANGE, Lieut.-Colonel,  
Inspector of Warlike Stores.

*Small Arm Ammunition.*

REPORT on the examination of small-arm cartridges made in the United States for the Russian Government and stated to become unserviceable after five years, with a view to comparison with those in store in Canada.

Being on inspection duty elsewhere, I ordered Lieut.-Colonel Montizambert to assemble a Board of officers of "B" Battery School of Gunnery, on 27th February, 1878, to report on the small arm cartridges in charge of "B" Battery, and that in the District Store.

The Board were of opinion "that the B.L.S.A. Snider Enfield cartridges on charge at this station are *thoroughly serviceable*."

I have examined the cartridges on which the Board pass opinion, which I confirm.

The American cartridge is of an entirely different material and make from the British, it was rejected many years ago by our W.O. authorities in favor of the present pattern.

The American cartridges submitted are copper, with a thin wash of brass, which is soon eaten through and rapid oxidation takes place, the saltpetre supporting it even without exposure to damp, not so with the English cartridge of rolled brass, lined with paper in the latter patterns (mark IX) nor have the older patterns V and VI, lined with shellac only, been found to have suffered. (The instance mentioned in my last year's report was exceptional, see Militia Report, page 190, 1876.)

The American cartridge is reported by Mr. Kirby, as bursting on ignition, this is due partly to the chemical action eating through the copper as before stated, and partly to the cartridge of solid copper not having the expansibility of the rolled sheet brass, which never bursts, but expands until supported by the barrel. There is no cause for uneasiness. That the officers of the Royal Artillery entrusted in Great Britain with this manufacture and inspection can be relied upon as well as the good condition of our magazines is proved by the sound state of our S.A. ammunition twelve years old. Herewith the American cartridge returned for comparison with British make.

## APPENDIX No. 4.

## REPORT ON "A" BATTERY, SCHOOL OF GUNNERY.

SCHOOL OF GUNNERY,  
KINGSTON, ONT.,  
11th December, 1878.

During the past year four officers and 122 non-commissioned officers and men joined this School. Of this number, three officers and 72 non-commissioned officers and men joined for a three months' course of instruction, one officer and 23 non-commissioned officers and men were retained for a further service of 12 months, and 38 non-commissioned officers and men enlisted or re-enlisted in "A" Battery for three years' continuous service.

Batteries.	Officers.	Non-Com- missioned Officers and Men.	Total.
London Field Battery.....		6	6
Welland Canal Field Battery.....			
Hamilton do.....		7	7
Wellington do.....		11	11
Ontario do.....			
Toronto do.....		5	5
Durham do.....		3	3
Kingston do.....		21	21
Gananoque do.....		5	6
Ottawa do.....	1	6	6
Winnipeg do.....		1	1
Woodstock do.....		1	1
"A" Battery.....		38	38
Ottawa Brigade Garrison Artillery.....		3	3
Collingwood Garrison Battery.....			
Sarnia do.....			
Goderich do.....			
St. Catharines do.....			
Toronto do.....		3	3
Port Hope do.....			
Trenton do.....		6	6
Cobourg do.....		4	4
Napanee do.....		1	1
Prescott do.....			
14th Battalion.....	1		1
47th do.....	1	1	2
47th do.....	1		1
Total.....	4	122	126

The following Certificates have been issued during the year 1878:—

	Long Course.		Short Course.				Total.
	1st Class.	2nd Class.	1st Class.	2nd Class.	3rd Class.	4th Class.	
Officers.....		1	2	1			4
Non-Com- missioned Offi- cers & Men..			7	7	9	9	64
Total.....		1	9	8	9	9	100

1. The system of providing for only three regular short courses of instruction, commencing respectively on the 5th January, 5th April and 5th September, has been inaugurated during the past year, and so far the results have been satisfactory, as regards systematic instruction, but it is probable that in some cases it may prevent eligible men from joining the School, it not being always possible for them to leave their employment on specified dates.

2. It is to be hoped that the permission granted in recent general orders for officers to pre-ent themselves for examination at the Schools of Gunnery, and if successful to obtain 2nd class certificates, will act as an inducement to a number of those gentlemen who have hitherto been unable to attend the short course of instruction, and that they will now endeavour to better qualify themselves for the duties of the positions they occupy, by acquiring a sufficient knowledge of artillery drills and exercises.

3. I am still of opinion that it would be advisable to limit the tenure of such officers appointments to a certain date, say 10th December, 1879, before which time they should be required to pass the examination for 2nd class short course certificates at the School of Gunnery.

4. My duties in British Columbia necessitated my absence from Kingston from the 13th May until the 19th September, during this period the duties of Commandant were performed entirely to my satisfaction, by Lieut.-Colonel Cotton, Commanding "A" Battery, and this officer was also ordered by the Senior Inspector of Artillery to inspect several Batteries of Artillery in Ontario during their annual drill.

5. The annual rifle practice, 40 rounds per man, was carried on as usual, with very good results.

6. Owing to the services of the Battery being required at Montreal from the 9th July until the 16th July, during which period they were encamped at that city, it was not considered necessary to have the usual summer camp on the lake shore.

7. During the summer months the officers and men of "A" Battery went through a course of instruction in the formation of rafts and raft and spar bridging.

8. I am very glad to be able to report that the general conduct of the men of "A" Battery during the past year has been extremely good, and that I have every reason to be satisfied with the ability and zeal of the officers and non-commissioned officers of this instructional staff. The results of the competition for the prize essay, field gun practice, and shifting heavy ordnance, instituted by the Dominion Artillery Association, and duly reported in their proceedings, will, I have no doubt, afford sufficient evidence as to the character and results of the instruction carried out at this Institution.

9. I have again to repeat my previous recommendations as to the increase of the field battery establishment of horses. When every other facility exists for proper instruction in field battery drills and duties, it is to be regretted that in this particular the means of proper instruction have been so long withheld.

10. Several repairs to the fortifications and barrack buildings have been carried out by the Public Works Department during the year, but no information as to their nature or extent has ever been afforded to me, and although I am supposed to be in charge of these forts and buildings, and responsible for their condition, it is apparently not intended that I should be able to report upon the steps taken to keep them in order, or as to the nature and efficiency of the repairs which have been or are to be executed. I venture, therefore, most respectfully to bring this matter under the consideration of the proper authorities, with a view to the establishment of a proper system of report upon the necessity and efficiency of all repairs, &c., and of communication between the officer-in-charge, and the individual who is entrusted with their execution.

I have the honor to be, Sir,

Your obedient servant,

D. T. IRWIN, Lieut.-Colonel,  
Commandant, School of Gunnery,  
Kingston. Ont.

The Commandant, School of Gunnery,  
Quebec.

#### REPORT ON "B" BATTERY, SCHOOL OF GUNNERY AND BRANCH SCHOOL, MONTREAL.

CITADEL, QUEBEC, December, 1868.

SIR,—During the year ending 15th December, 1873, 27 officers and 111 non-commissioned officers and men joined for instruction. Of this number the officers were as follows:—

##### *Artillery.*

Short course.....	15
Long course.....	4

##### *Cavalry.*

Short course.....	1
Long course.....	1

##### *Infantry.*

Short course.....	3
Long course.....	2

##### *Engineer.*

Short course.....	1
-------------------	---

One by examination, in accordance with G. O. (12) 10th May, 1872.

Of the above, 66 were non-commissioned officers, gunners and drivers from various artillery Militia corps in Quebec and the Maritime Provinces. In addition, 26 non-commissioned officers and men re-engaged in "B" Battery. In the Branch School at Montreal, 7 officers and 16 non-commissioned officers, gunners and drivers obtained certificates. These are included in the above.

Appended are returns of certificates granted, shewing subjects of instruction, and results of examination:—

(A.) Garrison, Artillery, Infantry and Engineer officers, Quebec School of Gunnery and Branch School, Montreal.

(B.) Field Artillery and Cavalry officers, School of Gunnery, Quebec.

(C.) Garrison Artillery non-commissioned officers and gunners, Quebec School of Gunnery and Branch School, Montreal.

(D.) Field Artillery non-commissioned officers, gunners and drivers, Quebec School of Gunnery and Branch School, Montreal.

As the wants and circumstances of the School remain the same, I beg to draw attention to previous recommendations and remarks, viz:—

"The number of applicants to join the battery for three years' service, as also for short courses of three months, is more than in previous years, and far in excess of the number sanctioned. As it would be impossible either to carry out the garrison duties, or even provide squads for instruction, if vacancies were kept open, very eligible men have to be refused admission because there happen to be no vacancies when they apply. They frequently ask to join without pay to take their turn of a vacancy."

"Under the circumstances, it is to be regretted that an increase of short-course men from the Militia batteries is not sanctioned, especially during the winter months. For while the artillery of the Maritime Provinces (from which the number of applicants is on the increase) is without a special Gunnery School, the Quebec Gunnery School is crippled by not having enough men to form squads for instruction and to carry on the duties of the garrison and necessary fatigues, especially in the Field Artillery branch, which cannot be efficient without the establishment of a complete Field Battery of Instruction; that is, an increase of 28 horses (in addition to the present strength), and 3 officers and 70 non-commissioned officers, gunners and drivers. If 16 horses were added to the above, to horse four ammunition waggons, there would be a complete Field Battery at each Gunnery School ready for immediate service, while the waggon teams could be used as a cavalry riding school as well as performing transport duty for the store department under ordinary circumstances saving cart hire."

"Having a selection, the class of men joining the battery is not in my opinion inferior in physique, education, or conduct to any troops it has been my lot to serve with."

The temperance society has averaged, during the past year, about one-fourth the battery strength.

"From a purely civil point of view, I think it is a drawback to the development of a new country that the force at Quebec is not permitted to be increased. Many Canadians, as well as immigrants of a good class, would, if permitted, train themselves as Canadian soldiers and become Canadian citizens. Not readily finding employment in times of depression, they cross to the United States or return to Europe with depreciating accounts of the country."

The Branch School detachment at St. Helen's, (which was withdrawn after the loss by fire of the barracks), it was found necessary to send back again this summer, in consequence of riots and the insecure state of the arms and military stores kept at that important depôt. The detachment has been again withdrawn owing to the insufficient number of "B" Battery at Quebec.

The militia of Montreal is composed of classes in business, who cannot leave the city for a course of instruction, a branch school is therefore much needed.

The fortress at Isle-aux-Noix is very important and still in fair condition, with bomb proof barracks and every accommodation for a garrison.

The establishment of a branch school there for garrison artillery, engineers and infantry would be a desideratum. It could be formed of a demi-garrison battery of 50 men and 3 officers on the strength of the Quebec Gunnery School from which reliefs should be sent. They would form an efficient frontier garrison as well as a school of instruction, and allow of the fortress being armed and kept in order. On each recurrence of the threat of invasion a detachment of "B" Battery, which it can ill afford to spare, has been held in readiness to garrison this fort.

Major Hebert, who has obtained a first class long course certificate at the Quebec School of Gunnery, offers to raise a Militia Garrison Battery in the neighborhood where he is resident. This battery as well as the artillery and infantry at St. John's, P.Q., could be effectually trained at such a school.

The General Officer commanding has already suggested military schools at Toronto and St. John's, P.Q. I have no doubt Lieut.-Colonel Irwin would concur in the advisability of establishing such a branch school as a detachment from "A" Battery, which should be augmented for the purpose. The general order forming the batteries provides for detachments from them at Toronto and Montreal respectively, but their limited numerical strength has prevented these detachments being of any great practical value.

The camp for field artillery practice on the Island of Orleans, was under the command of Captain Short; that for musketry instruction at Engineers' Park, Levis, under Captain Duchesnay; Lieutenant Sheppard performed the onerous duties of Quartermaster and Supply Officer to the two camps; and the headquarters, which remained in the Citadel, under command of Lieut.-Colonel Montizambert, during the time my duties as Inspector necessitated my absence which was prolonged this year in consequence of the visit to British Columbia of the Inspector for Ontario. The Gunnery School printing press has furnished copies of examination questions as well as copies of Artillery manuals, for the use of militia of the Dominion, also the necessary circulars for the Dominion Artillery Association.

"While the Quebec Gunnery School has been practically expanded into a school for officers of all arms, thereby much increasing the labor of the staff, no adequate provision has been made for men, without which, the military art can no more be taught than chess without pawns."

"The Lieutenant General commanding is fully cognizant of the points referred to, and has suggested effectual remedies from time to time. I trust, however, the emergency of the case may be an excuse for reporting upon facts with which he is already familiar."

Notwithstanding the heavy night duty the usual daily duties, fatigues, &c., the courses of instruction have been carried out.

The usual courses of gymnastics for young soldiers has been continued.

The system of bi-hourly meteorological observations by means of the non-commissioned officers of the guard relieving sentries has been also continued.

The averages are taken by Lieutenant Donaldson who has charge of instruments and reports through me to Professor Kingston of the Toronto observatory, who speaks very favorably of the results thus obtained. A grant of \$60 having been sanctioned for telegraphic instruction, four sets of instruments were purchased, wires, &c., fixed. Instruction has been given to six officers and one non-commissioned officer, by Major Hebert, formerly Superintendent of the Telegraph Institute, Montreal, who is at present at the Gunnery School. It was thought that the valuable knowledge so given could be utilized to concentrate the fire of the fortress or to explode torpedoes, as well as for the ordinary needs of military telegraphy.

The flags supplied with the Army and Navy Signal Code have also been made use of to a slight extent, to communicate with the Levis forts and Her Majesty's ships while in harbour, but the small numbers of the garrison and their many duties prevent much systematic instruction being carried out.

From the General Officer commanding Canadian Militia, I obtained permission (during the period that war with Russia seemed imminent) to communicate with the officer then commanding Her Majesty's forces at Halifax, Col. Elgee, R.A., with a view to sending a detachment of officers and non-commissioned officers from "B" Battery to learn the manipulation of torpedoes, but I found I could not have spared sufficient men for the purpose.

The six additional artificers (under supervision of Lieutenants Donaldson and Inlah) are gunners who have been excused guards and ordinary duties to work in the forge armorer's, wheeler's, carpenter's and harness maker's shops. They have, at less than the cost of importation, as before shown, manufactured carriages for the seven inch Palliser guns presented by Sir William for the armament of this fortress, in addition to executing a vast amount of repairs to the barracks and equipment of the battery. A Company of 50 Artillery and Engineer artificers added to the battery as recommended by the General Officer commanding, and by the various Boards of Survey on fortifications, would save a large amount of money to the public. They would also serve as a school for Infantry which, in my opinion, should in this country be entirely composed of artificers, and kept at military work, making and repairing material, as well as keeping in order fortifications, barracks, &c., by periodical pointing of masonry before heavy expenditure becomes necessary from long continued neglect. I must in this connection draw attention to paragraph 10 of Lieut.-Colonel Irwin's Report on "A" Battery S.G., in which he complains of the absence of any system by which officers placed by General Orders in charge of fortifications, might direct or in some way supervise and report upon the repairs considered necessary, and upon the final character of such repairs, when executed by the Public Works or other department.

The services of the battery were called in aid of the civil power at Quebec on 1st May, 12th June and 17th September, and at Montreal on the 12th July, while those of the detachment of "B" Battery from St. Helen's were on duty in various localities for a protracted period. It is not necessary for me to refer in detail to these services, as they have been already noticed in General Orders in terms of approval by the General Officer commanding.

The ten 64 pounder Palliser guns purchased for Quebec, as well as the 7" and 8" guns presented by Sir W. Palliser were landed by the battery and mounted as far as the racers and platforms laid by the Public Works Department admitted. One 7" B.L.R. gun platform only has been completed at the Levis forts (No. 1) on which the gun has been mounted. A 64-pounder Palliser has been also mounted at Orleans Island for gun practice.

It would be very desirable if the small outlay required to cover the guns so placed on Orleans Island could be sanctioned, a half sunken battery revetted with iron-band gabions could be erected by the men of the battery at a trifling cost.

I feel it my duty again to draw attention to the necessity of providing a fire-engine for a fortress and barracks, where there is a large amount of powder, arms and valuable stores at stake, to make no mention of human lives. The burning of

the room used as my study has been a serious loss to me and imminent danger to life was overcome by the promptness of the officers and men, to whom my thanks are due.

In conclusion, I beg respectfully to remark that the instruction of Infantry, Cavalry, Engineers and Artillery, is best carried on by working together under a single Director, with regimental officers for each arm. In the circumstance of Canada, where the money vote for military purposes must be very limited, the continuous tactical instruction of any or of all arms can only be so managed, and by having recourse to skeleton manoeuvres, reconnaissance, occupation, attack and defence of positions, &c. No arm can be thoroughly educated by itself; and the necessary small bodies of regular troops that can be permanently maintained in Canada, if disseminated in small separate schools for each arm, will, in my opinion, fail to give instruction beyond barrack yard drill, and a certain limited experience of interior economy, alone possible to a detached company, or even larger body of infantry. It is only possible to give such theoretical instruction in fortification, reconnaissance and the art of war generally, in establishments with a certain staff, and a considerable number of officers as pupils. In these days the military instruction that is limited to drill, neatness of turn out, &c., is of little value when not combined with some higher military knowledge. The examination returns of the Quebec Gunnery School, show how naturally the instruction of engineers and infantry falls in with that of garrison artillery; as the garrison artillery officer and gunner or engineer must be taught infantry drill before he becomes a gunner or engineer, so the cavalry instruction fits in with that of the Mounted Artillery, who must be trained as cavalry. After seven years experience I cannot alter my opinion that the limited expansion necessary to enable the Gunnery Schools to become schools for all arms, as well as garrisons and nuclei to the Militia in time of need, is the most economical and efficient means of maintaining a permanent force. In a country happily exempt from the probability of frequent wars, it is essential that such officers and soldiers as are permanently enlisted should be continuously employed in instruction of the National Militia, to keep bright their own knowledge. Such detachments as are necessary for small garrisons and branch Schools, should be commanded from, and frequently relieved by the Central School, otherwise the necessity of snow fatigues, wood cutting, &c., which prevent the regular instruction of a so all detachment (especially in a climate like Canada) combined with other influences, tend to certain deterioration, and is at best, in my opinion, a waste of public money.

*Officers of the Quebec Gunnery School.*

I have great pleasure in placing on record the willing and able assistance I received from the undermentioned officers of the Gunnery School under my command:—Lieut.-Colonel Montizambert has, during my absence, conducted everything to my entire satisfaction. The Adjutant, Captain Oscar Prevost, performed his onerous duties with regularity and ability. I beg to solicit for him the rank of Brigade-Major, for the double reason—1st. That his services entitle him to it; he was gazetted as Captain in the Militia in 1869, and served in the Red River expeditionary force from 1870 to 1872, since which he has served continuously in "B" Battery, and for the last five years as Adjutant of the Gunnery School, in which capacity he has given me great assistance. 2nd. It would be a great saving of labor and correspondence if the Adjutant of the Gunnery School were given the rank of Brigade Major, to enable him to carry on my necessary correspondence as Inspector of Artillery with Brigade Majors of Districts and commanding officers of corps, as well as with the Assistant Inspector of Artillery.

The usages of the service do not in general permit field officers to be communicated with through an Adjutant, which throws an unnecessary amount of correspondence upon me, particularly awkward and conducive to delay during my temporary absence. As Inspector of Artillery I require a staff officer of the rank of Brigade Major. Holding rank with Deputy Adjutants General I am not able to communicate with them through my staff, while they can do so to me, giving me useless and extra labor.

The details of the demi-field battery have been well carried out under the command of Captain Short, and the duties of Quartermaster by Lieutenant Sheppard.

T. BLAND STRANGE, Lieut.-Colonel, R.A.,

Commandant, School of Gunnery, Quebec.

[A.]

RETURN of Certificates granted at "B" Battery School of Gunnery, and Branch

## GUNNERY

Garrison Artillery, Infantry and Engineers, Officer's

CORPS AND RANK.	NAMES.	SUBJECTS—WRITTEN.									
		Gunnery		Artillery Material.	Shifting and Working Ordnance.	Fortification.	Surveying.		Tactics and Strategy.		Military Law, &c.
		Obligatory.	Voluntary.				Voluntary.	Range Finding.	Obligatory.	Voluntary.	
500	300	800	400	400	400	100	400	200	300		
Gaspé Battery of Garrison Artillery, Major	J. Slous	400	337	336	280	72	300	255			
Summerside Battery of Garrison Artillery, Captain	T. C. Price	470	560	305	220	330	100	277	150		
Charlottetown Battery of Garrison Artillery, Captain	J. D. Irving	420	544	320	172	50	90	306	230		
Montreal Garrison Artillery, Lieutenant	H. V. Platt	405	540	316	238	160	85	279	225		
Quebec Battery of Garrison Artillery, Captain	H. Roy	160	*144	291	168	30	70	174			
Quebec Battery of Garrison Artillery, Lieutenant	Jos. Hudon	300	*132	315	244	25	116	204			
2nd Halifax Brigade of Garrison Artillery, Captain	R. Dart	430	*186	348	308	75	65	313	160	198	
65th Battalion, Mount Royal Rifles, Major	P. O. J. Hebert	430	464	220	160	310	85	308	204		
1st Prince of Wales' Rifles, Captain	R. G. Tatlow	530	420	368	246	200	100	370	170	215	
Temiscouata Provisional Battalion, Captain	A. D. Dumas	268	186	200	304	212	150				
Charlevoix Provisional Battalion, Captain	H. J. Tremblay	262	189	200	260	160	180				
Montreal Gar. Art., Captain	A. K. F. McAllan	227	163	122	25	138					
do do	Geo. Forbes	192	109	114	15	126					
do do 1st Lieut.	T. J. Turnbull	245	158	122	36	120					
do do Lieutenant	A. Rushton	210	178	122	39	180					
do do	F. S. Vaughan	227	165	140	67	105					
do do	W. H. Laurie	220	180	150	73	94					
do do	F. W. Cole	245	180	160	71	113					
Montreal Engineers, do	A. Duffy										

Those marked thus \* were given on a basis of 300 instead of 800, according to value of papers given.

School of Gunnery, Montreal, during the Year ending 23rd December, 1878.

## SCHOOL, QUEBEC.

Short and Long Course Examination Return.

	SUBJECTS—PRACTICAL.										REMARKS.			
	Total Theory.	Company Drill.	Gun Drill.	Mortar Drill.	7-inch B.L.R. Gun Drill.	Gyn Drill.	Sling Wagon.	Shifting Ordnance, including Knotting and Lashing.	Regimental Duty.	Total Practical.		Decimal.		Class Certificate.
												T.	P.	
100	150	50	200	60	50	200	300	933	68	84	1st.	Qualifying Decimal, 5.		
1,980	100	135	35	140	48	35	140	300	933	68	84	1st.	Long course.	
2,412	100	120	45	180	54	45	180	300	1,024	73	92	1st.	do	
2,132	90	150	40	.....	48	.....	160	300	788	73	70	1st.	do	
2,248	90	105	40	180	48	35	120	300	918	78	82	1st.	Short course.	
1,037	60	90	30	160	.....	40	100	100	580	43	52	2nd.	do	
1,336	40	90	30	140	48	25	120	270	763	55	68	2nd.	do	
2,083	100	120	30	140	42	25	140	150	747	74	67	1st.	do	
2,181	100	105	40	140	54	45	120	300	904	75	81	1st.	Long course.	
2,619	100	105	40	180	48	40	120	300	933	83	84	1st.	Short course.	
1,318	80	90	35	180	48	30	120	240	823	45	74	2nd.	do	
1,251	80	90	35	100	36	30	100	240	711	43	64	2nd.	do	
675	90	90	35	.....	42	40	120	.....	417	23	37	2nd.		
556	90	75	30	.....	30	120	.....	.....	345	19	31	2nd.		
681	90	105	35	.....	42	35	120	.....	427	23	38	2nd.		
729	90	120	35	.....	42	35	120	.....	442	25	39	2nd.		
704	90	120	45	.....	54	45	160	.....	514	24	46	2nd.	Branch School of Gunnery, Montreal.	
717	90	120	45	.....	54	45	160	.....	514	24	46	2nd.		
769	90	105	35	.....	42	35	140	.....	447	26	40	2nd.		
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....		Examined in accordance with G.O. (12), 10th May, 1872.

T. B. STRANGE, Lieut.-Colonel.  
Commandant, Gunnery School, Quebec.

[B.]

RETURN of Certificates granted at "B" Battery School of

GUNNERY

Field Artillery and Cavalry Officers,

CORPS AND RANK.	NAMES.	SUBJECTS—WRITTEN.									
		Gunnery		Artillery Material.	Moving and Working Ordnance.	Fortification.	Surveying.		Tactics and Strategy.		Military Law, &c.—Interior Economy.
		Obligatory.	Voluntary.				Change Finding and use of Sextant.	Voluntary.	Obligatory.	Voluntary.	
500	300	400	400	400	100	408	400	200	300		
Shefford Field Battery, Lieutenant .....	Wm. Neil.....	280	.....	279	300	304	80	.....	300	.....	198
Shefford Field Battery, Lieutenant.....	A. W. Mitchell.....	290	.....	300	276	360	90	380	342	.....	230
Richmond Field Battery, Lieutenant.....	M. B. Hetherington .....	225	.....	270	300	352	70	.....	290	.....	180
Richmond Field Battery, Lieutenant.....	A. M. Beattie.....	285	.....	288	270	175	75	.....	225	70	190
Quebec Hussars, Lieutenant...	Wm. Stevenson.....	200	.....	248	200	356	75	.....	211	60	240

Gunnery, Quebec, during the Year ending 31st December, 1878.

SCHOOL, QUEBEC.

Short Course Examination Return.

Total Theory.	SUBJECTS—PRACTICAL.								Total Practical.	Decimal.	Class Certificate.	REMARKS.
	Foot Drill.	Field Gun Drill.	Harness and Stable Duty.		Field Battery Movements.	Sword Drill.	Knitting and Lashing.	Regimental Duty.				
			Riding.	.....								
.....	50	150	50	100	50	50	50	300	T. P.	.....	.....	
1,741	25	120	35	70	35	25	30	240	580	'70	'72	1st.. Short course.
2,268	30	120	35	80	40	35	35	270	645	'78	'80	1st.. Short Course.
1,717	25	120	35	70	25	30	30	240	575	'69	'71	1st.. Short Course.
1,578	25	120	40	70	45	35	25	270	630	'63	'78	1st.. Short Course.
1,590	40	100	40	80	40	45	25	300	665	'63	'83	1st.. Short Course.

T. B. STRANGE, Lt.-C 1.  
Commandant, Gunnery School, Quebec.

RETURN of Certificates granted at "B" Battery School of Gunnery and Branch School, Montreal, during the Year ending 23rd December, 1878.

GUNNERY SCHOOL, QUEBEC.

Garrison Artillery Non-commissioned Officers' and Gunners' Short Course Examination Return.

CORPS.	RANK.	NAMES.	SUBJECTS.—WRITTEN.						SUBJECTS.—PRACTICAL.						Total.	Decimal.	Class of Certificate.	REMARKS.										
			Gunnery.		Artillery Material.		Shifting and Working Ordnance.		Small Arm and Squad Drill.		Garrison Gun Drill.		Mortar Drill.						7-inch B. L. R. Gun Drill.		Gyn Drill.		Sling Wagon.		Shifting Ordnance, including Knotting and Lashing.		Regimental Duty.	
			350	300	200	50	150	50	200	50	290	60	50	50					200	50	200							
"B" Battery.....	Bombardier and	Thos. Pugh.....	210	180	104	25	105	25	100	30	15	15	100	909	.54	4th.												
do	Corporal.....	G. Labat.....	245	171	109	25	75	20	100	30	20	20	190	906	.55	4th.												
do	Actg. Bombardier	G. Laugille.....	230	182	166	40	90	25	100	30	30	20	190	993	.59	4th.												
do	do	A. Dery.....	236	167	132	45	120	25	120	30	30	25	100	1,020	.61	4th.												
do	Gunner	H. Garnier.....	245	177	103	25	75	20	80	30	20	20	100	895	.55	4th.												
do	do	C. Grondin.....	245	162	100	25	75	20	100	24	25	20	100	916	.55	4th.												
do	do	A. Vachon.....	210	150	90	25	75	30	100	36	25	25	100	866	.52	4th.												
do	do	F. Hanlon.....	234	179	144	40	120	35	140	42	35	20	100	1,089	.65	4th.												
do	do	L. P. Lavole.....	237	177	141	35	75	25	100	30	25	25	100	970	.58	4th.												
do	do	Jas. Eady.....	210	209	126	30	75	25	100	36	25	35	80	951	.57	4th.												
do	do	W. Cook.....	179	163	99	Sick	105	20	100	Sick.	25	20	100	789	.50	4th.												
do	do	F. J. N. Stephenson.	232	199	134	40	105	25	140	48	30	25	40	1,028	.61	4th.												
Quebec Battery	Bombardier.....	J. F. Morency.....	282	194	151	35	120	85	120	42	.....	30	120	1,039	.62	4th.												
of Garrison Ar-	do	E. Bilodeau.....	230	187	122	30	75	30	100	30	.....	25	140	969	.58	4th.												

Halifax Brigade	Gunner.....	J. C. Almour.....	210	225	170	30	105	30	120	.....	25	25	100	1,040	.62	4th.	
of Garrison Ar-	do	John Cunningham...	245	98	114	45	90	35	.....	36	35	.....	698	.42	4th.		
Montreal Brigade	do	Jas. Davidson.....	175	110	122	45	75	30	.....	42	35	.....	659	.39	4th.		
of Garrison Ar-	do	P. D. Todd.....	315	165	122	45	75	35	.....	30	30	.....	842	.50	3rd.		
tillery	do	Cole.....	140	109	128	45	120	35	.....	42	35	.....	679	.40	4th.		
do	do	N. Fiddes.....	140	27	80	45	90	25	.....	36	25	.....	493	.29	4th.		
do	do	Alex. Kyle.....	210	139	127	45	90	35	.....	36	35	.....	741	.44	4th.		
do	do	J. B. Noble.....	231	120	130	45	105	40	.....	48	35	.....	789	.47	4th.		
do	do	A. M. Finlayson.....	192	133	132	45	75	30	.....	30	30	.....	682	.41	4th.		
do	do	F. W. Mount.....	224	150	130	45	105	40	.....	54	40	.....	828	.49	4th.		
do	do	R. Miller.....	143	90	130	45	105	40	.....	51	.....	.....	647	.38	4th.		
do	Bombardier.....	Wm. Brunell.....	238	135	120	45	90	35	.....	42	30	.....	765	.46	4th.		
do	Gunner.....	Chas. Young.....	245	135	140	45	90	35	.....	42	30	.....	792	.47	4th.		

Branch School of Gun-  
nery, Montreal.

T. BLAND STRANGE, Lieut.-Col.,  
Commandant, Gunnery School, Quebec.

RETURN of Certificates granted at "B" Battery School of Gunnery and Branch School, Montreal, during the Year ending 23rd December, 1878.

GUNNERY SCHOOL, QUEBEC.

Field Artillery Non-commissioned Officers' and Gunners' Examination Return—Short Course.

CORPS.	RANK.	NAMES.	SUBJECTS WRITTEN.		SUBJECTS—PRACTICAL.								Total.	Decimal.	Class of Certificates.	REMARKS.
			Artillery Material.	Moving, Working Ordnance, Harnessing, &c.	Foot Drill.	Field Gun Drill.	Harness and Stable Duty.	Riding and Driving.	Field Battery Movements.	Sword Drill.	Shifting Ordnance, Including Knotting and Lashing.	Regimental Duty.				
"B" Battery	Gunner & Driver	Belcher, J. G.	231	150	25	120	30	120	60	50	35	160	1,081	.65	4th.	
do	Driver	Henshall, James	195	144	35	105	35	120	30	25	30	120	1,025	.61	4th.	
Sheffield Battery	Bombardier	Farley, James	175	120	30	120	40	120	30	25	160	1,060	.63	4th.		
do	do	Cox, Chas	243	100	36	105	35	120	15	15	140	990	.59	4th.		
Richmond Battery	Sergeant	Shea, A	245	120	40	120	30	100	25	35	80	859	.51	4th.		
do	Bombardier	Frazier, Geo.	177	144	35	105	35	120	18	30	25	160	978	.58	4th.	
do	do	Coburn, C. N.	162	157	123	35	105	35	120	30	25	160	952	.57	4th.	
do	do	Murphy, James	227	170	105	120	40	100	30	25	30	120	1,602	.60	4th.	
do	do	Wood, John	175	147	102	120	30	100	25	25	120	879	.52	4th.		
do	Gunner	Clowes, Robert	245	180	100	35	105	35	120	15	15	140	990	.59	4th.	
do	do	McMoin, Robert	175	150	104	35	135	35	120	25	20	140	939	.56	4th.	
do	Doctor	Putnam, Geo.	210	180	100	40	135	35	120	25	40	100	985	.59	4th.	
Montreal Battery	Gunner	Green, C. E.	111	90	35	105	35	100	18	30	25	160	780	.46	4th.	
Quebec Battery	Sergeant	Grenier, Thos.	170	201	35	120	35	100	18	25	20	160	1,009	.60	4th.	

do	do	Paradis, E.	191	214	126	120	35	120	35	100	18	25	30	160	1,054	.63	4th.	
do	Corporal	Marcheterre, H.	143	192	149	105	30	140	30	25	20	140	999	.60	4th.			
Halifax Battery	Gunner	Ridgeway, L.	215	294	150	105	35	100	15	20	140	1,119	.68	4th.				
Montreal Battery	Bombardier	Kendall, J. D.	223	180	120	120	120	100	35	35	35	713	.48	3rd.				
do	do	Hastings, Alex	183	189	100	105	105	100	35	35	35	638	.43	4th.	Branch School of Gunnery, Montreal.			
do	Gunner	Byrne, John	169	240	100	120	120	100	35	35	35	689	.47	4th.				
do	do	Kollman, E. L.	213	195	100	90	90	100	25	30	30	653	.44	4th.				

\* Instructed with their Battery.

† Instructed with their Battery as far as practicable.

T. B. STRANGE, Lt.-Col.,  
Commanding Gunnery School, Quebec.

APPENDIX No. 5.

(A.)  
GUNNERY CERTIFICATES.

PROVINCE OF ONTARIO.

List of the names of Officers, Non-Commissioned Officers, and others of the Active Militia who have obtained Certificates at "A" Battery School of Gunnery, Kingston, during the Year 1878.

Rank and Name.	Corps.	Certificates.				Long or Short Course.
		1st Class.	2nd Class.	3rd Class.	4th Class.	
Abraham, Lieut. Edwin	47th Battalion	1878.	1878.	1878.	1878.	Short.
Berry, Gunner Fred	Ottawa Field Battery		Oct. 5			do
Bliss, Bombardier D	do		Feb. 11		Dec. 9	do
Carman, Corporal W	Woodstock Field Battery, N.B.			Dec. 9		do
Dench, Corporal Geo. W	Trenton Garrison Battery	April 12				do
Ferris, Gunner L. G.	Kingston Field Battery			Dec. 9		do
Ferry, Sergeant James	Ottawa Brigade of Garrison Artillery		Jan. 31			do
Gill, Gunner Charles	"A" Battery				June 3	do
Gillies, 2nd Lieut. George	Gananoque Field Battery	Nov. 15			Dec. 9	do
Goswell, Gunner F	do			July 26		do
Griffith, Gunner E. H. M.	Hamilton do					do
Hill, Gunner Thomas	Toronto do	March 14				do
Hooper, Gunner J	Port Hope Garrison Artillery	do 14				do
Howe, Lieut. Joseph	New Brunswick Brigade of Garrison Artillery		Oct. 27			Long.
Kennedy, Corporal John	Hamilton Field Battery	Jan. 24			Dec. 9	Short.
Kerr, Gunner John	Port Hope Garrison Battery					do

Lawson, Gunner Samuel	Ottawa Field Battery	April 12			July 26	do
Lewis, Gunner F	do				Dec. 9	do
Lucas, Bombardier Wm	do					do
Mawhinney, Corporal W	"A" Battery			Dec. 9		do
Moran, Gunner Jas. F	Toronto Field Battery		Jan. 31			do
Myers, Sergeant R. D	Trenton Garrison Battery			June 3		do
McKeand, Gunner M	Hamilton Field Battery			Dec. 9		do
McKelvie, Gunner John	Port Hope Garrison Battery				Dec. 9	do
Redmond, Sergeant J. F	Gananoque Field Battery			July 26		do
Robertson, Gunner J	"A" Battery		April 12			do
Robinson, Gunner J	Gananoque Field Battery				Dec. 9	do
Sanderson, Sergeant Edward	Durham Field Battery	April 12				do
Scott, Gunner Jno	Hamilton do				July 26	do
Semith, Gunner M. F	Kingston do				do 26	do
Snyder, Bombardier E	Durham do		April 12			do
Swinford, Gunner S	Wellington do			Dec. 9		do
Todd, Bombardier Ernest	Ottawa do		Jan. 26			do
Williams, Gunner J	St. Catharines Garrison Battery		April 12			do
Wiser, Lieut. Harlow G	do	Dec. 9				do
Young, Corporal William	Ottawa Field Battery	April 12				do

RECAPITULATION.

First Class Certificates "Long Course"	0
do do	1
do do	9
do do	8
do do	9
do do	9
Total	56

PROVINCE OF QUEBEC.

LIST of Names of Officers, Non-Commissioned Officers and others, of the Active Militia, who have obtained Certificates at "B" Battery School of Gunnery, Quebec, during the Year 1878.

Rank and Name.	Corps.	Certificates.				Long or Short Course.
		1st Class.	2nd Class.	3rd Class.	4th Class.	
Almour, Gunner John C.	Halifax Brigade of Garrison Artillery	1878.	1878.	1878.	April 29.	Short.
Beattie, Lieut. A. M.	Richmond Field Battery	Dec. 11.			April 29.	do
Belcher, Gunner Joshua G.	Montreal Field Battery				Dec. 3.	do
Blodseau, Bombardier E.	Quebec Garrison Battery				Sept. 24.	do
Brunell, Bombardier Wm.	Montreal Brigade of Garrison Artillery				June 25.	do
Byrne, Gunner John.	Montreal Field Battery				April 29.	do
Clowes, Gunner Robt.	Richmond Field Battery				June 25.	do
Cole, Sergt. F. W.	Montreal Brigade of Garrison Artillery		Oct. 23.		Dec. 3.	do
Coburn, Bombardier Chas. N.	Richmond Field Battery				Oct. 26.	do
Cook, Gunner Wm.	"B" Battery				April 29.	do
Cox, Bombardier Charles	Sheffield Field Battery				June 25.	do
Cunningham, Sergt.-Major J.	Montreal Brigade of Garrison Artillery				June 25.	do
Dart, Captain Richard	2nd Halifax Brigade of Garrison Artillery	Dec. 3.			June 25.	do
Davidson, Sergt. James.	Montreal Brigade of Garrison Artillery				Oct. 26.	do
Deroy, Bombardier A.	"B" Battery				Oct. 26.	do
Dumas, Capt. A. D.	Temiscouata Provisional Battalion		Oct. 23.		Oct. 26.	do
Eady, Gunner James.	"B" Battery				Oct. 26.	do
Fairly, Bombardier James.	Sheffield Field Battery				April 29.	do
Fiddes, Sergt. N.	Montreal Brigade of Garrison Artillery				June 25.	do
Finlayson, Corporal A. M.	do				June 25.	do
Fraser, Bombardier George	Richmond Field Battery				Dec. 3.	do
Garnier, Gunner H.	"B" Battery				Sept. 24.	do
Green, Gunner C. E.	Montreal Field Battery				Dec. 3.	do
Greuter, Sergeant Thomas.	Quebec Field Battery				Dec. 3.	do

Hanlon, Gunner Patrick	"B" Battery				Oct. 26.	do
Hastings, Bombardier Alex	Montreal Field Battery				June 25.	do
Hebert, Major P. O. Joseph	65th Battalion	Dec. 11.			Dec. 3.	Long.
Henshall, Driver James.	"B" Battery				Dec. 3.	Short.
Hethrington, Lieut. M. B.	Richmond Field Battery	May 7.			do	do
Hudson, Lieut. Joseph. A. G.	Quebec Garrison Battery		Dec. 3.		do	do
Irving, 2nd Lieut. J. D.	No. 2, Charlottetown Battery of Garrison Artillery	Dec. 23.			do	Long.
Kendall, Bombardier J. D.	Montreal Field Battery			June 25.	do	Short.
Kollman, Gunner E. L.	do			June 25.	do	do
Kyle, Sergeant Alexander	Montreal Brigade of Garrison Artillery				do	do
Labat, Acting Bombardier G. P.	"B" Battery				Sept. 24.	do
Langille, Gunner George W.	do				Oct. 26.	do
Laurie, Lieut. W. H.	Montreal Brigade of Garrison Artillery		Oct. 22.		Oct. 26.	do
Lavoie, Gunner Louis P.	"B" Battery				Oct. 26.	do
Marcheterre, Corporal H.	Quebec Field Battery				Dec. 23.	do
Miller, Corporal R.	Montreal Brigade of Garrison Artillery				Sept. 24.	do
Mitchell, 2nd Lieut. A. W.	Sheffield Field Battery	May 21.			Dec. 3.	do
Morency, Bombardier J. F.	Quebec Garrison Battery				Sept. 24.	do
Mouni, Corporal F. W.	Montreal Brigade of Garrison Artillery				Dec. 3.	do
Murphy, Bombardier James.	Richmond Field Battery				Dec. 3.	do
McMorine, Gunner Robert.	do				April 29.	do
Neil, Lieutenant William.	Sheffield Field Battery	May 7.			Sept. 24.	do
Noble, Sergeant J. B.	Montreal Brigade of Garrison Artillery				Dec. 3.	do
Paradis, Sergeant E.	Quebec Field Battery				Dec. 3.	do
Price, Captain Thos C.	Summerside Garrison Artillery	Dec. 5.			Long.	Short.
Platt, Lieutenant H. V.	Montreal Brigade of Garrison Artillery	do 3.			April 29.	do
Pugh, Bombardier Thomas	"B" Battery				Sept. 5.	do
Putnam, Driver George.	Richmond Field Battery				April 29.	do
Ridgeway, Gunner Louis	Halifax Field Battery				April 29.	do
Roy, Captain H.	Quebec Garrison Artillery		Dec. 3.		do	do
Shea, Sergeant A.	Richmond Field Battery				Sept. 5.	do
Slous, Captain and Brevet-Major John	Gaspé Garrison Artillery	Dec. 11.			Oct. 26.	Long.
Stephenson, Gunner F. J.	"B" Battery				do	Short.
Stevenson, Lieutenant Wm.	Quebec Squadron of Cavalry	Dec. 11.			do	do
Tatlow, Captain R. G.	1st Battalion	do 3.			do	do
Todd, Sergeant P. D.	Montreal Brigade of Garrison Artillery			June 25.	do	do
Tremblay, Captain H. Jos.	Charlevoix Provisional Battalion		Nov. 5.		do	do
Vachon, Gunner A.	"B" Battery				Sept. 24.	do

PROVINCE OF QUEBEC.  
List of Officers, Non-Commissioned Officers and others, who obtained Certificates, &c.—Continued.

Rank and Name.	Corps.	Certificates.				Long or Short Course.
		1st Class.	2nd Class.	3rd Class.	4th Class.	
Vaughan, Lieutenant F. S.	Montreal Brigade of Garrison Artillery.	1878.	1878.	1878.	1878.	Short.
Wood, Bombardier John	Richmond Field Battery.		Oct. 23.			do
Young, Gunner Charles	Montreal Brigade of Garrison Artillery.					do
		<p style="text-align: center;">RECAPITULATION.</p> First Class Certificates, "Long Course" ..... 4 Second Class Certificates do ..... 0 First Class Certificates, "Short Course" ..... 8 Second Class Certificates do ..... 7 Third Class Certificates do ..... 2 Fourth Class Certificates do ..... 45 Total..... 66				

(B.)

ARTILLERY CERTIFICATES.

LIST of names of Officers, Non-Commissioned Officers and others of the Active Militia who have obtained Certificates from Inspectors of Artillery during the year 1878.

Name and Rank.	Certificates and dates.	
	First-Class	Second-Class
<i>Province of Quebec.</i>		
	1878.	1878.
Forbes, George, Captain, Montreal Brigade of Garrison Artillery.....		25th June.
McAllen, A. K. F., do do do .....		do
Rushton, A., 1st Lieutenant, do do .....		do
Turnbull, T. J., do do do .....		do

RECAPITULATION.

First-Class Certificates.....	0
Second-Class Certificates.....	4
Total.....	4

(C.)

ENGINEER CERTIFICATES.

LIST of names of Officers, Non-Commissioned Officers and others of the Active Militia who have obtained Certificates from Inspectors of Artillery during the year 1878.

Name and Rank.	Certificate and date.	
	First-Class	Second-Class
	1878.	1878.
Duffy, Ambrose, Lieutenant, No. 2 Company, Montreal Engineers .....		12th Nov.

RECAPITULATION.

First-Class Certificates.....	0
Second-Class Certificates.....	1
Total.....	1

APPENDIX No. 6.  
MILITARY SCHOOL CERTIFICATES.

PROVINCE OF NEW BRUNSWICK.

LIST of Officers and Non-Commissioned Officers in the Active Militia, and Candidates for Commissions therein, who have obtained Certificates at the School of Military Instruction at Fredericton during the Year 1877.

Rank and Name.	First Class Certificates and Dates.		Regimental Divisions.
	1878.	1878.	
Allen, Henry, 71st Battalion			
Atherton, Charles A., 71st Battalion	March 7	York.	
Barker, Wesley H. do	May 31	do	
Baxter, Robert do	do 31	do	
Bird, Samuel, Corporal do	do 31	do	
Bourne, Frank W., Sergeant, 67th Battalion	do 14	do	
Boyer, Gordon E., Captain do	March 19	Carleton.	
Brown, Gillmor, St. Stephen Infantry Company	do 19	do	
	do 19	Charlotte.	
Campbell, H. Montgomery, 8th Regiment Cavalry			
Carvell, Frank B., 67th Battalion	May 14	York.	
Colman, Timothy E., 71st Battalion	do 14	Carleton.	
Cooper, George	April 1	York.	
Currie, Willard A.	May 8	do	
	April 5	do	
Dayton, Milton, 71st Battalion			
De Forrest, Rodolph S., 67th Battalion	March 19	do	
Dunn, Ephraim L., 71st Battalion	May 14	do	
	March 26	do	
Estabrooks, Albion, 67th Battalion			
Kestey, William J., 71st Battalion	May 14	Carleton.	
Edgecombe, Headley V. do	April 16	York.	
	May 31	do	
Garrison, Augustus W. B. do			
Gonce, Beverly do	April 16	Sunbury.	
Graham, T. Alexander	do 30	York.	
Gregory, J. Fraser, 71st Battalion	March 19	St. John.	
Grieves, James A. do	April 24	York.	
	May 31	do	
Hanington, Clarence P.			
Hickson, John W., 8th Regiment Cavalry	April 1	Westmoreland.	
Horncastle, John M., 71st Battalion	do 1	Kings.	
	do 5	York.	
Jack, William B.			
Jaffrey, William, 71st Battalion	March 28	do	
Johnson, John V. do	do 28	do	
	May 31	do	
Kilburn, John H., 67th Battalion			
	March 28	Carleton.	
Mackay, James W., 71st Battalion			
Miller, William E. do	May 14	York.	
Mitchell, John G. do	March 1	do	
Mott, Harry do	do 7	Sunbury	
Mott, George F. do	do 1	York.	
	April 5	do	
McAlpine, J. Burpee do			
McCready, Jas. Wm. do	Feb. 21	do	
McKean, John P. do	March 28	Queens,	
	do 26	do	

PROVINCE OF NEW BRUNSWICK.  
LIST of Candidates for Commissions, &c.—Concluded.

Name and Rank.	First Class Certificates and Dates.		Second Class Certificates and Dates.		Regimental Divisions.
	1878.	1878.	1878.	1878.	
McKnight, Alexander, 73rd Battalion			April 24	Northumberland	
McKnight, William, Sergeant, 73rd Battalion			do 24	do	
McLaren, Murray			April 1	2nd St. John.	
McLaughlin, Alexander, 71st Battalion			March 1	York.	
McLeod, William D			do 28	Kent.	
McLeod, Finimore, M			April 1	Kings.	
Nevers, John Foy, 67th Battalion			March 19	Carleton.	
O'Brien, John C., Sergeant, 71st Battalion			Feb. 21	York.	
Orr, Charles S. do			April 16	do	
Parker, William S. do			May 8	do	
Perks, George S. do			March 19	do	
Peterson, John R., 67th Battalion			May 14	Carleton.	
Pickard, Moses, 71st Battalion			April 30	York.	
Price, Horatio, N., 67th Battalion			May 14	Carleton.	
Raymond, Edwin D., 67th Battalion			March 1	do	
Richards, J. Frederick, 71st Battalion			Feb. 21	York.	
Risteen, Frederick J. do			April 30	do	
Russell, Horace, Edwin do			May 14	do	
Saunders, Samuel E. do			April 16	do	
Shaw, Claron H., Sergeant, 67th Battalion			March 19	Carleton.	
Shaw, Bedford do			April 30	do	
Shives, Kilgour, 2nd Lieut., 62nd Battalion			March 7	St. John.	
Staples, Jonathan, 71st Battalion			do 1	York.	
Tweeddale, Allen do			May 14	do	
Tweedie, LeBerte			do 31	Westmoreland.	
Ward, John T., 71st Battalion			do 14	York.	
White, William do			April 30	do	
Winslow, J. Norman			March 28	Carleton.	
Yerxa, George B., 71st Battalion			April 5	York.	

RECAPITULATION.

First Class Certificates	0
Second Class Certificates	68
Total	68

## PROVINCE OF NOVA SCOTIA.

LIST of Officers and Non-Commissioned Officers in the Active Militia, and Candidates for Commissions therein, who have obtained Certificates at the School of Military Instruction at Halifax during the Year 1878.

Name and Rank.	First Class Certificates and Dates.	Second Class Certificates and Dates.	Regimental Divisions.
	1878.	1878.	
Allen, Alfred C., 66th Battalion.....	April 11.....		Halifax City.
Bartaux, Guilford R., Sergeant, 72nd Battalion.....	do 3.....		Annapolis.
Borden, Robert L., 63rd Battalion.....	do 3.....		Halifax City.
Brenner, W. F. Des Barres, 66th Battalion.....	do 17.....		do
Brown, W. N., Gunner, Halifax Field Battery.....	May 3.....		do
Caldwell, John W., Gunner, Halifax Field Battery.....	April 17.....		do
Crossley, Jas. Skene Saxon, 5th Battalion.....	do 11.....		Montreal City.
Curren, George N., 66th Battalion.....	May 3.....		Halifax City.
Delany, James, 66th Battalion.....	April 3.....		do
Dempsey, John, do.....	do 3.....		do
Dodwell, Lawrence E., 63rd Battalion.....	do 17.....		do
Forbes, E. P., Corporal, 66th Battalion.....	May 3.....		Halifax County.
Frith, R. T., Gunner, 1st Halifax Brigade Garrison Artillery.....	do 3.....		Halifax City.
Gillis, D. McK., Victoria Provisional Battalion.....	April 22.....		Inverness.
Goold, Arthur J., 66th Battalion.....	do 11.....		Halifax City.
Holloway, J. C., Halifax Field Battery.....	May 3.....		do
Kennedy, W. T., 78th Battalion.....	do 3.....		Pictou County.
Langille, G. W., 66th Battalion.....	April 3.....		Halifax City.
Larkin, John Y., 63rd Battalion.....	do 22.....		do
Major, W. A., 66th Battalion.....	do 22.....		do
Meagher, John, 63rd Battalion.....	do 3.....		do
Meynell, W. F., do.....	do 17.....		do
Mitch, Edwin W., 66th Battalion.....	May 3.....		do
McKie, Crawford J., 63rd Battalion.....	do 3.....		do
McPherson, A. E., 66th Battalion.....	April 17.....		do
Reynolds, C. R., 1st Halifax Brigade Garrison Artillery.....	do 11.....		do
Reynolds, Henry, 63rd Battalion.....	May 3.....		do
Ritchie, David G., 72nd Battalion.....	April 3.....		Annapolis Co.
Ross, Peter H., 66th Battalion.....	May 3.....		Halifax City.
Salter, B. W., jun., 66th Battalion.....	April 3.....		do
Scott, Hamilton P., 63rd Battalion.....	May 3.....		do
Scott, J. C., 63rd Battalion.....	do 3.....		do
Sirecom, S. J. R., 2nd Lieutenant, 2nd Halifax Brigade Garrison Artillery.....	April 11.....		do
Sterns, J. W. D., 66th Battalion.....	May 3.....		do

## PROVINCE OF NOVA SCOTIA.

LIST of Candidates for Commissions, &c.—Concluded.

Name and Rank.	First Class Certificate and Date.	Second Class Certificate and Date.	Regimental Divisions.
	1878.	1878.	
Thomson, G. W., 63rd Battalion.....	.....	April 11.....	Halifax City.
Thorburn, D., 66th Battalion.....	.....	May 3.....	do
Townsend, William, 63rd Battalion.....	.....	April 11.....	do
Van Rbyn, W. D. H., 1st Halifax Brigade Garrison Artillery.....	.....	May 3.....	do
Ward, Harry W., 63rd Battalion.....	.....	April 11.....	do
Wilson, John, Corporal, 66th Battalion.....	.....	do 22.....	do

## RECAPITULATION.

First Class Certificates.....	0
Second do.....	40
Total.....	40

## APPENDIX No. 7.

## CERTIFICATES OF BOARDS OF EXAMINERS.

LIST of Officers of the Active Militia, and of Candidates for Commissions who have obtained Certificates from Boards of Examiners therein, during the Year 1878.

Name and Rank.	First Class Certificates and date.	Second Class Certificates and date.
<i>Province of Ontario.</i>		
	1878.	1878.
Ballachey, John, Captain, 38th Battalion.....	12th Feb.	
Beattie, Joseph Hall, Lieutenant, 27th Battalion.....		27th May.
Bennett, Charles S., Sergeant, 2nd Battalion.....		5th Nov.
Biggar, William Hodgins, Ensign, 2nd Battalion.....		12th Feb.
Brunton, Thomas, Sergeant, 7th Battalion.....		27th May.
Carlisle, George C., Captain, 19th Battalion.....	12th Feb.	
Carroll, Robert, Lieutenant, 27th Battalion.....		27th May.
Clarke, Robert, Lieutenant, 28th Battalion.....		5th Sept.
Close, Alexander James Burrows, 1st Lieutenant, 2nd Battalion.....	5th Nov.	12th Feb.
Cook, James Bell, Ensign, 7th Battalion.....		27th May.
Cooper, William M., 2nd Lieutenant, 10th Battalion.....		5th Nov.
Crockett, John Robertson, Sergeant, 13th Battalion.....	5th Nov.	12th Feb.
Davidson, Charles Henry, Lieutenant, 34th Battalion.....		12th Feb.
Davies, John Try, Captain 3rd Battalion.....	4th Nov.	
Day, William Henry, Ensign, 19th Battalion.....		do
Foster, James Reid, Captain, 2nd Battalion.....	12th Feb.	
Furnival, George Maurice, 2nd Lieutenant, 10th Battalion.....		5th Nov.
Hamilton, R. B., Captain, 2nd Battalion.....	12th Feb.	
Hodgins, William Egerton, 1st Lieutenant, 2nd Battalion.....	5th Nov.	
Jennings, Bernard, 2nd Lieutenant, 2nd Battalion.....		5th Nov.
Johnson, Archibald, Lieutenant, 30th Battalion.....		5th Sept.
Kertland, Monserratte McLean, 2nd Lieutenant, 2nd Battalion.....		5th Nov.
Kesterman, Henry E., Ensign, 2nd Battalion.....		12th Feb.
Laing, George Edgar, Ensign, 7th Battalion.....		27th May.
Manley, Frederick Fitzpayne, Color-Sergeant, 2nd Battalion.....		12th Feb.
Milloy, Archibald, Lieutenant, 30th Battalion.....		5th Sept.
Moores, Charles James, Lieutenant, 19th Battalion.....		12th Feb.
Morton, Herbert M., 2nd Lieutenant, 38th Battalion.....		5th Nov.
Mutrie, John, Ensign, 30th Battalion.....		27th May.
McKeand, Moorhouse, Corporal, 13th Battalion.....		12th Feb.
McMicking, George A., Sergeant-Major, 44th Battalion.....		do
Nash, Edward A., Captain, 2nd Battalion.....	12th Feb.	
Newton, John, Corporal, 20th Battalion.....		12th Feb.
Ponton, Edward George, 2nd Lieutenant, 2nd Battalion.....		5th Nov.
Procter, William, Ensign, 33rd Battalion.....		27th May.

## LIST of Candidates for Commissions, &amp;c.—Continued.

Name and Rank.	First Class Certificate and date.	Second Class Certificate and date.
<i>Province of Ontario—Concluded.</i>		
	1878.	1878.
Railton, George W., Sergeant, 33rd Battalion.....		27th May.
Reid, Charles, Ensign, 10th Battalion.....		12th Feb.
Shanly, James Moore, Sergeant, 2nd Battalion.....		12th Feb.
Strange, Frederick W., Captain, 2nd Battalion.....		do
Stuart, John J., Ensign, 13th Battalion.....	12th Feb.	
Thairs, George, Sergeant, 19th Battalion.....		12th Feb.
Thompson, John T., Captain, 10th Battalion.....	12th Feb.	
Van Norman, George Robinson, jun., Lieutenant, 38th Battalion ..		12th Feb.
Wayling, James, Captain, 12th Battalion.....	5th Nov.	
Wilkes, A. J., Captain, 38th Battalion.....	12th Feb.	
Wilkes, Walter Alexander, 2nd Lieutenant, 38th Battalion.....		5th Nov.
<i>Province of Quebec.</i>		
Bédard, Pierre Joseph.....		15th May.
Colleret, Etienne Damase, Lieutenant, 65th Battalion.....		do
Du Plessis, Wolfred, Ensign, 65th Battalion.....		do
Esdale, Robert M., Ensign, 5th Battalion.....		1st June.
Gray, John, Ensign, 6th Battalion.....		do
Hamilton, Robert Craigie, Ensign, 5th Battalion.....		do
Handyside, Clarence A., Ensign, 3rd Battalion.....		do
Hood, Peter, 2nd Lieutenant, 6th Battalion.....		4th Nov.
Howe, Henry S. A., Ensign, 3rd Battalion.....		1st June.
Hutchins, Joseph R., Lieutenant, 1st Battalion.....	4th Nov.	
Lyman, Henry H., Ensign, 5th Battalion.....		1st June.
Nelson, Frederick E., 2nd Lieutenant, 6th Battalion.....		4th Nov.
Pratt, Louis Etienne Napoleon.....		15th May.
Rouillard, Charles Callixte.....		do
Terroux, Tancrede, Ensign, 65th Battalion.....		do
Torrance, Charles E., Captain, 3rd Battalion.....	1st June.	
Watson, William Wallace, Lieutenant, 1st Battalion.....		1st June.
Wilgress, Henry Trollope, Ensign, 1st Battalion.....		do

## RECAPITULATION.

First Class Certificates.....	15
Second Class Certificates.....	51
Total.....	66







APPENDIX

QUALIFICATIONS OF THE COMBATANT

[The following Return shows the numbers of Combatant Officers borne on the strength of each rank of those holding 1st and 2nd Class Certificates of qualification, and of those having only **NOTE**—Commissions are only issued to Officers who hold Certificates of qualification. Officers Militia Act came into force, and now belonging to Corps of the Active Militia, are shown as qualified in the case of Field Officers and Adjutants, and 2nd Class in that of Company Officers—there being no 2. Until the General Order of 18th April, 1878, the provisions of General Order of 10th May, 1872, Military School Certificates sufficing to qualify.]

MILITARY DIS

OFFICERS.	Number borne.			Qualified Without Certificate.			Number borne.			Qualified Without Certificate.			Number borne.			Qualified Without Certificate.			Number borne.			Qualified Without Certificate.		
	1st Class.	2nd Class.	Without Certificate.	1st Class.	2nd Class.	Without Certificate.	1st Class.	2nd Class.	Without Certificate.	1st Class.	2nd Class.	Without Certificate.	1st Class.	2nd Class.	Without Certificate.	1st Class.	2nd Class.	Without Certificate.	1st Class.	2nd Class.	Without Certificate.			
	1st Regiment Cavalry. (London.)			London Field Battery.			Wellington Field Battery. (Guelph.)			Ontario Field Battery. (Guelph.)			Goderich Garrison Battery.											
	4 Troops.																							
Lieutenant Colonel	1	1																						
Major	1	1																						
Adjutant	1	1																						
Captain	4	3	1	1	1		1	1		1	1		1	1		1	1		1	1		1	1	
Lieutenant	3	2	1	2	2		1	1		1	1		1	1		1	1		1	1		1	1	
2nd Lieutenant	3		3	1		1	1		1	1		1	1		1	1		1	1		1	1		1
<b>Total</b>	<b>13</b>	<b>8</b>	<b>1</b>	<b>4</b>	<b>4</b>	<b>3</b>	<b>1</b>	<b>3</b>	<b>2</b>	<b>1</b>	<b>3</b>	<b>1</b>	<b>3</b>	<b>3</b>	<b>1</b>	<b>3</b>	<b>3</b>	<b>1</b>	<b>3</b>	<b>3</b>	<b>1</b>	<b>3</b>	<b>3</b>	<b>2</b>
	26th Battalion. (London.)			27th Battalion. (Sarnia.)			28th Battalion. (Stratford.)			29th Battalion. (Berlin.)			30th Battalion. (Guelph.)											
	8 Companies.			6 Companies.			6 Companies.			6 Companies.			10 Companies.											
Lieutenant Colonel	1	1		1	1		1	1		1	1		1	1										
Major	2	2		1	1		2	2		2	2		2	2										
Adjutant	1	1					1	1																
Captain	7	2	4	1	6		4	2	6	1	5		5			3	2	10	1	7	2			
Lieutenant	7		2	5	5		3	2	5	1	4	6	6	9		3	6							
2nd Lieutenant	5		5	5	1	1	3	2		2	2		2	5		1	4							
<b>Total</b>	<b>23</b>	<b>6</b>	<b>6</b>	<b>11</b>	<b>18</b>	<b>3</b>	<b>8</b>	<b>7</b>	<b>17</b>	<b>5</b>	<b>6</b>	<b>6</b>	<b>16</b>	<b>3</b>	<b>3</b>	<b>10</b>	<b>27</b>	<b>4</b>	<b>11</b>	<b>12</b>	<b>12</b>	<b>4</b>	<b>11</b>	<b>12</b>

No. 9.

OFFICERS OF THE ACTIVE MILITIA.

Corps of the Active Militia of the Dominion, on the 26th day of December, 1878, with the number in "Provisional" or "Acting" appointments. holding Commissions in the Provincial Militia of the Maritime Provinces at the time the Dominion Militia Act came into force, and now belonging to Corps of the Active Militia, are shown as qualified in the case of Field Officers and Adjutants, and 2nd Class in that of Company Officers—there being no 2. Until the General Order of 18th April, 1878, the provisions of General Order of 10th May, 1872, Military School Certificates sufficing to qualify.]

TRICT No. 1.

OFFICERS.	Number borne.			Qualified Without Certificate.			Number borne.			Qualified Without Certificate.			Number borne.			Qualified Without Certificate.			Number borne.			Qualified Without Certificate.		
	1st Class.	2nd Class.	Without Certificate.	1st Class.	2nd Class.	Without Certificate.	1st Class.	2nd Class.	Without Certificate.	1st Class.	2nd Class.	Without Certificate.	1st Class.	2nd Class.	Without Certificate.	1st Class.	2nd Class.	Without Certificate.	1st Class.	2nd Class.	Without Certificate.			
	Sarnia Garrison Battery.			7th Battalion. (London.)			22nd Battalion. (Woodstock.)			24th Battalion. (Chatham.)			25th Battalion. (St. Thomas.)											
	7 Companies.			8 Companies.			6 Companies.			6 Companies.														
Lieutenant Colonel	1	1		1	1		1	1		1	1		1	1										
Major	2	2		2	2		2	2		1	1		1	1		1	1		1	1		1	1	
Adjutant	1	1		1	1		1	1		1	1		1	1		1	1		1	1		1	1	
Captain	1	1		7	2	5	8	3	5	5	2	3	6	2	4	6	2	4	4	2	4	4	2	4
Lieutenant	1		1	7		7	7	1	3	3	6	2	4	4	4	4	4	4	4	4	4	4	4	4
2nd Lieutenant	1		1	2		2	5		4	2	5		2	5		5		5	5		5	5		5
<b>Total</b>	<b>3</b>	<b>1</b>	<b>1</b>	<b>20</b>	<b>6</b>	<b>12</b>	<b>24</b>	<b>9</b>	<b>8</b>	<b>7</b>	<b>16</b>	<b>3</b>	<b>4</b>	<b>9</b>	<b>18</b>	<b>3</b>	<b>2</b>	<b>13</b>	<b>18</b>	<b>3</b>	<b>2</b>	<b>13</b>	<b>13</b>	<b>13</b>
	32nd Battalion. (Walkerton.)			33rd Battalion. (Goderich.)			Leamington Infantry Co.			Windsor Infantry Co.			Total.											
	8 Companies.			8 Companies.																				
Lieutenant Colonel	1	1		1	1														12	12				
Major	2	2		2	2														20	20				
Adjutant	1	1		1	1														9	9				
Captain	8	3	2	3	8	3	4	1	1	1	1	1	1	1	1	1	1	1	87	23	45	19	19	19
Lieutenant	8		4	4	7	1	5	1	1	1	1	1	1	1	1	1	1	1	82	7	32	43	43	43
2nd Lieutenant	5		3	2	7		4	3	1	1	1	1	1	1	1	1	1	1	54	2	9	43	43	43
<b>Total</b>	<b>25</b>	<b>7</b>	<b>9</b>	<b>9</b>	<b>26</b>	<b>8</b>	<b>13</b>	<b>5</b>	<b>3</b>	<b>1</b>	<b>2</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>2</b>	<b>1</b>	<b>1</b>	<b>264</b>	<b>73</b>	<b>86</b>	<b>105</b>	<b>105</b>	<b>105</b>

QUALIFICATIONS OF THE COMBATANT  
MILITARY DIS

OFFICERS.	Number borne.			Number borne.			Number borne.			Number borne.			Number borne.			Number borne.			Number borne.		
	Qualified		Without Certificate.	Qualified		Without Certificate.	Qualified		Without Certificate.	Qualified		Without Certificate.	Qualified		Without Certificate.	Qualified		Without Certificate.	Qualified		Without Certificate.
	1st Class.	2nd Class.		1st Class.	2nd Class.		1st Class.	2nd Class.		1st Class.	2nd Class.		1st Class.	2nd Class.		1st Class.	2nd Class.		1st Class.	2nd Class.	
	Gov. Generals Body Guard. (Toronto.)			2nd Regiment Cavalry. (Oak Ridges.) 7 Troops.			Hamilton Field Battery.			Welland Canal Field Battery.			Toronto Field Battery.			St. Catherines Garrison Battery.					
Lieut-Col.																					
Major	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Adjutant			1	1																	
Captain	2	2	7	4	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Lieut.	1	1	6	3	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
2nd Lieut.	1		1	6	2	4	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Total	5	4	12	11	3	7	3	1	2	3	1	2	3	1	2	2	1	1	1	1	1
	19th Battalion. (St. Catharines)			20th Battalion. (Milton.)			31st Battalion. (Owen Sound.)			34th Battalion. (Whitby.)			35th Battalion. (Barrie.)			36th Battalion. (Brampton.)					
	6 Companies.			7 Companies.			7 Companies.			7 Companies.			10 Companies.			8 Companies.					
Lieut-Col.	1		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Major	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Adjutant	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Captain	6	3	3	7	1	6	7	2	3	2	7	3	4	3	9	8	1	7	2	3	2
Lieut.	5		3	2	6	1	4	1	5	3	2	6	1	1	9	3	6	4	1	3	3
2nd Lieut.	6		6	3		3	6	1	1	4	2			2							2
Total	20	5	6	9	19	5	10	4	20	4	7	9	17	7	5	5	21	3	11	7	17

OFFICERS OF THE ACTIVE MILITIA—Continued.  
TRICT No. 2.

OFFICERS.	Number borne.			Number borne.			Number borne.			Number borne.			Number borne.			Number borne.			Number borne.			Number borne.		
	Qualified		Without Certificate.	Qualified		Without Certificate.	Qualified		Without Certificate.	Qualified		Without Certificate.	Qualified		Without Certificate.	Qualified		Without Certificate.	Qualified		Without Certificate.	Qualified		Without Certificate.
	1st Class.	2nd Class.		1st Class.	2nd Class.		1st Class.	2nd Class.		1st Class.	2nd Class.		1st Class.	2nd Class.		1st Class.	2nd Class.		1st Class.	2nd Class.		1st Class.	2nd Class.	
	Toronto Garrison Battery.			Collingwood Garrison Battery.			2nd Mil. Dis. Engineer Co. (Toronto.)			2nd Battalion. (Toronto.) 10 Companies			10th Battalion. (Toronto.) 10 Companies			12th Battalion. (Aurora.) 8 Companies.			13th Battalion. (Hamilton.) 6 Companies.					
Lieut-Col.																								
Major																								
Adjutant																								
Captain																								
Lieut.																								
2nd Lieut.																								
Total	1	1	3	1	2	4	2	2	27	9	13	5	27	7	13	7	23	5	11	7	18	8	6	
	37th Battalion. (York.)			38th Battalion. (Brantford.)			39th Battalion. (Simcoe.)			44th Battalion. (Clifton.)			77th Battalion. Dundas.)			Sault Ste. Marie Rifle Co.			TOTAL.					
	7 Companies.			6 Companies.			8 Companies.			8 Companies.			6 Companies.											
Lieut-Col.	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
Major	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
Adjutant	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
Captain	7	6	1	6	3	3	8	7	1	8	2	3	3	5	1	4	1	1	1	1	1	1	1	
Lieut.	5	2	3	6	4	2	8	3	5	5	1	4	5	3	2	1	1	1	1	1	1	1	1	
2nd Lieut.	1	1	5	1	4	1			1	4														
Total	16	2	9	5	19	5	8	6	21	3	10	8	20	5	4	11	15	4	7	4	3	1	1	

QUALIFICATIONS OF THE COMBATANT  
MILITARY DIS

OFFICERS.	Number borne.			Qualified			Number borne.			Qualified			Number borne.			Qualified		
	1st Class.	2nd Class.	Without Certificate.	1st Class.	2nd Class.	Without Certificate.	1st Class.	2nd Class.	Without Certificate.	1st Class.	2nd Class.	Without Certificate.	1st Class.	2nd Class.	Without Certificate.	1st Class.	2nd Class.	Without Certificate.
	3rd Provisional Regt. Cavalry. (Cobourg.)			4th Provisional Regt. Cavalry. (Kingston.)			Kingston Field Battery.			Durham Field Battery.			Cobourg Garrison Battery.					
	3 Troops.			4 Troops.														
Lieut.-Colonel.....	1	1	.....	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Major.....	1	1	.....	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Adjutant.....	3	2	1	4	3	1	1	.....	1	1	1	.....	.....	.....	.....	.....	.....	.....
Captain.....	2	1	.....	1	4	3	1	.....	1	2	1	.....	1	1	.....	1	1	.....
Lieutenant.....	2	.....	.....	2	3	1	2	.....	1	.....	.....	.....	1	1	.....	.....	.....	.....
2nd Lieutenant.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total.....	9	5	1	3	13	9	4	.....	3	1	1	1	4	2	.....	2	3	1
OFFICERS.	16th Battalion. (Picton.)			40th Battalion. (Cobourg.)			45th Battalion. (Bowmanville.)			46th Battalion. (Port Hope.)			47th Battalion. (Kingston.)					
	6 Companies.			9 Companies.			6 Companies.			6 Companies.			7 Companies.					
Lieut.-Colonel.....	1	1	.....	1	1	.....	1	1	.....	1	1	.....	1	1	.....	.....	.....	.....
Major.....	1	1	.....	2	2	.....	2	2	.....	1	1	.....	2	2	.....	.....	.....	.....
Adjutant.....	.....	.....	.....	1	1	.....	1	1	.....	1	1	.....	1	1	.....	.....	.....	.....
Captain.....	6	1	3	2	9	3	5	1	5	2	3	.....	6	3	3	7	3	4
Lieutenant.....	5	.....	.....	5	7	.....	7	.....	4	1	2	1	5	1	3	1	7	1
2nd Lieutenant.....	5	.....	.....	2	3	6	.....	1	5	2	.....	2	6	.....	4	2	2	1
Total.....	18	3	5	10	26	7	13	6	15	7	5	3	20	7	10	3	20	9

OFFICERS OF THE ACTIVE MILITIA.—Continued.  
TRICT No. 3.

Number borne.	Qualified		Without Certificate.	Number borne.	Qualified		Without Certificate.	Number borne.	Qualified		Without Certificate.	Number borne.	Qualified		Without Certificate.	Number borne.	Qualified		Without Certificate.
	1st Class.	2nd Class.			1st Class.	2nd Class.			1st Class.	2nd Class.			1st Class.	2nd Class.					
Napanee Garrison Battery.			Port Hope Garrison Battery.			Trenton Garrison Battery.			14th Battalion. (Kingston.)			15th Battalion. (Belleville.)							
6 Companies.			6 Companies.			6 Companies.			6 Companies.			6 Companies.							
.....	.....	.....	.....	.....	.....	.....	.....	.....	1	1	.....	.....	.....	.....	1	1	.....		
.....	.....	.....	.....	.....	.....	.....	.....	.....	2	2	.....	.....	.....	.....	2	2	.....		
.....	.....	.....	.....	.....	.....	.....	.....	.....	1	1	.....	.....	.....	.....	1	1	.....		
1	1	.....	.....	.....	.....	.....	.....	.....	7	2	4	1	4	.....	2	2	.....		
1	1	.....	.....	.....	.....	.....	.....	.....	5	1	1	3	6	.....	1	5	.....		
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....		
3	2	1	.....	2	1	.....	1	3	16	7	5	4	16	4	4	8	.....		
48th Battalion. (Napanee.)			49th Battalion. (Stirling.)			57th Battalion. (Peterborough.)			Total.										
6 Companies.			6 Companies.			6 Companies.			6 Companies.										
1	1	.....	.....	.....	.....	1	1	.....	10	10	.....	.....	.....	.....	.....	.....	.....		
2	2	.....	.....	.....	.....	2	2	.....	20	19	.....	.....	.....	.....	.....	.....	.....		
1	1	.....	.....	.....	.....	1	1	.....	11	11	.....	.....	.....	.....	.....	.....	.....		
6	3	3	.....	6	4	1	1	.....	75	29	37	9	68	14	27	25	.....		
4	1	1	2	5	1	3	1	7	66	14	27	25	43	3	16	24	.....		
3	.....	.....	.....	2	.....	2	.....	2	43	3	16	24	.....	.....	.....	.....	.....		
17	8	5	4	17	9	1	7	20	225	86	80	59	.....	.....	.....	.....	.....		

QUALIFICATIONS OF THE COMBATANT  
MILITARY DIS

OFFICERS.	Number borne.			Qualified.			Without Certificate.					
	1st Class.		2nd Class.	1st Class.		2nd Class.	1st Class.		2nd Class.			
	1st Class.	2nd Class.		1st Class.	2nd Class.		1st Class.	2nd Class.				
	Prescott Troop.			Princess Louise' Dragoon Guards. (Ottawa.)			Ottawa Field Battery.			Gananoque Field Battery.		
Lieutenant Colonel.....												
Major.....												
Adjutant.....												
Captain.....	1	1		1	1		1		1	1	1	
Lieutenant.....	1		1	1		1	2		2	2	2	
2nd Lieutenant.....	1		1				1		1	1		1
Total.....	3	1	2	2	1	1	4		4	4	3	1
	42nd Battalion. 7 Companies.			56th Battalion. 7 Companies.			59th Battalion. 7 Companies.			Metcalf Infantry Co.		
Lieutenant Colonel.....	1	1		1	1		1	1				
Major.....	2	2		2	2		2	2				
Adjutant.....	1	1		1	1		1	1				
Captain.....	7	2	5	7	4	1	7	1	3	3	1	1
Lieutenant.....	7	1	2	7		2	7		1	6	1	1
2nd Lieutenant.....	3		1	7			6		1	5	1	1
Total.....	21	7	8	25	8	3	14	24	5	5	14	3

OFFICERS OF THE ACTIVE MILITIA.—Continued.  
TRICOT No. 4.

OFFICERS.	Number borne.			Qualified.			Without Certificate.					
	1st Class.		2nd Class.	1st Class.		2nd Class.	1st Class.		2nd Class.			
	1st Class.	2nd Class.		1st Class.	2nd Class.		1st Class.	2nd Class.				
	Prescott Garrison Battery.			Governor-General's Foot Guards. (Ottawa.) 6 Companies.			18th Battalion. (Vankeek Hill) 6 Companies.			41st Battalion. (Brockville.) 5 Companies.		
				1	1		1	1		1	1	
				2	2		2	2		2	2	
				1	1		1	1		1	1	1
	1		1	6	1	5	6	1	5	5	2	3
	1		1	6	1	5	6		4	2	4	3
	1		1	4		1	2		2	5	1	4
	3		3	20	6	11	3	18	5	9	4	18
	Goulburn Infantry Co.			Vernon Infantry Co.			Total.					
								6	6			
								12	11		1	
								6	6			
	1		1	1			1	46	13	25	8	
	1		1	1	1		1	47	5	20	22	
				1			1	33	1	4	28	
	2		2	3	1		2	150	42	49	59	

QUALIFICATIONS OF THE COMBATANT  
MILITARY DIS

OFFICERS.	Number borne.			Qualified			Without Certificate.			Number borne.			Qualified			Without Certificate.			Number borne.			Qualified			Without Certificate.					
	1st Class.		2nd Class.	1st Class.		2nd Class.	1st Class.		2nd Class.	1st Class.		2nd Class.	1st Class.		2nd Class.	1st Class.		2nd Class.	1st Class.		2nd Class.	1st Class.		2nd Class.	1st Class.		2nd Class.			
	1st Class.	2nd Class.	Without Certificate.	1st Class.	2nd Class.	Without Certificate.	1st Class.	2nd Class.	Without Certificate.	1st Class.	2nd Class.	Without Certificate.	1st Class.	2nd Class.	Without Certificate.	1st Class.	2nd Class.	Without Certificate.	1st Class.	2nd Class.	Without Certificate.	1st Class.	2nd Class.	Without Certificate.	1st Class.	2nd Class.	Without Certificate.			
	5th Provisional Regt. Cavalry. (Cookshire.)			No. 1 Troop Montreal Cav'ry			St. Andrew's Troop.			Huntingdon Troop.			Missisquoi Troop.																	
	4 Troops.																													
Lieut. Colonel.	1	1																												
Major	1	1																												
Adjutant																														
Captain	3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1			
Lieutenant	2			2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1			
2nd Lieutenant.	4			4	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1			
Total	10	2	1	7	3	1	1	1	3	3		3	1	1	1	3		1	2											
	1st Montreal Co'y. Engineers.			2nd Montreal Co'y. Engineers.			1st Battalion. (Montreal.)			3rd Battalion. (Montreal.)			5th Battalion. (Montreal.)																	
	6 Companies.			6 Companies.			6 Companies.			6 Companies.			6 Companies.																	
Lieut. Colonel.							1	1		1	1		1	1		1	1		1	1		1	1		1	1				
Major							2	2		2	2		2	2		2	2		2	2		2	2		2	2				
Adjutant							1	1		1	1		1	1		1	1		1	1		1	1		1	1				
Captain				1	1		6	4	2	6	3	3	5	2	3	5	2	3	5	2	3	5	2	3	5	2	3			
Lieutenant	1			1	1		4	2	2	5		5	6		6		6		6		6		6		6		6			
2nd Lieutenant.	1	1		1	1		2		2	5		1	4		5		5		5		5		5		5		5			
Total	2	1		1	3	1	2	16	10	4	2	20	7	9	4	20	6	14												
	53rd Battalion. (Sherbrooke.)			54th Battalion. (Richmond.)			58th Battalion. (Cookshire.)			60th Battalion. (Clarenceville.)			79th Battalion. (Waterloo.)																	
	6 Companies.			6 Companies.			10 Companies.			6 Companies.			8 Companies.																	
Lieut. Colonel.	1	1		1	1		1		1	1		1	1		1	1		1	1		1	1		1	1		1			
Major	2	2		1	1		2	2		1	1		2	2		2	2		2	2		2	2		2	2				
Adjutant				1	1		1	1		1	1		1	1		1	1		1	1		1	1		1	1				
Captain	5	2	2	1	6	2	4	10	8	2	6	2	2	2	8	1	4	3	8	1	4	3	8	1	4	3	8			
Lieutenant	6		2	4	6	3	1	2	8	2	1	5	6	1	4	1	8		8		2	6		8		2	6			
2nd Lieutenant.	6		1	5	5	2	3	7		7		5	1	4		5		5		2	3		5		2	3				
Total	20	5	5	10	20	10	5	5	29	13	3	13	20	7	6	7	25	5	8	12										

OFFICERS OF THE ACTIVE MILITIA.—Continued.  
TRICT No. 5.

OFFICERS.	Number borne.			Qualified			Without Certificate.			Number borne.			Qualified			Without Certificate.			Number borne.			Qualified			Without Certificate.					
	1st Class.		2nd Class.	1st Class.		2nd Class.	1st Class.		2nd Class.	1st Class.		2nd Class.	1st Class.		2nd Class.	1st Class.		2nd Class.	1st Class.		2nd Class.	1st Class.		2nd Class.	1st Class.		2nd Class.			
	1st Class.	2nd Class.	Without Certificate.	1st Class.	2nd Class.	Without Certificate.	1st Class.	2nd Class.	Without Certificate.	1st Class.	2nd Class.	Without Certificate.	1st Class.	2nd Class.	Without Certificate.	1st Class.	2nd Class.	Without Certificate.	1st Class.	2nd Class.	Without Certificate.	1st Class.	2nd Class.	Without Certificate.	1st Class.	2nd Class.	Without Certificate.			
	Brome Troop.			Montreal Field Battery.			Shefford Field Battery.			Richmond Field Battery.			Montreal Brig'de Gar. Artillery.			St. John's Garrison Battery														
	4 Troops.			6 Batteries.																										
Lieut. Colonel.																														
Major																														
Adjutant																														
Captain	1	1		1	1		1	1		1	1		1	1		1	1		1	1		1	1		1	1				
Lieutenant	1			1	1		1	1		1	1		1	1		1	1		1	1		1	1		1	1				
2nd Lieutenant.	1			1	1		1	1		1	1		1	1		1	1		1	1		1	1		1	1				
Total	3			3	4		2	2		4	3		4	2		2	16	1	9	6	3	1		2						
	6th Battalion. (Montreal.)			11th Battalion. (St. Andrew's.)			21st Battalion. (St. John's)			50th Battalion. (Huntingdon.)			51st Battalion. (Hemmingford.)			52nd Battalion. (Knowlton.)														
	6 Companies.			8 Companies.			5 Companies.			8 Companies.			8 Companies.			6 Companies.														
Lieut. Colonel.	1	1		1	1		1	1		1	1		1	1		1	1		1	1		1	1		1	1				
Major	2	2		2	2		2	2		2	2		2	2		2	2		2	2		2	2		2	2				
Adjutant				1	1		1	1		1	1		1	1		1	1		1	1		1	1		1	1				
Captain	5	3	2	8	3	5	5	3	2	6	3	1	2	8	3	2	8	3	2	8	3	2	8	3	2	8	3			
Lieutenant	6		6	8	2	5	1	5		5		2	3	8		7	2	3	2	5		5		2	3		2			
2nd Lieutenant.	3		2	1	6		3	3		3		3	3	6		3	3		6		3	3		6		3	3			
Total	17	6	10	1	26	9	13	4	17	4	5	8	24	7	7	10	25	6	14	5	19	4	3	12						
	Eardley Infantry Co'y.			Wakefield Infantry Co'y.			Aylwin Infantry Co'y.			TOTAL.																				
	6 Companies.			6 Companies.			6 Companies.			6 Companies.																				
Lieut. Colonel.																														
Major																														
Adjutant																														
Captain				1	1		1	1		1	1		1	1		1	1		1	1		1	1		1	1				
Lieutenant				1	1		1	1		1	1		1	1		1	1		1	1		1	1		1	1				
2nd Lieutenant.				1	1		1	1		1	1		1	1		1	1		1	1		1	1		1	1				
Total	3	1	1	1	3	1	2	3		1	2		367	119	124	124														

\*Volunteer Board, 1st Class; no Artillery Certificate.

QUALIFICATIONS OF THE COMBATANT  
MILITARY DISTRICT

OFFICERS.	64th Battalion. (Beauharnois.)			65th Battalion. (Montreal.)			76th Battalion. (Ste. Martine.)			80th Battalion. (Gentilly.)			Joliette Provisional Battalion. (Joliette.)							
	6 Companies.			6 Companies.			6 Companies.			6 Companies.			5 Companies.							
	Number borne.	Qualified		Number borne.	Qualified		Number borne.	Qualified		Number borne.	Qualified		Number borne.	Qualified						
	1st Class.	2nd Class.	Without Certificate.	1st Class.	2nd Class.	Without Certificate.	1st Class.	2nd Class.	Without Certificate.	1st Class.	2nd Class.	Without Certificate.	1st Class.	2nd Class.	Without Certificate.					
Lieut. Colonel.	1	1		1	1		1	1		1	1		1	1						
Major.....	2	2		2	2		2	2		1	1		1	1						
Adjutant.....	1	1					1	1												
Captain.....	5	2	3	6	1	5	6	4	2	6	1	2	3		1					
Lieutenant.....	4		2	6	2	2	3		2	5	1	2	2	5						
2nd Lieutenant.	4		4	3		1	2	6		6	4		1	3	2					
Total.....	17	6	5	6	18	6	8	4	18	7	2	9	18	5	5	8	11	1	1	9

OFFICERS OF THE ACTIVE MILITIA.—Continued.  
DISTRICT No. 6.

OFFICERS.	Three Rivers Provisional Battalion. (Three Rivers.)			St. Hyacinthe Provisional Battalion. (St. Hyacinthe.)			St. Jean Baptiste Village Infantry Company.			St. Norbert Infantry Co.			Wotton Infantry Co.			Total.			
	5 Companies.			4 Companies.															
	Number borne.	Qualified		Number borne.	Qualified		Number borne.	Qualified		Number borne.	Qualified		Number borne.	Qualified		Number borne.	Qualified		
	1st Class.	2nd Class.	Without Certificate.	1st Class.	2nd Class.	Without Certificate.	1st Class.	2nd Class.	Without Certificate.	1st Class.	2nd Class.	Without Certificate.	1st Class.	2nd Class.	Without Certificate.	1st Class.	2nd Class.	Without Certificate.	
Lieut. Colonel.	1	1		1	1											4	4		
Major.....	1	1														10	10		
Adjutant.....																3	3		
Captain.....			3	2	4	1	3		1	3		1	1		1	38	9	21	8
Lieutenant.....			2	3	4		2	2	1		1	1		1	1	35	3	11	21
2nd Lieutenant.			3	4			4	1		1	1		1		1	28		2	26
Total.....	15	2	5	3	13	2	5	6	3	3	3		2	1	2	118	29	34	55

QUALIFICATIONS OF THE COMBATANT  
MILITARY DIS

OFFICERS.	Qualified			Without Certificate.			Qualified			Without Certificate.			Qualified			Without Certificate.			Qualified			Without Certificate.		
	1st Class.		2nd Class.	1st Class.		2nd Class.	1st Class.		2nd Class.	1st Class.		2nd Class.	1st Class.		2nd Class.	1st Class.		2nd Class.	1st Class.		2nd Class.	1st Class.		2nd Class.
	Number borne.	1st Class.	2nd Class.	Number borne.	1st Class.	2nd Class.	Number borne.	1st Class.	2nd Class.	Number borne.	1st Class.	2nd Class.	Number borne.	1st Class.	2nd Class.	Number borne.	1st Class.	2nd Class.	Number borne.	1st Class.	2nd Class.	Number borne.	1st Class.	2nd Class.
	Quebec Squadron.			Quebec Field Battery.			Gaspé Garrison Battery.			No. 1 Garrison Battery, Quebec.			No. 1 Garrison Battery, Lévis.											
	2 Troops.																							
Lieut. Colonel.....	1	1																						
Major.....	1	1																						
Adjutant.....	1	1																						
Captain.....	2	2		1	1		1	1		1	1		1	1		1	1		1	1		1	1	
Lieutenant.....	2	2		2	2		1	1		1	1		1	1		1	1		1	1		1	1	
2nd Lieutenant.....				1	1		1			1			1			1			1			1		
Total.....	6	4	2	4	4		3	1	1	1	1		3	1	1	1		2	1	1				
	61st Battalion. (Montmagny.)			70th Battalion. (Ste. Genevieve de Batiscan.)			81st Battalion. (Pointe aux Trembles.)			Dorchester Provisional Battalion.			Kamouraska Provisional Battalion.											
	5 Companies.			6 Companies.			6 Companies.			4 Companies.			4 Companies.											
Lieut. Colonel.....	1	1		1	1		1	1																
Major.....				2	2					1	1							1	1					
Adjutant.....	1	1		1	1		1	1										1	1					
Captain.....	5	1	3	6	6		6	2	4	4		2	2	4	2	2		4	2	2				
Lieutenant.....	4		1	3	6	1	5		5		4	1	4		3	1	4	1	2	1				
2nd Lieutenant.....	2			2	1		1	2		2		1					1							
Total.....	13	3	4	6	17	5	11	1	15	4	10	1	10	1	5	4	12	5	5	2				

OFFICERS OF THE ACTIVE MILITIA.—Continued.  
TRICT No. 7.

	Qualified			Without Certificate.			Qualified			Without Certificate.			Qualified			Without Certificate.			Qualified			Without Certificate.		
	1st Class.		2nd Class.	1st Class.		2nd Class.	1st Class.		2nd Class.	1st Class.		2nd Class.	1st Class.		2nd Class.	1st Class.		2nd Class.	1st Class.		2nd Class.	1st Class.		2nd Class.
	Number borne.	1st Class.	2nd Class.	Number borne.	1st Class.	2nd Class.	Number borne.	1st Class.	2nd Class.	Number borne.	1st Class.	2nd Class.	Number borne.	1st Class.	2nd Class.	Number borne.	1st Class.	2nd Class.	Number borne.	1st Class.	2nd Class.	Number borne.	1st Class.	2nd Class.
	8th Battalion. (Quebec.)			9th Battalion. (Quebec.)			17th Battalion. (Levis.)			23rd Battalion. (Ste. Marie.)			55th Battalion. (Inverness.)											
	6 Companies.			8 Companies.			8 Companies.			5 Companies.			6 Companies.											
1	1			1	1		1	1													1	1		
2	2			2	2		2	2				1	1								2	2		
1	1			1	1		1	1				1	1								1	1		
6	6			8	6	2	8	4	4		5	4	1								6	3	3	
5		4	1	7		2	6	2	3	1			4								5		4	1
4	1		3				4	1	3				1								1			1
19	11	4	4	19	10	4	22	11	10	1	12	5	7								16	7	7	2
	Co. of Quebec Provisional Battalion.			Rimouski Provisional Battalion.			Temisconata Provisional Battalion.			Charlevoix Provisional Battalion.			Total.											
	4 Companies.			4 Companies.			4 Companies.			4 Companies.														
																					7	7		
1	1			1	1		1	1				1									18	17		1
1	1			1	1		1	1													12	11		1
4	2	2		4		3	4	1	3		4	1	3								80	37	39	4
4	1	3		2		2	4		4		3		3								70	8	47	15
2		2		4		4	1		1		1	1									29	4	15	10
12	5	7		12	2	9	10	2	8		9	2	6	1	216	84	102	30						