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APPENDIX No. 4.

ANNUAL REPORT OF THE INSPECTOR OF ARTILLERY.

OTTAWA, December, 1887.

To the Adjutant-General of Militia,
Ottawa.

SIR,—I have the honor to report for the information of the Lieut.-General Commanding the Militia, that the following Artillery Corps performed their Annual Drill as under, during the past year, and were inspected by me, or by the Assistant Inspectors of Artillery, whose reports are herewith attached :—

FIELD BATTERIES.

Hamilton, Camp Niagara.—Inspected by Lieut.-Colonel Irwin.
Toronto do do do
Welland Canal do do do
1st Brigade, 2 Batteries do do do
Ottawa, Camp Ottawa do do
London do London do do
Newcastle do Newcastle do do
Sydney do Sydney do do
Kingston do Kingston do Lieut.-Colonel Cotton.
Gananoque do do do do
Durham do do do do
Winnipeg do Winnipeg do do
Quebec—Inspected by Major Short, Commanding "B" Battery, C.A.
Montreal do do do
Shefford do do do
Richmond do do do
Woodstock—Camp St. Andrew's.—Inspected by Lieut.-Colonel Maunsell.

GARRISON BATTERIES.

Prince Edward Island Brigade, 2 Batteries, Charlottetown, inspected by L.-Col. Irwin.
Halifax Brigade, 6 do Halifax do do
Yarmouth Battery, Yarmouth do do
New Brunswick Brigade, 5 do St. John do do
No. 1, Quebec—Quebec—Inspected by Major Short.
2 do do do do
3 do do do Lieut.-Colonel Montizambert.
2, Lévis—Lévis do do
1 do do do Major Short.
Digby, 1 Battery, Digby do District Staff.
Pictou, 1 do do
Souris, 1 do Camp Charlottetown—Inspected by District Staff.
Montague, 1 do do do do
Montreal Brigade, 6 Batteries, Montreal do do
Gaspé do 1 Battery, Gaspé do do

The above inspections, with the exception of those by District Staff, were conducted on the system of giving marks for each detail, according to a specified scale. This plan has been in operation for several years; its results have been extremely satisfactory, and a comparison of the credits obtained, as shown by the tabulated statement herewith, affords a convenient means of ascertaining the relative efficiency of each Corps.

I have also attached a summary of the results of the Annual Gun Practice, and have the honor to submit the following brief notes of the several inspections :—

Field Batteries at Niagara Camp.

This Camp was formed on the 14th June, under the Command of Lieut.-Col. Otter, Deputy Adjutant General, and in addition to the authorized detail of Cavalry and Infantry Battalions, comprised the Hamilton, Toronto and Welland Canal Field Batteries, and on the 17th June, was augmented by the arrival of the 1st Brigade Field Cavalry, two Batteries under the Command of Lieut.-Col Macdonald.

These five Field Batteries were placed under my immediate Command and formed two Brigade Divisions under the respective Command of Lieut.-Col. Gray, Toronto Field Battery, and Lieut.-Col. Macdonald, 1st Brigade.

The general results of this Artillery Camp were in every respect most satisfactory. The Batteries seemed to vie with each other in the efficient performance of their various drills and Camp duties, the discipline maintained was extremely good, and the union of so many Batteries enabled combined Brigade Drill to be carried out with manifest advantage.

The annual gun practice of these Batteries was carried out at Port Colborne during the Camp, each Battery detachment being 1¼ days absent from Camp for this purpose. The arrangements for gun practice were under the direction of Captain Drury, "A" Battery, assisted by Lieut. Irving, Toronto Garrison Battery, and Captain Donaldson, M.S., and were very satisfactorily carried out.

The Artillery Brigade joined the rest of the Force in Camp on two occasions, but for parade purposes only, on future occasions it is to be hoped that some combined operations on a more extended scale may be practised.

Captain Mead, Toronto Field Battery, performed the duties of Brigade Major during Camp with zeal and efficiency and to my entire satisfaction.

London Field Battery

Inspected at Brigade Camp, London, on the 22nd June. Lieut. Col. Peters in Command. His Battery although very creditably turned out and extremly well horsed, was scarcely up to its usual state of efficiency. This may possibly be accounted for by the fact of two days' instruction having been practically lost on account of the Jubilee celebrations at London.

The annual gun practice was carried out by a detachment of the Battery at Port Colborne during Camp.

Ottawa Field Battery

Inspected at Brigade Camp, Ottawa, on 29th June, Major Stewart in Command. This Battery had to encounter some disadvantages in the rocky and somewhat cramped site chosen for their Camp and in the extreme heat of the weather during most of their drill. They were as usual very efficient in the field and their good driving and drill ensured their becoming the winners, by a small fraction of time, of the Gzowski Cup for Field Battery competition.

This Battery sent a firing detachment for annual gun practice to Kingston, during Camp.

Sydney Field Battery

Inspected in Battery Camp at South Sydney, on 20th and 21st July, Major McLeod in Command.

This was the first occasion on which this Corps turned out for drill, and thanks to the instruction which they received from the Commanding Officer, Captain Crowe, and one or two Sergeants, all of whom had recently passed through a short course at the Royal School of Artillery, Quebec, the Battery showed a very creditable amount of efficiency.

If voluntary drills can be carried on during the year the Battery ought soon to become efficient, but from what I could learn during my short visit I fear a supply of suitable horses will be very difficult to obtain, and the almost impossibility of removing the Battery from Sydney to join any Brigade Camp, will always be a drawback to its usefulness.

The Battery is armed with the obsolete 9-pr. S. B. guns, which are very inaccurate even at ordinary rifle range, so that if the Corps is intended to be maintained in a serviceable condition its re-armament should be seriously considered.

Newcastle Field Battery

Inspected at Battery Camp, Newcastle, 29th August, Lt.-Colonel Call in command. This Battery was short of officers, one vacancy not being filled and Lieut. Fish being absent without leave, and there being a large number of recruits in the ranks, their general efficiency was not quite up to its usual standard.

Annual gun practice was satisfactorily carried out during my inspection. The gun drill and driving was very good, and the Battery only requires more careful preliminary instruction and an increased staff of qualified Officers and non-commissioned Officers, to become very efficient.

The arrangements for the care and safe custody of Battery equipment in a commodious building which has been rented at the sole expense of the Officer commanding, are very satisfactory.

Garrison Artillery.

Prince Edward Island Brigade.

I inspected No. 1 and 2 Batteries at Charlottetown on the 12th August, and found as usual both Batteries very well turned out and in a very efficient state. The Souris and Montague Batteries formed part of the Brigade Camp at Charlottetown and were inspected by the District Staff.

It is hoped that the issue to this Brigade of two 40-pounder B. L. guns before next year's drill, will enable the rural Batteries to obtain much needed instruction in artillery exercises.

Detachments were sent from three Batteries to the Garrison Artillery competition at Quebec.

Halifax Brigade

Inspected at Halifax on the 16th and 17th August, and superintended the Gun-practice of four of the Batteries at Point Pleasant. The remaining three Batteries sent detachments to the Quebec meeting.

There was a good attendance at the inspection parade, which also included the annual muster, and the general appearance of the Corps showed a decided improvement on that of the previous year. There was however a very poor attendance at gun drill, and much remains to be done to make this Brigade as thoroughly efficient as it should be. It is, however, confidently expected that recent changes in its organization and increased attention to voluntary drills on the part of both officers and men will have the desired effect.

Yarmouth Battery

Inspected at Yarmouth on 19th August, Lieut. Lewis in command during the absence in England of Capt. Jolly.

Battery very well turned out and very efficient.

A detachment was sent to join the Artillery competitions at Quebec from this Battery, and also from the Battery at Digby. The latter Battery did not drill until October and was inspected by Lt.-Colonel Worsley, Deputy Adjutant General.

New Brunswick Brigade.

Superintended Gun practice of two Batteries at Fort Dufferin on 22nd and 23rd August, and inspected the Brigade, 5 Batteries, on the former afternoon, when they were also mustered by the Deputy Adjutant General.

The general appearance and state of efficiency of this Corps is very satisfactory, and reflects great credit upon the interest and zeal shown by the Officers and non-commissioned Officers.

Three detachments were sent to the Quebec competitions from this Brigade.

Montreal Brigade.

Although this Corps, from want of sufficient accommodation to enable them to practise the necessary artillery exercises, were only inspected as Infantry by the District Staff, yet they were able to furnish a Detachment from each Battery to take part in the Garrison Artillery competitions at Quebec.

The knowledge of standing gun drill shown was, with few exceptions, very creditable, and the shifting ordnance detachment showed very careful training.

In some cases it was apparent that the Officers in charge did not pay sufficient attention to the instruction and control of their Detachments at gun practice.

GENERAL REMARKS.

Field Batteries.

I am very glad to be able to report in most favorable terms of the general efficiency of these Corps. So far, indeed, as regards the individual and comparative efficiency of the Batteries which have obtained the highest number of marks, in the accompanying Return, during the past five or six years, I consider that under the present system of annual drill and practice, they are as efficient as it is possible or reasonable to expect, and the fluctuations in their actual standing are mainly due to accidental causes, such as the absence of an Officer or the presence of a greater or less number of recruits.

The assembly this year of five Batteries at the Niagara Camp, and three and one-half Batteries at the Kingston Camp, under the immediate command of the Artillery Staff, was of undoubted benefit to all concerned, and it is to be hoped that a similar advantage may also be enjoyed next year by the Batteries in the Province of Quebec. To enable Batteries to obtain the greatest possible advantage from this system of combined instruction it is very necessary that much attention should be previously paid to theoretical instruction, and to standing gun drill, and as under the present system this can only be obtained by voluntary drills, a very great deal of credit is due to those Corps which have attained to such efficiency by this means.

The annual gun practice was carried out very satisfactorily, and the use of Major Scott's revolving sights was found to be very advantageous, and had the general effect of equalizing the scores made by individuals.

It has been recommended for more general adoption next year.

Garrison Batteries.

As a necessary consequence of the universal use of rifled ordnance, the efficiency and usefulness of corps which have only the opportunity of being instructed in the use of the obsolete smooth bore gun becomes more and more difficult to maintain.

It is not possible to send rifled ordnance with their costly equipment and ammunition to individual Batteries at isolated stations, and as one of the principal considerations which determine the advisability of maintaining such corps is the aid which they would bring to the reinforcement of defensible Forts or Redoubts and strategical points, it becomes evident that if the corps themselves can be organized and maintained in the immediate vicinity of such localities, they can be more easily trained and their services in time of need will necessarily be of much more value.

As previously pointed out in my Reports on this subject, the re-armament of our existing Fortifications, and the greater concentration of our Garrison Artillery at or near their immediate vicinity, are subjects of the greatest importance in a defensive point of view.

With reference to the organization of Garrison Artillery west of Kingston, it appears evident that this can most usefully be accomplished by the maintenance of a small Brigade of two or three Batteries at Toronto. These Batteries should be armed with guns of position such as the 40-pr. B.L. or the 20 pr. R.B.L. and would be sufficiently mobile to take their place in the defence of any previously selected position.

The existing Garrison Artillery Force in the Province of Quebec and the Maritime Provinces, has, with a few exceptions, made very satisfactory progress this year The opportunity of a partial meeting of representatives from different corps, which was afforded by the artillery competitions held at the Island of Orleans, Quebec, has been productive of such gratifying and satisfactory results that it is strongly recommended for annual recurrence. I append herewith a special report upon this competition.

REPORT ON THE GARRISON ARTILLERY MEETING FOR COMPETITIVE GUN PRACTICE AT THE ISLAND OF ORLEANS, QUEBEC.

The above meeting began on the 5th September, and was participated in by detachments of one Officer and seven Non-Commissioned Officers or Gunners from each of the following Corps:—

	Batteries.
Montreal Brigade	6
Halifax do	3
New Brunswick Brigade	3
Prince Edward Island Brigade	3
No. 2 Battery, Quebec	1
No. 1 do Lévis	1
No. 2 do do	1
Digby Battery	1
Yarmouth Battery	1
	20

Each of the above detachments fired from the 64 pr. M. L. R. and 40-pr. B. L. guns as follows, seven men each:—

Common shell, plugged	3
Shrapnel shell, time fuze	1
	4

Or a total of 28 rounds from each nature of gun.

One Officer with each detachment was allowed to fire 4 rounds of common shell, plugged, from the 40-pr. B. L. gun, and with the exception of five, they all availed themselves of the opportunity of actual competitive practice.

At the commencement of the practice, one 64-pr. and one 40-pr. were used, each firing at a separate target; that for the former being at about 1,700 yards range, for the latter about 1,500 yards. It was soon found, however, that owing to the great delay caused by the frequent replacement of the targets, the practice would be much retarded, another 64-pr. gun was consequently brought into action, and a 40-pr. procured from Montreal, and on the last three days of the week all four guns were kept continuously in action.

The firing commenced each morning at 8 a.m. and was continued without cessation until dark. The practice was concluded on Saturday.

Tents and blankets were provided on the Camp ground by the Store Department at Quebec, who also delivered all the ammunition required for the gun practice, all arrangements being most satisfactorily carried out. The targets and working party on the Range were provided by contract, and the necessary camp fatigues, distribution and preparation of ammunition, care of stores, &c., &c., by a working party from "B" Battery, Royal School of Artillery.

The duties of superintending the gun practice, and umpiring the various competitions were performed by the Inspector of Artillery, who also acted as Camp Commandant, Lieut. Col. Cotton, Asst. Inspector of Artillery, and Lieut. Col. Fairtlough, R.A. Capt. Peters, R.S.A., acted as Executive Officer and Camp Adjutant, and Major Crawford Lindsay, Quebec Field Battery, acted as Camp Quartermaster and had entire charge of the transport and commissariat arrangements. Capt. Farley and Capt. Fages, acted as Range officers during the entire meeting, and Capt. Donaldson, Militia Store Dept., performed the duties of Register Keeper and Paymaster. The duties of the Staff Officers were very satisfactorily performed, and to their energy and zeal must be attributed the entire success of the meeting.

The expenses of the meeting, including transport of detachments to and from Battery headquarters, camp allowance of 75 cts. per diem to each competitor, extra duty pay to local staff officers employed, and working pay to fatigue party, expenses consequent upon targets and range party, telephone, &c., &c., were all met by the Government grant of $2,000 in aid of these competitions, and out of this fund was also provided a liberal prize list both for aggregate and individual scores and for the shifting ordnance competition.

The general results of the meeting were extremely satisfactory. The scores made were generally very good and the interest and emulation incited by the wholesome competition between the representatives of corps so widely separated cannot fail to be of the greatest benefit to the Garrison Artillery of the Dominion.

It was noticed that in several cases individuals in the different detachments were insufficiently grounded in a knowledge of gun drill. At future competitions this will have to be made a reason for disqualification. On the other hand, it was remarked that the drill for the 40-pr. B. L. gun was very rapidly acquired by detachments previously unfamiliar with this gun.

I am very glad to be able to report that the conduct of the detachments was uniformly good, no irregularity of any description being noticed in camp.

If the difficulty arising from the expense of transport by the Intercolonial Railway can be overcome, it will be advisable in future to increase the strength of each detachment by one or two men, specially selected as cooks and for fatigue purposes, in order that the arrangements for messing and camping may be carried out as on service.

The shifting ordnance competitions were carried out very satisfactorily and in a very creditable manner. The Local Corps were conspicuous by their absence from this competition, which want of zeal is the more to be regretted, as the facilities for preliminary practice and instruction are more easily obtained at Quebec than elsewhere.

I have the honor to be, Sir,
Your obedient servant,

D. T. IRWIN, Lieut.-Colonel,
Inspector of Artillery.

INSPECTION REPORT—ASSISTANT INSPECTOR OF ARTILLERY FOR QUEBEC.

CITADEL, QUEBEC, 16th November, 1887.

SIR,—I have the honor to submit herewith my report, with tabulated efficiency returns, upon the two Garrison Batteries, inspected by me this year, for the year 1886.

Owing to illnese I was unable to inspect any other Batteries. This duty was performed by Major Short, Commanding "B" Battery, whose report is enclosed herewith.

QUEBEC GARRISON ARTILLERY.

No. 3 Battery.

Inspected at Drill Shed, Quebec, on the 19th March, Captain Morgan in command, Lieut. Morgan and Lieut. Panet, 37 non-commissioned Officers and men.

Salute and march past, very good; clothing, arms and accoutrements in good order and well turned out.

Four squads in standing gun drill.

Answers to questions indifferent.

LÉVIS GARRISON ARTILLERY.

No. 2 Battery.

Inspected at Lévis on 20th May, Captain Vien in command, Lieuts. Lemelin and Bourgest, 31 non-commissioned Officers and men.

Company drill fair; clothing in good order, but not well fitted; only two squads instructed in standing gun drill, and deficient in theoretical instruction; answers to questions indifferent.

I have the honor to be, Sir,

Your obedient servant,

C. E. MONTIZAMBERT, Lieut.-Colonel,
Assistant Inspector of Artillery.

The Inspector of Artillery.

REPORT OF MAJOR SHORT, COMMANDING "B" BATTERY, ACTING ASSISTANT INSPECTOR.

CITADEL, QUEBEC, 9th December, 1887.

SIR,—I have the honor to submit my report on the Field and Garrison Batteries of Artillery inspected by me during the year 1887.

The credits for general efficiency for each Battery herewith submitted.

Montreal Field Battery—Lt. Col. Stevenson Commanding.

I inspected this fine Battery on St. Helen's Island on the 28th of June and found it as usual in an excellent state of efficiency.

The horses, guns, harness, clothing and equipment in the most perfect order.

The Field Manœuvres, Marching past, Gun drill, answers to questions and Gzowski shift, excellent. In fact the whole turn out reflects the greatest credit on all concerned.

Gun practice was performed at Quebec.

Richmond Field Battery—Lt.-Col. Hon. H. Aylmer Commanding.

I inspected this Battery at Granby on the 29th June and was rather disappointed at their turn out, considering their excellent condition in 1885; allowance, however, must be made for their want of smartness on parade, as they had a long and tedious march from Richmond in very bad and rainy weather, the majority of the Battery being recruits. The Captain of this Battery, who did so well in 1885, appeared to have forgotten the most simple movements of Field Artillery.

Gun practice was performed at Granby.

Shefford Field Battery—Lt. Col. Amyrauld Commanding.

Inspected on the 1st July; their turn out was very fair, considering the state of the weather during camp. Horses, Guns, Harness, Clothing, &c., fair; Field Manœuvres and gun drill excellent.

Gun practice was performed at Granby.

Quebec Field Battery—Major Lindsay Commanding.

Inspected at Point Lévis on the 15th July, 1887.

Too much praise cannot be given for the smartness with which this Battery always turns out. The guns, harness, clothing and equipment excellent. Major Lindsay has an able assistant in Capt. Garneau, a young officer who passed one of the best Short Course examinations in Field Artillery and who affords an example of discipline and efficiency to his N. C. officers and men.

Gun practice performed at Isle of Orleans, 27th July, 1887.

Garrison Artillery.

I inspected Nos. 1 and 2 Batteries, Quebec Garrison Artillery, in the Drill Shed in August and found them as usual very smart and well turned out.

The Gun drill, Company drill and marching past of these two Batteries was most creditable, especially No. 1 Battery; but they are very deficient in proper accoutrements, having to borrow from one another to turn out for inspection.

Nos. 1 and 2 Batteries, Lévis Garrison Artillery.

I inspected these Batteries at Point Lévis and found them also in a very creditable condition. These Batteries are very deficient in accoutrements and borrow from one another when they turn out for inspection.

Gun drill, Company drill, marching past and answers to questions by No. 1 Battery very good.

I have the honor to be, Sir,

Your obedient servant,

C. J. SHORT, Major,
Commanding "B" Battery, R. C. A.

To the Assistant Inspector of Artillery.

REPORT OF THE ASSISTANT INSPECTOR OF ARTILLERY FOR ONTARIO.

KINGSTON, 1st December, 1887.

SIR —I have the honor to submit herewith my report on the Batteries inspected by me during the year 1887.

The efficiency marks of each Battery, compiled in tabulated form, have already been forwarded to you, as have also the scores made at gun practice.

The general efficiency remains about the same, and the number of recruits still large.

The Kingston, Durham and Gananoque Field Batteries, with detachment of "A" Battery, composed Artillery Brigade in Camp here in June, 1887. All worked hard and cheerfully. These Batteries carried on their gun practice at Kingston and were joined for this purpose by two gun detachments of the Ottawa Field Battery.

The Scott sight was used throughout the practice, but having only one it had to be changed from gun to gun, entailing a certain loss of time.

KINGSTON FIELD BATTERY.

Major Drennan commanding.
Inspected by me in Brigade Camp at Kingston.
Efficient and very well turned out.
Marked improvement on recent years.

GANANOQUE FIELD BATTERY.

Lt.-Col. Mackenzie commanding.
Inspected by me in Brigade Camp.
Efficient and smart.
Gun Carriages require painting.

DURHAM FIELD BATTERY.

Major McLean commanding.
Inspected by me in Brigade Camp.
Efficient and in good order.

This Battery was unfortunate enough to lose a horse by accident during the Camp.

They made excellent time in the competition for Gzowski Cup, and lost only by the fraction of a second.

WINNIPEG FIELD BATTERY.

Major Coutlée commanding.
Inspected by me at Winnipeg on the 20th and 22nd July.

Not very efficient. It would seem that sufficient advantage had not been taken of the opportunities afforded, otherwise the result must have been different

The knowledge of duties and stores among the Non-Commissioned Officers was very poor.

Practice was carried out at Little Stoney Mountain with fair result.

Since the inspection one Officer has obtained Special Course Certificate, and another is about to join for Short Course.

GENERAL REMARKS.

In all Batteries the majority of Non-Commissioned Officers were not sufficiently well acquainted with a knowledge of their duties, and the use and application of stores.

Excepting in City Corps, this is of course attributable to the difficulty of men, whose residences are far apart, assembling for voluntary drills, and to the large number of recruits.

The ground on which the Artillery was encamped, at Kingston, was very unsuitable, extremely muddy and wet during rain, and very dusty in dry weather. The consequence was an immense amount of otherwise unnecessary cleaning.

I desire to strongly recommend that before starting to Camp another year, all Field Batteries be issued with good strong picketing posts, and heel ropes and pegs. The accident to a horse in the Durham Field Battery lines, originated from want of proper picketing arrangements.

Major Drennan, Kingston Field Battery, brought his forge waggon to Camp, and the shoeing smith of "A" Battery was able to attend to minor repairs and shoeing in an emergency.

The Paysheets, as supplied for Annual Drill, are not suitable for Field Batteries. Special forms would be desirable.

I desire to again urge the yearly inspection, at Battery Headquarters, of the guns, carriages and equipment, harness and reserve ammunition.

The fuzes and tubes used during practice were all good. The 15 second fuze is recommended for next year's practice.

Suits of canvas working clothes should be issued to Field Batteries, particularly so to the Drivers, otherwise it is impossible for them to be neat and maintain the regimental clothing for the period it is expected to last.

I have the honor to be, Sir,

Your obedient servant,

W. H. COTTON, Lieut.-Colonel,
Assistant Inspector of Artillery.

INSPECTION REPORT OF PICTOU GARRISON BATTERY.

MILITIA BRIGADE OFFICE,
HALIFAX, N.S., 12th December, 1887.

SIR,—In compliance with your order, I inspected the Pictou Battery on the 6th inst. No gun drill had been performed, nor had the written questions forwarded by the Inspector of Artillery been prepared. The time for drill had been devoted to Part 2, F. E. Company drill, which was fair, considering the absence of preliminary squad and arms drill by numbers.

The best thing that can be said for this inspection is that the turn out was excellent, the *personnel* of the Battery being exceptionally good; the clothing, though old, very clean and well fitted; belts, slings and accoutrements scrupulously clean and bright; every man having every article of equipment issued to him complete, and helmets of their own besides.

Annexed is parade state, showing 16 rank and file present in excess of the number authorized to drill for pay, this inclucing a very good band of 13 performers.

I have the honor to be, Sir,

Your obedient servant,

J. R. MACSHANE, Lieut.-Colonel,
Brigade Major.

To the Deputy Adjutant General of Militia,
Commanding Military District No. 9,
Halifax, N.S.

CREDITS AWARDED EACH BATTERY FOR GENERAL EFFICIENCY.

FIELD BATTERIES.

Name of Battery.	Officer Commanding Battery.	Inspecting Officer.	Clothing and Accoutrements.	Gun Carriages and Equipment.	Horses.	Harness and Harnessing.	Marching past.	Standing Gun Drill; Position and General Duties.	Answers to Questions. Officers.	Answers to Questions. N.-C. Officers.	Field Manœuvres.	Sword Drill by Mounted Officers and N.-C. Officers.	Discipline, including Camping Details.	One-fifth Total Score at Competitive Practice.	Total.
		Full Credits.....	12	16	12	16	15	28	40	64	16	8	12		
Hamilton	Major Van Wagner	Lt.-Col. Irwin	12	15	10	14	14	26	37	60	15	8	12	88·4	311·4
Welland Canal	Major King	do	10	15	8	11	13	24	26	44	11	3	10	91·8	266·8
Toronto	Lt.-Col. Gray	do	12	14	9	12	12	26	35	30	10	7	7	73·4	247·4
London	Lt.-Col. Peters	do	10	15	12	11	10	18	28	29	13	5	10	90	251
1st Brigade.. No. 1.	Major Nicoll	do	10	13	9	13	14	25	28	32	13	7	12	91·6	267·6
1st Brigade.. No. 2.	Major Hood	do	11	15	10	15	15	26	24	43	13	8	12	88·6	280·6
Ottawa	Major Stewart	do	11	15	10	11	14	26	32	38	12	6	8	90·2	273·2
Sydney	Major McLeod	do	8	8	4	5	*	20	*	*	8	*	10	†	
Newcastle	Lt.-Col. Call	do	9	10	9	10	12	23	17	19	11	*	10	70	200
Durham	Major McLean	Lt.-Col. Cotton	6	9	11	14	14	14	24	45	9	3	10	95·8	254 8
Gananoque	Lt.-Col. McKenzie	do	9	8	8	14	14	18	28	13	12	3	10	60·4	197·4
Kingston	Major Drennan	do	11	12	7	15	15	15	22·5	17	9	5	10	81·2	219·7
Winnipeg	Major Coutlee	do	11	8	12	14	12	10	15	24	6	*	6	57·4	175·4
Montreal	Lt.-Col. Stevenson	Major Short	12	16	10	16	12	24	39	52	14	6	10	85	296
Richmond	Major Aylmer	do	6	10	6	8	11	16	31	26	10	*	7	46·6	177·6
Shefford	Lt.-Col Amyrauld	do	8	12	8	8	12	25	30	33	12	*	10	55·8	213·8
Quebec	Major Lindsay	do	11	16	8	14	14	26	37	58	15	6	10	89·4	304·4

* Unable to show proficiency in this subject. † Practised with S. B. guns; results cannot be compared.

D. T. IRWIN, Lt.-Col.,
Inspector of Artillery.

CREDITS AWARDED EACH BATTERY FOR GENERAL EFFICIENCY.

GARRISON ARTILLERY.

Batteries.	Officer Commanding the Battery.	Inspecting Officer.	Clothing and Accoutrements.	Manual and Firing Exercises.	Company Drill.	Gun Drill, each Detachment.	Discipline.	Answers to Questions. Officers.	Answers to Questions. N.-C. Officers.	Total.	Present at Inspection. Officers.	Present at Inspection. N.-C. Officers and Men.	Remarks.
		Full Credits.....	5	10	10	10	5	30	24	129			
Quebec G.A., No. 3.....	Capt. Morgan	Lt.-Col. Montizambert ...	4	9	7	29	5	18	14	86	3	37	For 1886.
Lévis G.A., No. 2.....	do Vien	do do ...	4	9	6	18	4	18	14	73	3	31	
do No. 2.	do do	Major Short	3½	7	7	28	4	18	15	82½	3	37	
do No. 1...	do Martineau ..	do	3½	8	7	32	4	22	21	96½	3	42	
Quebec G.A., No. 1.....	do Roy.....	do	4	8	8	32	4	*	*	56	3	39	
do No. 2.....	do Boulanger...	do	3½	7	8	32	4	24	29	107½	2	40	
P.E.I. Brigade. No. 1.	do Passmore ...	Lt.-Col. Irwin.....	3	7	8	35	5	7	19	84	2	36	
P.E.I. Brigade. " 2.	do Moore	do	4	8	7	38	5	23	42	127	3	36	
Halifax Brigade. No. 1.	do Curran.....	do	3	6	6	9	4	19	33	80	3	31	Lt.-Col. Mowbray in command.
Halifax Brigade. " 2.	do Garrison	do	3	6	*	8	4	18	23	62	2	22	
Halifax Brigade. " 3.	Major Purcell	do	3	7	*	8	4	17	26	65	2	22	
Halifax Brigade. " 4.	Capt. Story	do	3	5	*	7	3	*	7	25	1	21	
Halifax Brigade. " 5.	do Kane.....	do	3	7	6	7	4	10	26	63	2	32	
Halifax Brigade. " 6.	do Anderson ...	do	4	7	7	8	4	19	27	76	2	35	
Halifax Brigade. " 7.	do Boggs	do	4	7	7	15	4	18	26	81	2	35	
Yarmouth	Lieut. Lewis	do	5	7	8	30	5	7	38	100	1	34	
New Brunswick Brigade. No. 1.	Capt. Seely.....	do	5	8	6	25	5	26	26	101	3	30	Lt.-Col. Armstrong in command.
New Brunswick Brigade. " 2.	do Gordon	do	4	5	4	14	5	21	10	63	3	27	
New Brunswick Brigade. " 3.	do Crawford.....	do	5	8	6	15	4	25	26	89	3	24	
New Brunswick Brigade. " 4.	do Jones	do	5	9	9	36	5	9	41	114	1	42	
New Brunswick Brigade. " 5.	do Scammell....	do	4	6	3	15	4	13	27	72	2	36	

* Unable to show proficiency in this subject.

D. T. IRWIN, Lieut.-Col.,
Inspector of Artillery.

SUMMARY OF TARGET PRACTICE RETURNS.

Battery.	Preliminary Instructional.	Final Competitive	Total.	Remarks.
Royal Military College	236	146	382	Fired with 6-pr. B.L.G.
FIELD BATTERIES—9-PR. R. M. L. GUNS.				
Durham	291	188	479	
Welland Canal	311	148	459	
No. 1 Battery, 1st Brigade	278	180	458	
Ottawa	345	106	451	
London	286	164	450	
Quebec	257	190	447	
No. 2 Battery, 1st Brigade	305	138	443	16 competitors in preliminary, and 8 in the final practice; range about 1,700 yds.
Hamilton	295	147	442	
Montreal	260	165	425	
Kingston	288	118	406	
Toronto	242	125	367	
Newcastle	242	108	350	
Gananoque	194	108	302	
Winnipeg	174	113	287	
Shefford	186	93	279	
Richmond	136	97	233	
Woodstock	.....	.....	.....	
Sydney	.....	.....	.....	
GARRISON BATTERIES—64-PR. R. M. L. GUNS.				
No. 1 Battery, Halifax	66	34	100	8 competitors in the preliminary and 4 in the final practice; range about 1,800 yds.
" 2 do	84	62	146	
" 4 do	74	41	115	
" 7 do	35	63	98	
" 2 do New Brunswick Brigade	67	35	102	
" 5 do do	84	26	110	
BRITISH COLUMBIA BRIGADE—VICTORIA.				
No. 2 Battery	92	61	153	Fired under same system of marking as for 9-pr. R. M. L guns; range 1,350 yds.
" 3 do	132	78	210	
" 4 do	69	45	114	

SUMMARY OF TARGET PRACTICE RETURNS—*Concluded.*

ARTILLERY COMPETITION—ISLE OF ORLEANS, QUEBEC.

Battery.		64-pr.	40-pr.	Remarks.
Lévis	No. 1	149	110	
	" 2	75	93	
Quebec	" 2	117	91	
Montreal Brigade	" 1	94	89	
	" 2	124	137	
	" 3	115	108	
	" 4	66	108	
	" 5	163	153	Each detachment consisted of 7 N.-C. Officers or gunners who fired four rounds each from each nature of gun.
	" 6	73	130	
Prince Edward Island Brigade.	" 1	141	138	
	" 2	158	112	
	" 5	101	115	Range with 40-pr., 1,500 yds. do 64-pr., 1,700 do
New Brunswick Brigade	" 1	95	105	
	" 3	121	70	
	" 4	151	164	
Halifax Brigade	" 3	162	111	
	" 5	139	128	
	" 6	147	153	
Yarmouth		147	135	
Digby		126	136	

D. T. IRWIN, Lieut.-Colonel,
Inspector of Artillery.

APPENDIX No. 5.

REPORT OF THE INSPECTOR OF ENGINEERS.

KINGSTON, 25th November, 1887.

SIR,—I have the honor to submit the following report of my inspection of the Companies of Engineers during the present year :—

BRIGHTON ENGINEERS.

2. I reached St. Andrews, N.B., late on Saturday night, the 2nd July. The Company was present in the Brigade Camp at its full sanctioned strength, under the command of Lieut. Tompkins, Commanding Officer, Bt. Major Vince, having been appointed Instructor of Musketry Gentleman Cadet Barker, of the Royal Military College, performed the duties of 2nd Lieut.

3. The Company had completed its Musketry course before I arrived, making, I understand, the second best Company score in the Brigade. The first few days after my arrival were spent in steady work at both Engineer and Infantry drill, the former consisting chiefly of trestle bridging, use of brushwood, tool drill, &c. The Infantry drill included some portions of the attack formation. Alight trestle bridge for Infantry in single file was built during the Camp. It was 160 feet long and over a very rocky gap, from 15 to 18 feet deep. The roadway was of continuous hurdle work.

4. On the 7th July, the work for the Gzowski competition was done; it consisted in the construction of a defensible log house, capable of containing the whole of the Company and of the necessary Camp conveniences. The amount of work undertaken was, I think, rather too great for the time allowed, but all ranks worked with such a will that when "cease work" sounded, the task was to all intents and purposes finished. For this piece of work the Company was subsequently awarded the 1st prize, which it also gained last year. For details of the work see Appendix C.

5. On the following day the Infantry inspection took place; the turn out was very good, but the drill was not quite so satisfactory as last year and there was some confusion in performing the extended order movements; but from what was done on previous days, I have reason to believe that the Company can drill very much better than it did at the inspection. I have again this year to thank the Officer Commanding "A" Company, I.S.C., for kindly allowing his Band to play the march past for the Engineers at their inspection.

6. I am glad to be able to report this Company as being still in a very satisfactory condition. Considering their opportunities, all ranks deserve great credit for what they have done. Major Vince's place was well filled by Lieut. Tompkins, an officer who shows a special aptitude for superintending Engineer work.

CHARLOTTETOWN ENGINEERS.

7. The inspection of this Company was to have taken place on the 29th September, but owing to the wet weather; it had at the last moment to be put off till the next day. In consequence of this, the Company was unable to parade in quite its full strength.

8. The morning of the 30th was occupied with the Infantry inspection. The turn out was very smart and the drill was decidedly good. I was especially pleased with the progress made in the extended order movements, practised this year, I believe, for the first time.

9. In the afternoon the task for the Gzowski competition was done. Capt. Week's project included the erection of four huts of light poles, thatched with spruce boughs, the necessary Camp conveniences and a defensible breastwork guarding the approaches to the Camp. The Company worked exceeding well and a large amount of work was done for which the 2nd prize was afterwards awarded. For details see Appendix C.

10. I am glad to be able to report that the expectation I expressed last year of finding a marked improvement in this Company, has been fulfilled. It is now in a very satisfactory condition and should, I think, continue year by year to steadily improve.

Montreal Engineers.

11. In June last I had an opportunity of seeing this Company at drill in the Bonsecours Market, when the difficulty of attempting any Engineer drill, properly so called, in that building, was so evident that I suggested to Lt.-Col. Kennedy, amongst other things, the advisability of taking up signalling as one of the subjects of instruction. A little had been attempted in previous years, but no proficiency had been attained.

12. On the evening of Friday, 28th October, the signalling squad paraded in the Bonsecours Market for my inspection. I found that their instruction had been confined to signalling with flags from one end of the hall to the other, but both the sending and reading was so well done, that it was arranged to try some signalling on the following morning between parties stationed respectively on the tower of the City Hall and the mountain. Unfortunately, however, there was a thick fog in the morning and so the second party had to be stationed closer at hand, on the tower of the St. Denis Street Church. Several long messages were sent both ways in fair time and almost, I may say, without mistake. This was the more satisfactory as the day was most unfavorable and field glasses had to be used; moreover, it was the first attempt at signalling out of doors.

13. The Infantry Inspection took place on Saturday afternoon, 29th October, unfortunately at the last moment the weather became so bad that the drill had to be done under cover in the Bonsecours Market. The turn out of the Company was not as good as it should have been. Most of the men were very clean and smart, but the appearance of the Company was spoilt by a few who were neither. It is however only fair to remark here that Lt.-Colonel Kennedy informs me that the Company has not received its full issue of clothing, and that this to some extent may account for the dirty appearance of some of the uniforms, as in several cases very old ones had to be worn. The close order drill was satisfactory, but owing to the limited space there was no opportunity of judging fairly of the extended order movements.

14. After the Infantry inspection the Company was broken up into squads for Engineer drill; a barrel pier, a spar trestle and a gyn were lashed in good time and some tool drill was done.

15. This Company did not enter for the Gzowski competition.

16. I regret that I am unable to report this Company as yet in a satisfactory state, still I think there is decidedly more life in it than there was last year. The signalling squad has done good work and the infantry drill has improved. Although better equipped than the others this Company labors under many disadvantages. It is still short of its complement of officers, and still without proper facilities for Engineer work, although when the quarters in the new Drill Hall are taken possession of, its position in this latter respect will be enormously improved. Indeed, I think a marked improvement will certainly occur as soon as the move from the present most unsuitable quarters takes place.

GENERAL REMARKS.

17. During the year nine Non-Commissioned Officers and Sappers have attended the Engineer courses at the Royal Military College, all of whom have qualified.

18. The benefit resulting to the Engineers from these courses is very great. Indeed in the absence of any permanent Engineer School of Instruction I do not think it would be found possible to keep up a force of Engineers in anything but the name without this means of giving the Officers and Non-Commissioned Officers some real knowledge of what is meant by Military Engineering.

19. I beg in conclusion to refer to the suggestions make in the last paragraph of my report for last year. And with reference to the recommendation made by the Major General Commanding in his report for last year that the number of Engineer Companies should be increased, I beg to suggest that this might to some extent be done without increasing the strength of the Militia by gradually converting any suitably situated infantry companies into Engineers.
into Engineer Companies.

I have the honor to be, Sir,

Your obedient servant,

STUART DAVIDSON, Capt. R.E.,
Inspector of Engineers.

The Adjutant General of Militia,
Ottawa.

APPENDIX A.

GZOWSKI ENGINEER COMPETITION, 1887.

The first prize was again taken by the Brighton Engineers; the Charlottetown Company obtaining the second prize for a piece of work of very nearly equal merit.

2. I regret to say the Montreal Company was again unable to compete.

3. The task for this year's competition was the construction of a defensible camp. The full conditions are contained in Appendix B.

First Prize.

4. Brighton Engineers, under Lieut. Tompkins. I was much pleased with the smart way in which the working parties were told off and the tools distributed, and with the judgment shown by Lieut. Tompkins in making his arrangements, so as to avoid waste either of time or labor.

5. The work undertaken was rather too much for the time, and had not all concerned worked remarkably well, would certainly not have been finished. A good deal of trouble was also caused by the crooked growth of the trees and the consequent difficulty of getting the logs to lie flat on each other.

6. Considerable ingenuity was displayed in the construction of the door, which was made entirely of wood, including the very latch and hinges, and formed a very good sample of what a skilled man can do in the woods with only an axe and auger for tools.

Second Prize.

7. Charlottetown Engineers, under Captain Weeks. The amount of work undertaken was here also perhaps rather much for the time available, still I think it would have been done had the men had the advantage of being in camp and work-

ing together as a company for a few days before the competition; but as it was owing partly to this and partly to the unavoidable absence of some of the men, and partly also to some slight mistakes in the arrangements, the work was not quite finished. The camp itself was quite completed and very well done too, but the defences were left till too late, and were consequently in an unfinished state at the end of the six hours. Still the work, as a whole, was exceedingly good and falls but little short of that which took the first prize.

STUART DAVIDSON, Captain, R.E.,
Inspector of Engineers.

APPENDIX B.

GZOWSKI ENGINEER—CONDITIONS FOR THE COMPETITION, 1887.

General Idea.

In an expedition into an enemy's country a company of Engineers has been left behind on the line of communications for the purpose of constructing and subsequently guarding a bridge across a considerable stream. There are none of the enemy's forces in the neighborhood, but the country is in a disturbed state and the sparse population is decidedly hostile.

The company is left to its own resources about six hours before nightfall, and in this time it has to construct its encampment and the necessary defences, in order to be ready to commence work on the bridge the following morning at daybreak.

Work for the Competition.

The work for this year's competition will be the construction of this encampment, and the defences which may be judged necessary for it,—no notice being taken of the imaginary stream and bridge.

Instructions.

The commanding officer will select the most convenient spot for the encampment which he can obtain permission to work upon.

He will furnish a sketch plan of the proposed encampment and its defences; this should be as accurate as circumstances will permit.

He will also furnish a general description of the work he proposes to do, with any special details which he may consider necessary. This description must include a table showing approximately the distribution of the working parties, the tools and materials they will require, &c., &c.

In preparing the above sketch plan and project the commanding officer should avail himself, as much as possible, of the assistance of his subaltern officers and senior non-commissioned officers.

His attention is specially directed to the following points:—

(*a*). The nature of the site.
(*b*). The water supply.
(*c*). The cooking and sanitary arrangements.
(*d*). The arrangements for obtaining shelter from the weather. (N.B.—No use whatever is to be made of tents or existing buildings.)
(*e*). The size and arrangement of the camp and its defences.

Finally, special attention is directed to rules 2 and 4 of the Competition, published on page 160 of the Militia Report for 1885.

STUART DAVIDSON, Captain R.E.,
Inspector of Engineers.

ROYAL MILITARY COLLEGE,
KINGSTON, 1st April, 1887.

APPENDIX C.

CAMP ST. ANDREW'S, 7th July, 1887.

From the Officer Commanding Brighton Engineers to the Inspector of Engineers :—

SIR,—In accordance with your instructions I have the honor to report :—

1st. That I have available for work (if no casualties occur):

3 Officers (including myself).
1 Sergeant Major.
9 Non-Commissioned Officers.
25 Sappers (3 of whom are employed on Camp duty) making the total authorized strength of the Company in Camp, viz. :—
3 Officers.
35 Non-Commissioned Officers and Sappers.

2nd. I have the following tools:—

15 Axes.
1 Cross-cut saw.
1 Hand saw.
3 Augers.
2 Hammers.
1 Two-inch chisel.
2 Six-foot rods.
1 Measuring tape.
1 Tracing line.
1 Field level.
And the necessary picks and shovels.

3rd. I propose to encamp on the brow of a hill commanding some 800 yards of the shore of a lake and the site of the proposed bridge over a considerable stream emptying into the lake. (Note—this is a supposition.)

The land about the encampment is supposed to be cleared for a distance of about 600 yards, with the exception of a small grove which I propose to fell and utilize in constructing the encampment and for firewood.

The water is good, and the supply can be made sufficient with but little work.

I propose to shelter my men by building a double block house (according to the annexed plan) and place it in a condition for their protection from any marauding parties or from any body of organized men taken from the undisciplined population of the country.

4th. I propose to make the following distribution of my Officers and men :—

Work.	Officers.	N.-C. Officers.	Sappers.	Tools.
For general superintendence	1	1	.....	
For cutting and delivering timber	2	.....	12	5 axes, 3 bill-hooks.
For building block house	.....	6	6	6 axes, 1 hand-saw, 1 auger, 2 hammers, 1 2-inch chisel, 2 6-foot rods, measuring tape, tracing line, field level and cross-cut saw.
For roofing	.....	1	2	2 axes, 1 auger.
For water supply, latrine, kitchen and drains	.....	1	3	2 axes, 1 auger, 2 picks, 2 spades.
For cooks	.....	.....	2	
For picquet	.....	.....	1	
Total	3	9	26	

5th. Before the lumber is on the ground, I propose to use the building party to lay out and work and commence latrine, &c.

6th. After the block house is completed I propose to utilize the men for the further strengthening of the position and in work for their own comfort.

I have the honor to be, Sir,

Your obedient servant,

J. R. TOMPKINS, Lieutenant.,
Commanding Brighton Engineers.

CHARLOTTETOWN, September, 1887.

From the Officer Commanding Charlottetown Engineers to the Inspector of Engineers :

SIR,—I have the honor to report that the general description of the work I propose to do with the Charlottetown Engineers competing for the Gzowski prize is as follows :—

Having selected a site near the river in the neighborhood of spruce trees and young undergrowth of brushwood, and adjacent to a small spring, I shall lay off the Camp as nearly as possible to the description given on the plan annexed. The men on being marched to the ground will be told off into working parties. A Corporal or Lance Corporal, with a small squad, will immediately prepare the water supply by sinking and enlarging the spring and protecting it from defilement; another small squad will prepare the latrines. A few sentries or picquets will be posted to protect and warn the working parties. The largest number will be detailed for the hutting and will be divided into four squads, the whole of whom will, under the command of a Sergeant, cut the poles and brushwood required for the huts, before being divided into squads for huts. When a sufficient quantity of poles and brushwood has been cut, this large squad will be subdivided into smaller ones for each hut. The hut will be gable shaped, each half of which is constructed on the ground, and when completed will be raised each half locking in like a lock bridge. A sapper will then place himself upon the gable and fix the top with boughs or thatch. A squad will also be detailed to construct a field kitchen.

After the completion of the huts, which is calculated to take about four hours, the whole company will prepare its defence, being divided into squads, the superintendence of which will be under the direction of an Officer.

Time and tools required:

Field Kitchen—1 corporal, 5 men, 4 hours, 3 pick axes, 1 bill hook, bundle of pickets, 4 spades, 1 camp kettle, measuring rod.

Wood Party—1 sergeant, 2 corporals, 2 lance corporals, 18 men, time, 1 hour.

The wood for each hut to consist of poles about 3 or 4 inches in diameter and 12 feet long, and for each of the men's huts there will be required 30 or 36, also of smaller stuff for being lashed across these poles to hold the thatch work of spruce boughs, about 100 pieces, 1 cart or waggon load of spruce boughs. The beds will be made of mats of grass, straw or seaweed.

After the wood has been brought up, each squad in charge of the Non-Commissioned Officer will lay off and construct each hut.

For each men's hut there will be 1 Non-Commissioned Officer and 4 men. Tools—2 shovels, 1 pick axe, 2 bill hooks, 2 gabion knives, measuring rod, bundle of pickets, spun yarn, twine, nails and hammer, 1 saw.

For mats for bedding—bundle of stakes and twine. Each hut will accommodate a corporal and 12 men.

For latrines—1 lance corporal and 4 men.

Tools—4 shovels and picks, 1 measuring rod, spun yarn or rope, 4 poles, 4 to 6 inches in diameter, 12 feet long, for seat and rest, 8 stakes, 5 feet long, 4 inches in diameter.

One Non-Commissioned Officer and 6 men will take charge of the Officers', Non-Commissioned Officers' and guard huts, which will be much smaller than the other huts. The tools required, the same as for the other huts.

When the squads detailed for latrines and perfecting of water supply have finished, they will assist in the construction of the Officer, Non-Commissioned Officer and guard huts.

It may perhaps be better to make the huts for the men a little larger, when only two will be required. *

I have the honor to be, Sir,

Your obedient servant,

WILLIAM A. WEEKS, Captain

Charlottetown Engineers.

* This was done.

APPENDIX No. 6.

ANNUAL REPORT OF "A" TROOP, CAVALRY SCHOOL CORPS AND ROYAL SCHOOL OF CAVALRY.

CAMP POINT LÉVIS, 1st December, 1887.

SIR,—I have the honor to submit, for the information of the General Commanding, my annual report respecting the Royal School of Cavalry and the Corps under my command.

I acknowledge with gratitude the title of "Royal" given to the School by Her Most Gracious Majesty in this year of Jubilee.

I regret to say that the disadvantages of having hitherto had no proper stables or barracks was made only too evident by the temporary wooden sheds erected over the Citadel casemates and occupied by the Corps as stables, taking fire, and being in a few minutes consumed, together with the twenty-three horses they contained.

I ordered a Court of Inquiry to assemble and report upon the loss sustained and enquire into the cause; but no light was obtained as to the origin of the fire, which would seem to have been purely accidental. The loss to the Royal School of Cavalry was estimated at about $5,000.

The attendance at the School has in consequence been reduced, and the number of certificates granted is only half that of last year, the want of a fixed residence and the very small establishment, increasing the difficulties so much as to strain to the utmost the endurance of all ranks and interfere with instruction.

These difficulties I hope very shortly to overcome, as the buildings hitherto occupied as the Provincial Armory are being converted into barracks and stables, and when completed will prove to be a most suitable permanent residence.

Consequent upon this, it is in every way desirable, and I recommend, that the much needed increase in the establishment of the school be made without delay, and that Lieutenant Heward be gazetted Captain Commanding the Troop, as is done in each of the other Military Schools of Instruction.

The following statistics indicate the work performed as a School of Instruction, and the changes in the *personnel* of the Corps.

RETURN of Certificates and Attendance.

Rank of those Attached.	Grade A.		Grade B.		Attendance.	Special Course.		Equitation.	Total.	Remarks on the Course of Instruction.
	1st.	2nd.	1st.	2nd.		1st.	2nd.			
Officers	4	1	.....	.....	.....	1	1	3	10	
do	.....	.....	.....	.....	.....	.....	.....	.....	1	Did not compete.
do	.....	.....	.....	.....	.....	.....	.....	2	2	do
Sergeants	.....	.....	3	3	1	.....	.....	2	9	
Corporals	.....	.....	8	.....	2	.....	.....	1	11	
Privates	.....	.....	4	4	4	.....	.....	12	24	
do	.....	.....	.....	.....	.....	.....	.....	.....	9	do
Trumpeters	.....	.....	.....	.....	1	.....	.....	.....	1	
do	.....	.....	.....	.....	.....	.....	.....	.....	1	do
Total	4	1	15	7	8	1	1	20	68	

In the above it will be seen that 5 Officers and 15 Non-Commissioned Officers and men were attabced for Equitation only, the latter being the Bandsmen of the Queen's Own Canadian Hussars.

There still remain in the School attached 4 Officers and 7 Privates, several of whom will leave this month.

Return of the changes in the Corps:—

Recruits enlisted	16
Re-enlisted	8
Discharged on completion of service	5
do by purchase	2
do as unserviceable	2
Deserted	1

This return I consider highly satisfactory, showing that suitable recruits have been obtained to fill the vacancies; and the fact that but one man deserted and only two others purchased their discharge I attribute entirely to the *esprit de corps* which exists, and the care taken by me in refusing anyone who cannot give good references as to character and sobriety.

Defaulters' Sheets.

Nothing can surpass the admirable conduct and devotion of all ranks to duty. There has not been a single court-martial necessary during the year, and there are only a total of seventeen entries on the regimental defaulters' sheets during the same period of time, those occasional cases brought to office being almost entirely for "minor offences." The total amount of fines for drunkness is only $11, or, to be more exact, £2 5s sterling, for the whole twelve months, received from but two men, one of whom (who contributed the greater part of this) has now become a teetotaller.

Remounts.

I have had the greatest difficulty in obtaining a suitable lot of remounts, as none were shown at the Provincial Agricultural Exhibition in this city. However, by dint of perseverance and a very considerable amount of travelling, very fine, well bred, sound, young horses have been obtained at a reasonable price, their average age being 5 years and height 15-2¾. By next summer I expect they will be equally well trained with those destroyed by fire.

It is perhaps as well to state the principal points required in a cavalry horse, as farmers do not seem to understand the stamp of horse we desire to purchase.

Dark colored horses, with little or no white about them—geldings preferred; from 4 to 6 years of age, and from 15-2 to 15-3 hands in height. Must have:

1. A short and broad back and loin.
2. A broad and deep chest.

The neck cannot be well too light and long for riding purposes. Pasterns moderately long. The horse himself cannot be too long, provided the length is not in the back or hind legs. The horse must also, above all things, walk well, and of course be perfectly sound.

Veterinary.

Not the least important part of a cavalry soldier's knowledge is that he should be skilled, to a certain extent, in veterinary science, and that he should thoroughly understand all about the animal which is to carry him, and on the proper condition of which much of his own efficiency depends.

I expect, shortly, to arrange for a short course of lectures on this subject with the Veterinary College of the Laval University, which will be a great additional advantage to those attached for a short course of cavalry instruction.

Shoeing, too, is no less important. A lame horse is like a sick soldier, not only of no use, but a serious impediment in the field.

I am glad to be able to report that all the duties required to be performed by a Veterinary Surgeon, during the year, have been satisfactorily done, at a cost of less than $100; and that the shoeing of the horses is also most satisfactorily performed, at a minimum of expense, by a civilian contractor.

Musketry Instruction.

The loss of so many horses has enabled me to devote more time this year to musketry instruction and target practice, and the progress made by each and all has been considerable, notwithstanding the inferior weapon in possession of the Corps, viz., the Winchester Carbine, still, by careful practice in correcting the sights, a good average score has been obtained, as will be seen from the enclosed Target Practice Returns, marked A, at 200, 400, 500 and 600 yards, five rounds at each range; every Officer, Non-Commissioned Officer and man firing his twenty rounds, not one failed to hit the target, the total average points being 39 each; the highest score was made by Sergt.-Major Dingley, namely, 69 points, and the lowest score was 12 points.

Gymnastics.

The R. & O. Mil. say, "gymnastic exercises will be encouraged in all the Schools." I have, therefore, recently obtained from England and enlisted a valuable Non-Commissioned Officer in Sergt.-Major Elliott (late gymnastic and fencing instructor to the 9th Lancers), and now that we are to have permanent barracks of our own, I hope before long to be able to establish a gymnasium, in accordance with the regulations.

Saddlery.

The saddlery destroyed by fire has not yet been replaced, but orders have been given to do so, with Canadian make, and if it should prove to be as good as the Canadian made numnahs already received, there will no longer be any necessity to import saddlery to ensure a first-rate article.

Clothing.

The tunics and serges received of Canadian make are excellent, both as to cut and make, but not so the overalls, which are cut too much like trowsers, nor is the quality of the cloth sufficiently strong to stand the wear and tear of hard mounted work, for which purpose specially made pantaloons should be issued.

The greatcoats are warm and comfortable in winter, and so are the fur caps and winter gloves.

Carbines.

The Winchester Carbine in possession of the Corps I recommend being replaced by the Martini-Henry for reasons already given by me in previous annual reports, particularly too as there is no Winchester ammunition in store here and the new carbine buckets received are made for the Martini-Henry carbine.

Toll Gates.

The Quebec Turnpike Trust Commissioners having demanded the payment of tolls upon their roads I caused a test case to be tried before the Courts of Justice and duly forwarded the full text of the Judge's decision, which was to the effect that the Army Act, 1881, has never been put into force in Canada by the Dominion Parliament and that the Consolidated Militia Act, while it places the Canadian Militia under the Army Act for all the penalties it contains, gives none of its exemptions or privileges

to the force, and, therefore, all Canadian troops, whether "on duty or on the line of march" must pay toll. This decision affects the status and interests of the permanent corps in so many other ways that serious difficulties are certain to arise unless the Dominion Act be amended, so that the Permanent Corps, at least, be placed on an equal footing with the British army.

General Remarks.

The first period of service having expired, I desire to draw attention to the position attained in general public opinion by this School as a military educational institution and a model disciplinarian for civil life.

Something over 200 young men have already passed through the school, with a few exceptions of liberal education, and of as high conduct and character, of nerve, energy and of physical qualities equal to any in the world. This success has been attained by the support I have received from my zealous and high-minded staff, both commissioned and non-commissioned, and the conduct, intelligence and good will of the rank and file.

I hope, therefore, there will be no further delay in the high political and military authorities of Canada placing the Royal School of Cavalry upon the same footing as regards its "Establishment" in common with all the other Military Schools of th country.

I have the honor to be, Sir,

Your obedient servant,

J. F. TURNBULL, Lt.-Colonel.

Commandant, Royal School of Cavalry.

The Adjutant General of Militia,
Ottawa.

APPENDIX No. 7.

ANNUAL REPORT ON THE REGIMENT OF CANADIAN ARTILLERY AND THE ROYAL SCHOOLS OF ARTILLERY.

OTTAWA, Dec., 1887.

SIR,—I have the honor to forward herewith, for the information of the Lieut. General Commanding the Militia, the Annual Reports of the Commandants of the Royal Schools of Artillery for the year ended 31st Dec., 1887.

1. The following statistics show the strength of each Battery, and the work performed as Schools of Instruction :—

REGIMENT of Canadian Artillery.

	Batteries.						Total.	
	"A"		"B"		"C"			
	Officers.	N.-C. O. and Men.	Officers.	N.-C. O. and Men.	Officers.	N.-C. O. and Men.	Officers.	N.-C. O. and Men.
Authorized establishment	9	151	9	161	7	100	25	412
Present strength	8	143	9	158	6	97	23	398
Enlisted, or re-enlisted	.....	86	1	98	2	97	3	280
Discharged by purchase	.....	6	.....	9	.....	.....	.....	15
do as unsuitable	.....	.....	.....	8	.....	.....	.....	8
do as invalided	.....	4	.....	.....	.....	.....	.....	4
Deaths	.....	.....	.....	9	.....	.....	.....	9
Joined for Instruction.								
Long Course	.....	1	3	3	.....	.....	3	4
Short do	.....	28	3	41	.....	1	3	70
Special do	.....	.....	8	.....	1	.....	9	.....
R.M.C. do	13	.....	.....	.....	.....	.....	13	.....
Engineer do	.....	11	.....	.....	.....	.....	.....	11
Certificates Granted.								
Long Course	.....	5	3	7	.....	.....	3	12
Short Course, 1 "A"	3	.....	4	.....	.....	.....	7	.....
do 2 "A"	.....	.....	.....	.....	.....	.....	.....	.....
do 1 "B"	.....	13	.....	24	.....	.....	.....	37
do 2 "B"	.....	14	.....	11	.....	.....	.....	25
Special Course	.....	.....	8	*8	.....	.....	8	8
Engineer do Long	.....	1	.....	.....	.....	.....	.....	1
do do Short—1 "B"	.....	2	.....	.....	.....	.....	.....	2
do do do —2 "B"	.....	6	.....	.....	.....	.....	.....	6
Long Course at R. M. C.—1 "A"	5	.....	.....	.....	.....	.....	5	.....
do do do —2 "A"	1	.....	.....	.....	.....	.....	1	.....

*Granted under exceptional circumstances to N.-C. Officers and Gunners of Montreal Brigade.

2. As shown by the Commandant R.S.A., Kingston, the number of officers, N.C. officers and men of Field Batteries attending that school for instruction is out of all proportion to those of Garrison Batteries. Similarly, on reference to the certificates granted at the Quebec School this year, it has been ascertained that forty-one were for Garrison and only twelve for Field Artillery. It would therefore appear to be very desirable were the Field Artillery establishment at Kingston increased to the extent recommended by Lt.-Col. Cotton so as to enable practical instruction to be given in all the details of the management of a Field Battery.

3. The organization of "C" Battery was effected in accordance with General Orders of 6th October. The Battery is composed of volunteers from "A" and "B" Batteries. Two Officers and 51 N.C. Officers and men from the former and 1 Officer and 44 N.C. Officers and men from the latter.

The detachment left their Battery Headquarters on the 4th November, and arrived at Victoria on the 10th November, where they are at present stationed in temporary barracks.

4. The following changes in the staff and organization have been made during the year:—Lieut. and Brevet Captain J. Peters to be Major Commanding "C" Battery; Lieut. and Brevet Capt. T. Benson and Lieut. G. H. Ogilvie transferred from "A" Battery to "C" Battery, 6th October; Captain G. R. White appointed Quarter-Master "C" Battery, 6th October; Surgeon J. A. Duncan appointed to "C" Battery, 9th November; Veterinary Surgeon W. P. Hall appointed to "B" Battery, 29th January; Veterinary Surgeon J. Massie appointed to "A" Battery, 9th May; Staff Sergeant J. Cornish appointed Master Gunner "C" Battery; Staff Sergeant J. Mulcahey appointed Sergeant Major "C" Battery.

5. I have the honor to call attention to my remarks, made last year, with reference to the increasing unsuitability of the Tête du Pont Barracks for the headquarters of a School of Instruction and barracks.

The extreme lowness of the water and the impossibility of obtaining proper drainage have combined to render this locality very unwholesome.

6. During the year the Bands of all three Batteries have been placed upon a similar footing, and the supply of instruments from Government has given general satisfaction.

I have the honor to be, Sir,

Your obedient servant,

D. T. IRWIN, Lieut.-Colonel,
Commanding Canadian Artillery Regiment.

The Adjutant General of Militia, Ottawa.

ANNUAL REPORT OF "A" BATTERY, REGIMENT OF CANADIAN ARTILLERY AND ROYAL SCHOOL OF GUNNERY.

KINGSTON, 1st December, 1887.

SIR,—I have the honor to submit herewith for the information of the General Officer Commanding the Annual Report on the Royal School of Artillery under my command.

I desire to call attention to a comparison of the number of Garrison and Field Artillery who have attended the Royal School of Artillery during the past two years—1st October, 1885, to 30th November, 1887:—

	Officers.	N.C.O. & Men.	Total
Garrison Artillery.....	1	7	8
Field do	5	75	80

This is due to the small number of Garrison Batteries in the Province, and as they have been still further reduced it is recommended that the means of instructing the Field Artillery at the Royal School of Artillery be increased.

Owing to the limited number of horses, and which from accident and sickness were during the year reduced to eight, the field work was exceedingly restricted.

The Field Artillery Division of "A" Battery with 2 guns and 9 horses joined the Brigade Camp in June, 1897, but owing to the small number of horses little or no drill could be done. The plan, however, is a good one and has a beneficial effect on the other Batteries in Camp.

Within the last few days, however, an increase of eight horses has been authorized, so that by the spring matters will be somewhat improved, and I trust next year to have a more extended practice of duties in the field, such as forced marches, bivouacking, bridging, &c., &c., &c. I would, however, as in my reports of the last two years, recommend that the number of horses be increased to 26 in all, which number would allow the horsing of 4 guns for drill instruction, and for active service of 2 guns, 2 waggons and 1 forge waggon.

I would suggest that a general service spring waggon and ambulance waggon be imported for this station.

A tri-weekly equitation class for the gentlemen Cadets of the Royal Military College has been maintained.

A drill shed is very much needed for the use of the Royal School of Artillery. In winter when the classes are largest its want is very much felt. Understanding that the present Government drill shed is shortly to be abandoned, I would recommend the erection of the next on some site in proximity to the Barracks in order that it could be utilized by all.

A detachment of Engineers, consisting of eleven Non-Commissioned Officers and men attending the Royal Military College course, were instructed in Company drill and general regimental duties. These men worked hard and cheerfully.

I have received every assistance from the Staff of the R.S.A. in carrying on the duties connected therewith.

"A" Battery Regiment, C.A.

The conduct of the men has been very good.

Rifle practice was carried out during the summer months on the same system as that of last year, and with satisfactory results.

Owing to the reduction of the Batteries by the drafts for "C," the annual competition between "A" and "B" Batteries did not take place this year as usual.

A new supply of Short Enfield Rifles have been received and issued.

On the 4th November, a draft consisting of 2 Officers and 51 Non-Commissioned Officers and men were sent from "A" Battery to Victoria, B.C.

The clothing is not yet perfectly satisfactory.

The greatest fault lies in the cut of the tunics and serge patrol jackets. The latter, as supplied by a Hamilton firm, being good. Large sizes have to be taken for men of medium height, and are therefore cut to waste in the fitting. The dye of some is inferior, and clothing, blue when issued, shortly turns to a green or claret color. The ankle boots are too low in the instep in proportion to sizes, but are otherwise very good.

I would recommend that for the future enlistments for the Battery should be probationary for three months, with a reduced kit. At the end of that time men to be allowed to go, or remain for three years.

This, I consider, would be a means of checking desertion and preventing the loss of a large and costly kit. It would also permit undesirable men being got rid of.

I desire to strongly urge the fitting up of a proper recreation room for the Non-Commissioned Officers and men on the modern plan of soldiers' libraries, &c., &c. The room now used in the Tête du Pont Barracks is not in decent repair, and is anything but attractive. The resources of the funds are taxed to the utmost to keep

it in its present shape. Gas has been introduced out of the private funds of the reading room for the purpose of affording enough light and adding to its comfort and attractiveness.

"A" Battery went into Camp for three weeks in the month of August, the change of air from Barracks being highly beneficial. During that period the annual games and sports were held with great success, the different events being keenly contested.

Repairs.

Some repairs have been affected to fortifications and buildings, but the work was delayed till so late in the season that it has not been as efficiently and completely performed as it should have been.

Forts and Armaments.

The gun carriages and platforms, excepting those in the towers, are all unserviceable.

Barracks.

The introduction of gas into men's barrack rooms, stables, &c., &c., would be little more expensive than coal oil, but much more convenient and safe, and the comfort of the Non-Commissioned Officers and men would at the same time be greatly increased thereby.

The old fashioned latrines should be changed for the dry earth system.

Ordnance Armorer Sergeant R. Parrett, R.A., left the Battery on the 24th November on account of ill health, and returned to England to join the Royal Artillery to which he belongs.

I have the honor to be, Sir,

Your obedient servant,

W. H. COTTON, Lt.-Colonel,
Commanding Royal School of Artillery.

ANNUAL REPORT OF "B" BATTERY, REGIMENT OF CANADIAN ARTILLERY AND ROYAL SCHOOL OF GUNNERY.

CITADEL, QUEBEC, 31st December, 1887.

SIR,—I have the honor to submit herewith my Annual Report on "B" Battery, R. C. A. and R. S. A., under my command for the year ending 31st December, 1887.

Camps and Outside Instruction.

Staff Sergeant Hamann gave instruction to No. 3 Battery, Quebec Garrison Artillery at evening drills during the winter, and also acted as Camp Sergeant-Major of the District Camp at Lévis in July.

Staff-Sergeant Newnham acted as Instructor to the Quebec Field Battery while in the Brigade Camp at Lévis. Gunner Jordan had charge of and instructed the Trumpeters of that Brigade.

Sergeant Bouchard, No. 2 Battery, Quebec Garrison Artillery, while going through a Long Course, instructed his Battery during their drill.

Annual Competitions.

The annual competitions between "A" and "B" Batteries had been arranged for this year but did not take place in consequence of the large drafts from each of these Batteries for "C" Battery, British Columbia.

"B" Battery furnished the staff and a large fatigue party for the Dominion Artillery Association Garrison Artillery Competition at the Island of Orleans.

Remarks on Armament.

There has been no change except that effected by the fire of the 6th July, when carriages and stores of various kinds, but mostly obsolete; were destroyed, and three 7-inch and one 40-pr. R. B. L. guns were rendered useless. There are in the Citadel only a few rifled guns; none of which could pierce an ironclad at 50 yards range.

General list of Repairs to Armament.

General repairs to Gatling Gun.

Venting S. B Ordnance.

Copper bouching and ringing vent pieces of two 40-pr. R. B. L. (Montreal and Kingston) guns for Dominion Artillery Association competition.

Examination of S. B. and Rifled Ordnance.

Repairs to gun carriages, Quebec Field Battery.

Sighting and repairs to one S. B. gun, Lévis Garrison Artillery.

Fitting Scott's patent revolving sight to four Field Batteries.

Repairs to Garrison gun carriages.

Artificers Work.

General repairs and painting Field Division gun carriages and sleighs.

Setting up engine and general repairs to engine and machinery.

Examination of ordnance and stores destroyed by fire.

Making gun platforms, Garrison Artillery competitions at Island of Orleans.

Building new covering to chain gate (snow sheds). General jobbing and repairs to Barrack stables, saddlery and equipment, which were absolutely necessary, and have been done by the artificers at small expense to Government.

Clothing.

(*a.*) The material of the great coats issued to the men is so indifferent that it does not wear as it should. I recommend strongly that the red collars should be done away with; they get dirty very quickly, and are a constant source of expense to the men.

(*b.*) The cut of the tunics and trousers is so faulty that expensive alterations are necessary in every case, and in many suits, the size does not agree with the marks. Either properly cut clothing should be supplied, or the allowance to the men for alterations should be increased from 50 cents to $2 or $3. The quality of the material —especially in cloth tunics—is very inferior.

(*c.*) Hospital clothing has been repeatedly asked for, and is badly wanted.

(*d*) Boots are of very bad quality, and are supplied in an unsatisfactory manner.

GENERAL REMARKS.

(*a*) *Citadel Fire.*

On the night of the 6th July, a fire took place in the Citadel, starting from some unknown cause in the stables of the Royal School of Cavalry, and burning the wooden constructions on Richmond and Dalhousie Bastions, containing a quantity of stores. Officers and men worked with a will, but it was found impossible to arrest the flames and the sheds were entirely destroyed.

(b) Water Supply.

Water pipes were introduced into the Citadel last year, and this year the supply pipes were carried into the buildings. I would strongly recommend, however, that the present tanks existing in the Citadel, or at least, the large one in front of the Officers' Quarters which can contain 300,000 gallons should be kept in perfect order in case of any accident to the lake pipes.

(c) Married Soldiers.

I concur with other Commandants in strongly recommending the issue of rations to the families of married soldiers up to the number allowed.

(d) Signalling.

A class of Non-Commissioned Officers and men passed in flag signalling this summer and are very efficient.

(e) "C" Battery.

A draft of 44 Non-Commissioned Officers and men under command of Major Peters left on the 4th November, for British Colnmbia to form, with a similar contingent from "A" Battery, "C" Battery of the Regiment.

Sergeants Newnham and Saunders were sent to Montreal and Halifax to recruit, with satisfactory results. There was no difficulty in obtaining a fine class of young men—intelligent and of good physique—and the Battery is now full strength.

These Batteries are called Garrison Batteries, but include a mounted division, and are each as strong as four Volunteer Batteries. I would respectfully suggest that, as promotion is slow, the senior subalterns should be given the rank and pay of Captains.

(g) Battery Games.

The usual annual games were held this year on the Plains of Abraham, and prizes were given out of the Canteen Fund.

(h) Sanitary State of Barracks.

The surgeon reports that the health of the troops in the Citadel is good, and that the Sanitary condition of the quarters, &c., is better than last year owing to the great improvement in the water supply, and to the new system of drainage and closets.

Major Short acted as Commandant for several months this summer, during my illness and absence on leave. We concur in saying that the conduct of the N.-C. officers and men has been excellent, and that the staff of the School has, as usual, cheerfully given every assistance during the past year.

I have the honor to be, Sir,

Your obedient servant,

C. E. MONTIZAMBERT, Lt.-Colonel,
Commandant Royal School Artillery, Citadel, Quebec.

To the Officer Commanding
Regiment of Canadian Artillery,
Ottawa.

REPORT ON "C" BATTERY, REGIMENT OF CANADIAN ARTILLERY AND ROYAL SCHOOL OF ARTILLERY.

VICTORIA, B. C., 19th December, 1887.

SIR,—I have the honor to submit the following Report on the "C" Battery, R. C. A., and the Royal School of Artillery under my command for the year ending the 31st December, 1887.

Owing to the recent arrival of the Battery in the Station, viz., the 10th November last, there is very little to report. The behavior of the men since their arrival has been very good and they seem to be well contented. Major Peters, the Officer in command of the Battery *en route* Quebec to Vancouver, reports that the arrangements made by the Canadian Pacific Railway, both as regards train accommodation and meals, were very good.

The single Non-Commissioned Officers and men are quartered in the Agricultural Hall, Victoria, which was fitted up under my supervision as Barracks and answers the purpose fairly well. Considerable work had to be done both to the main building and the outbuildings. I attach plan showing the amount of room provided.

The Mayor and Corporation of Victoria have aided me in every possible way in making the Battery comfortable, and the people of the city very generously provided a good supper and gave the Battery a hearty welcome the night of its arrival.

The present arrangements, however, which compel the Officers and married Non-Commissioned Officers and men to reside out of Barracks, owing to want of accommodation, are not satisfactory, and it is to be hoped that the new Barracks to be built on Work Point will be fully completed by the 1st October next year, when the lease of the present premises expires.

Arms and Equipment.

The arms, accoutrements and equipment being new are in good order. I regret, however, that the Martini-Henry Rifle was not issued instead of the antiquated Snider-Enfield. The former weapon being for many reasons, especially here on the Pacific, much to be preferred.

Barrack Stores.

These are in good order, and of serviceable pattern. The only exception being the wooden beds which had to be made here owing to the absence of iron ones. The iron pattern bed should be provided at an early date.

Established Strength.

The established strength of the Battery is rather low considering the importance of the position it has to aid in defending, and the fact that the local Force of the Active Militia is, although good in quality, numerically weak, owing to the smallness of the population.

If it is not thought advisable to increase the strength of the Regiment a redistribution of the Batteries, making each equal in strength, would, perhaps, meet the necessities of the case.

The strength of "C" Battery should, in my opinion, be increased by not less than one Lieutenant and thirty Non-Commissioned Officers and men.

The provision of twelve horses with a supply of harness and saddlery for two Sub-Divisions of Field Artillery would also add much to the effective fighting strength of the Corps and be of invaluable service in case of attack.

I beg to call your attention to the fact that we are still without one of our three Lieutenants on the present establishment. This makes it very hard work for the two already serving, and I hope that this vacancy may be filled at an early day.

Forts and Armaments.

These have not yet been taken over by me from the Store Department owing to the fact that there is no Storekeeper yet appointed. This is a matter which, however, will be attended to at an early date.

Band.

The formation of a Band will be proceeded with as soon as the instruments which have been asked for arrive.

There are a number of trained Bandsmen in the ranks, so that I hope to have no trouble in forming a Band that will do credit to the Corps and to the service.

Sergeants' Mess, Canteen, &c.

The Sergeants' Mess, Battery Canteen, Library, &c., are already in good working order, as also Tailor's and Carpenter's shops.

Hospital.

This, under the management of Surgeon Duncan is well conducted. Fortunately there have been no serious cases, as owing to the Hospital Ward being in the main building it would have been difficult to treat them. Should these occur they would have to be sent to the City Hospital, where quieter and more isolated accommodation can be provided.

Recruiting.

No public notice has as yet been given that men will be enlisted here. I have no fear, however, but that a considerable number will be obtainable owing to the increased pay allowed at this Station to Non-Commissioned Officers and men.

The case of the Officers, however, deserves consideration. The increased cost of living in this Province over that in the Eastern Stations is at least 33⅓ per cent. and this is felt with greater force by the Officers who have to provide nearly everything for themselves, than by the men. It is in my opinion only simple justice to them to give them the same proportionate increase in their pay, viz., 25 per cent.

The question of forage for Officers' horses is still in abeyance; an early and favorable answer to my application for this allowance to each of the Officers is looked for. Every Officer on the permanent establishment should be able to ride well, and he can only do so by constant practice and exercise.

In conclusion permit me to say that I have every reason to think that "C" Battery, R. C. A., will prove equal in every respect to the other and older Batteries in the Regiment, and although it is not able as yet to boast of active service in the field, it has the honor of being the first completely organized Corps in Her Majesty's service that has crossed the North American Continent from Ocean to Ocean.

I have the honor to be, Sir,

Your obedient servant,

J. G. HOLMES, Lt.-Col., R.C.A.
Commandant.

To the Officer Commanding
Regiment Canadian Artillery,
Ottawa.

APPENDIX No. 8.

ROYAL SCHOOL OF MOUNTED INFANTRY.

WINNIPEG, 10th December, 1887.

SIR,—I have the honor to submit for the information of the General Officer Commanding this my annual report of the "Royal School of Mounted Infantry" under my command.

Strength.

I am glad to be able to report that the School is now in good working order and of full strength (except Officers), the present strength being 5 Officers, 100 Non-commissioned Officers and men, and 50 horses.

Heavy Duties.

But I find the duties come very heavy on the men, for they have not only to perform all duties and clean their arms and accoutrements, the same as infantry (being Infantry soldiers), but they have also to clean their saddlery and equipments and attend to and groom their horses, which though a labor of love to most of them (for they take a great pride in their horses), still it not only gives to them a great deal of extra work, but it also wears out their uniform much quicker, for no stable fatigue suits have yet been issued.

Daily State.

Out of the total strength of 100 Non-Commissioned Officers and men, the following is the average "daily state":—

—	Staff and Duty Sergeants.	Corporals, Lc.-Corporals and Acting L.C.	Privates.	—
Band and buglers	1	1	11	
Servants, batmen and grooms	.....	.....	6	
Hospital and average sick	.....	1	3	
In Quartermaster's store	1	.....	1	
Orderly room clerk and orderly	.....	1	1	
Cooks	.....	.....	2	
Pioneer	.....	.....	1	
Mens' mess orderlies	.....	.....	2	
Canteen	1	.....	.....	
Library and recreation room	1	.....	.....	
In Officers' mess	.....	.....	2	
In Sergeants' mess	.....	.....	2	
Farrier and blacksmiths	.....	.....	3	
Tailor, saddler and carpenter	.....	.....	3	
Staff instructors and color sergeant	3	.....	.....	
Recruits at drill	.....	.....	2	
Total "employed."	7	3	39	49
Leaves "for duty."	3	7	41	51
Total strength	10	10	80	100

"Employed Men."

In examining the above state it will be noticed that the employed Non-Commissioned Officers and men are about one-half of the total strength of the School, and are really the cadres for a Battalion which could thus be raised to five times its present number with a very small increase to the staff and employed Non-Commissioned Officers and men.

"Duty Men."

But as to the other half of the Corps which are the duty men, there are nine men daily on guard and gate duty, three on piquet., and four orderly men of rooms, making a total of sixteen for daily duties. It therefore follows that the forty-one duty men are not sufficient to make three reliefs (it would take forty-eight men for this), and so some men *must go on duty every other day*, and when there are more than the average number of sick or men otherwise off duty, as in the case at present, the duty comes round to all every other day, which in this cold climate is very trying. This is irrespective of all fatigue duties, such as coal carrying, &c., which is a heavy fatigue duty in winter.

Increase applied for.

If to the above duties are added the daily Drill, mounted exercise, and routine of stables, also cleaning not only his horse and equipments but also infantry accoutrements, it will be seen that a Mounted Infantry Soldier has an exceptionally busy time compared with other Corps; and as he is on guard or duty every other day; I do most respectfully beg that his case may be considered, so that by *an increase to the number of the School* his now very heavy tour of duty may be lessened.

Brown leather accoutrements.

During this year brown leather accoutrements have been issued to the Corps and are found very satisfactory in every respect, while they look far more soldierlike than would be anticipated by one accustomed to the white belts.

Clothing and Riding Breeches.

The Riding breeches issued lately are of a very good material and fit very well, and the whole issue of Clothing this year is most satisfactory.

New Stables.

Since my last report the new stables have been finished, they are very convenient and healthy; the iron faced partition doors which divide them in 3 parts are a wise precaution in case of fire and work well and easily.

Barrack Improvements.

The fence round Barracks has been completed and also the drainage and sidewalks. The new officers quarters will be fit to occupy as soon as the heating furnace is finished.

The men's huts have been newly floored, and a few repairs to the roofs and plastering will make them last for some time, until brick huts can gradually replace them.

Inspections.

The Hon. the Minister of Militia and Defence visited Winnipeg early this month and inspected this Corps on the 7th instant; he also went through the whole Barracks, and his visit resulted very much to our advantage, for he was able to judge for himself how badly some of the buildings wanted repairs, which he authorized to be done; and also other important improvements made, including a Laboratory and Bath house.

The General Officer Commanding the Militia also visited the School on the 5th instant, and after a thorough inspection, was pleased to express himself satisfied with the result.

Horses.

Since my last report we have had the number of horses completed, from 16 to 50, all bronchos, which though very wild at first have turned out well and tractable.

Riding School.

But a Riding School is much required for the winter months, not only to exercise the horses in very cold weather, but also to instruct attached officers who can best spare time in winter.

Field Drill and Rifle Practice.

The Corps has had weekly "field firing" on the prairie as long as the weather would permit, and also constant drill in outpost duties, scouting and skirmishing, besides dismounted drill and Target Practice. A Regimental Rifle Association has also been formed, which has done much to increase the interest in Rifle Shooting, and will, I trust, be the means of making the men good rifle shots.

Gardens.

Acting on the wishes of the General I partitioned off part of the spare ground and laid it out in small gardens for the men. It proved very successful; so many of them took up gardens and attended carefully to them that at the end of the season we had a show and prizes given for best garden and vegetables, which gave them an interest in the Barracks as a home and a pleasant occupation for spare time.

Canteen.

As there is no hospital we use the hut that was made for a Canteen; not only is it a very poor substitute, but having no Canteen that can be called such the men have no comfortable place for social enjoyment (which is now acknowledged as necessary in every properly arranged Barracks) thus men are tempted into bad company in town which they might have avoided if there was a comfortable Canteen to keep them in Barracks.

Attached Officers and Men.

The following is a Return of the Officers, Non-Commissioned Officers and men who have attended this School since my last report.

RETURNS of Certificates and Attendance.

—	Grade A.		Grade B.		Attendance.	Remaining at School.	Total.	Remarks.
	1st.	2nd.	1st.	2nd.				
Officers	3	1	.....	.....	.....	.....	4	
do	.....	.....	.....	.....	.....	.....	1	Did not complete course.
Sergeants	.....	.....	2	.....	.....	3	5	
do	.....	.....	.....	.....	.....	.....	2	do do
Privates	.....	.....	.....	1	5	9	15	
do	.....	.....	.....	.....	.....	.....	10	do do
Corporals	.....	.....	.....	.....	.....	1	1	
Buglers	.....	.....	.....	.....	.....	.....	5	Each of those have received a course of instruction.
Total	3	1	2	1	5	13	43	

It must be remembered there are only three Battalions from which we draw applicants to enter the School for instruction. It is a pleasure to be able to report the interest shown by all those attending course of instruction, and I always endeavor to give them every facility and to make their course of instruction pleasant to them as well as instructive.

Quartermaster.

I beg to ask consideration of the importance of appointing a Quartermaster; the Adjutant has his time fully taken up with the discipline, instruction, and duties of the School, and really has not time to at'end to the very important duties of Quartermaster.

I am glad to be able to report that I have been ably and willingly assisted by all the Officers in carrying on the duties of this School.

I have the honor to be, Sir,

Your obedient servant,

JOHN B. TAYLOR, Lieut.-Colonel,
Commandant Royal School of Mounted Infantry.

The Adjutant General of Militia,
Ottawa.

APPENDIX No. 9.

ROYAL SCHOOL OF INFANTRY.

INFANTRY SCHOOL CORPS, "A" COMPANY AND STAFF.
FREDERICTON, 5th December, 1887.

SIR,—I have the honor to submit this my third Annual Report of the Royal School of Infantry and Corps under my command.

I have already in my Annual Report for 1887, as Deputy Adjutant General, referred at some length to the advantages of both School and Corps in the District under my command. I am glad to know that the Deputy Adjutant General of Nos. 9 and 12 Districts, shares my opinion respecting the presence in Brigade Camp of a porition of the Corps, as may be observed in the memorandum of Lt.-Colonel Worsley—copy enclosed. I can with truth repeat what I stated in my previous report, viz, that not only has the Corps as a body been useful as a means of impart-parting instruction, but the general work of the School, in the three annual courses, has gone on satisfactorily.

The subjoined Return shows the number of Officers, non-commissioned Officers and men who attended the School since last report, 27th November, 1886, and obtained certificates:—

Officers.

Grade A, 1st Class (1 Long Course)	15
do 2nd Class	1
Special Course, 1st Class	7
do 2nd do	4
Total	27
Now attending	2
Left with permission	2
Total Officers	31

Non-Commissioned Officers and Men.

Grade B, 1st Class	12
do 2nd Class	27
Attendance	24
Total	63

Royal School of Infantry.

Her Majesty has been graciously pleased to signify Her approval of the Cavalry and Infantry Schools of Military Instruction of the Dominion being in the future designated Royal. This is considered a high honor, not only amongat the Officers, non-commissioned Officers and men of the Corps, but amongst those who attend the School for instructional purposes.

Inspection by Major General Sir Frederick Middleton, K.C.M.G., C.B.

The Corps was inspected by the Major-General Commanding at St. Andrew's Brigade Camp on the 8th and 9th of July last.

Target and Judging Distance Practices.

The Corps remained in Camp at St. Andrew's after the breaking up of the Brigade Camp, until the 4th August, and there carried out the usual course of preliminary drills and Target and Judging Distance practices.

Name of best shot, Lance Corporal Gill.

Name of best in Judging Distance practice, Private H. Hazen.

Music.

The Band continues to be very efficient.

On the completion of the first period of service—three years—it was expected that some of our skilled musicians would take their discharge; the Bandmaster, however, with forethought, is always enabled to recommend a substitute for any man on discharge. Swords, and I hope cross belts, are about to be issued to the Band.

Temperance Lodge and Canteen.

The Temperance Club, in which Major Gordon takes active interest in "A" Company under his Command, formed in 1885, has taken an advanced step during the past year in the formation of a Temperance Lodge in the Corps, with increased members and renewed efforts for good.

I cannot speak too highly of the advantage of these efforts; crime and misconduct have, as a result, been reduced to the minimum, and the Canteen, at all times conducted with regularity, strictly in accordance with Queen's Regulations, is now considered as a branch of the Coffee Room, where harmless beverages can be obtained, more than as an ordinary Canteen for the supply of ale and porter. There is also a Recreation Room in connection with the Canteen.

Library and Recreation Room.

The Library Committee is as active as usual, and the stock of books has largely increased.

The Recreation Room, with refreshment stall (coffee room), has been rendered more attractive. I must here state, with pleasure, that during the period of our encampment at St. Andrew's last summer, Neville Parker, Esq., M. D., assisted by several citizens, most thoughtfully placed a Reading and Recreation Room, well supplied with periodicals and papers, &c., at the disposal of the Corps. These kindly actions are duly appreciated by all ranks.

I have submitted a recommendation for new Library and Recreation Rooms, which may, I hope, be favorably considered.

It is well known that too much importance cannot be attached to the amusement in Barracks, as well as to the useful occupation of the soldier.

Barracks.

Both Officers' and men's Barracks have undergone repairs since last report.

Both buildings, previous to the formation of the Infantry School Corps, had been long unoccupied, requiring much in the way of repairs. These repairs are being efficiently carried out under the supervision of the Clerk of Works, F. Hilyard, Esq.

The number of Officers' quarters is insufficient when the quota of attached Officers is complete.

Barrack Rooms.

That which I stated in last report as to the interest taken by Major Gordon in the welfare of his men may here be repeated with equal justice. Nothing can exceed the cleanliness and tidiness of the Barrack rooms, all being uniformly arranged and in conformity with the standing orders, while nothing is left undone for the comfort of the soldier with the view to his considering the Barrack Room his "home."

Non-Commissioned Officers and Men.

By means such as those above referred to the "morale" of the men is not lost sight of, and, as already stated, the varied routine of the soldier's duty in Camp or Quarters becomes attractive, discipline is easily maintained and no difficulty is experienced in keeping the ranks filled with men of the best class—those of good character, well fitted for the service.

As regards the *useful occupation* of the men above referred to (there is no room for *the idler* in this country), not only have drill and practice in their varied courses been carefully attended to, but the men of the Corps—which includes many skilled mechanics in its ranks—have been employed with advantage in the different works of repairs; and besides, increased interest is, I am glad to think, being taken in the improvement of Barrack Grounds, knowing that, as in the case of Brigade Depot Barracks and grounds of Imperial Army, occupied from time to time by detachments of the same Territorial Regiment, however frequently changed, on a change of quarters taking place in our case the advantage of any improvements of Barracks and grounds will be felt by *our brethern* in the same Corps, though perhaps drawn from a distant part of the same Dominion.

The Non-Commissioned Officers have again given valuable proofs, individually and collectively, of their usefulness and efficiency.

In addition to the important work of instruction in the different "courses"—faithfully done by Sergt.-Instructors Fowlie and Polkinhorn—and in the performance of regimental and other duty in the Corps, the following have been employed with advantage in the positions named:—

District No. 8, Brigade Camp, St. Andrews.—Sergt.-Major McKenzie, Sergt.-Major; Quartermaster Sergeant Walker, Quartermaster Sergeant; Sergt.-Instructor Fowlie, Sergt.-Instructor of Musketry; Bandmaster Hayes, Bandmaster; Sergt. Gregory, Orderly Room Clerk; Sergt. Cochran, Hospital Sergeant.

District No. 9, Brigade Camp, Aldershot, N. S.—Sergt.-Instructor Polkinhorn, Sergt.-Major; Lance-Corporal Fancutt, Instructor; Lance Corporal Lynch, Sergt. Musketry Instructor; Lance-Corporal Duncan, Supply Sergeant.

Lance-Corporal Lynch was subsequently employed in Regimental Camp at Cape Breton.

Of the above Non-Commissioned Officers employed in District No. 9, Lt.-Colonel Worsley, D.A.G., states "they answered all his expectations of them, and their conduct in every way was exemplary. The Major-General was pleased to express his entire satisfaction with what he saw, and much is due to the detachment from the Royal School of Infantry, Fredericton."

Lance Corporal Fancutt attended a course of signalling, attached to the Royal Engineers at Halifax, where he obtained a 1st Class Certificate, with special mention as to his proficiency.

Recommendations.

1. The want of a permanent Quartermaster in each School has been referred to by more than one Commandant and this want has already been supplied in one instance in the corps, viz, at St. John's, Quebec. I quite concur in the opinion expressed as to this want, by Commandant Royal School of Mounted Infantry, viz., "as most requisite for the comfort of the men and the insuring the Department against waste and loss of stores, &c."

I have submitted and recommended the application for this appointment in the School and Corps under my command, from Sergeant Major McKenzie, who has experience both in District and Regimental work, and if appointed, I consider he would prove a zealous and efficient Quartermaster.

The recommendation has also been submitted for favorable consideration by the Commandant Royal School of Infantry, St. Johns, Que., as to the appointment of an Adjutant in addition to the authorized strength of the Corps at each station. The necessity for this appointment is also obvious. I concur in the recommendation, while desiring most earnestly to retain the services, as such, of my present Adjutant, Lieut. Douglas Young, whose services have been valuable and at all times cheerfully rendered.

2. Permit me again to refer to my recommendation that N. C. officers and men married *with leave* and their families be placed on the same footing, as regards the issue of rations, as those in the Her Majesty's Regular Army.

Conclusion.

It only remains for me to express my sincere thanks to the officers for their continued assistance, their zeal and energy in the discharge of their duties, viz., to Major Gordon, Surgeon Brown, Major and Paymaster Armstrong, Lieutenant and Adjutant Young, and Lieutenants Hemming and Lieutenant and Captain Bremner. These two last named officers have been very useful in the performance of District duties, besides their regimental work.

I have the honor to be, Sir,

Your most obedient servant,

GEO. J. MAUNSELL, Lt.-Colonel,
Commandant, Royal School of Infantry.

The Adjutant General, &c., &c., &c.,
Ottawa.

"B" COMPANY, AND ROYAL SCHOOL OF INFANTRY.

ST. JOHNS BARRACKS, 15th December., 1887.

SIR,—I have the honor to submit the following report for the information of the Major-General Commanding, together with such remarks and recommendations I think necessary for the better management and in the interests of the Corps placed under my command.

The conduct of the men has been good. My officers and N.C.O. have, as usual, performed their duties with zeal and carried out with attention the orders laid down for the discipline of the School. Everything would have gone as nicely as possible had we not been marred by the desertion of six of my musicians during the summer, who were enticed to cross the frontier to form a band.

The details of our work are known to you, day by day, by the weekly returns sent to Headquarters.

The corps was inspected by the Major General Commanding, accompanied by Lieut. Colonel Duchesnay, D.A.G., of Quebec, and Capt. Wise, A.D.C., on the 20th July last. Before leaving, the General kindly caused his satisfaction to be recorded in a regimental order.

Instruction.

During the year 81 officers, N.C.O. and privates attended the School, with the results shown in the annexed tabular form. To this number must be added 10 N.C.O. and privates of the Company, making a total of 91 who attended the different courses

of instruction. As I remarked in my last report, not sufficient care is taken by commanding officers in selecting their N.C.O. or men for the School. The unsuccess of many is due to their want of education. Often their letters of application are copied, and when left to their own resources they cannot pass the final written examination.

RETURN of Officers, Non-Commissioned Officers and Men who have been attached to the Royal School of Infantry, St. Johns, P.Q., from the 1st to the 31st December, 1887.

RANKS.	Total of each rank who have attended.	Long course.	"B" Company, R.S.I.	CERTIFICATES. Grades. A. 1.	A. 2.	B. 1.	B. 2.	Left with permission.	Left without permission.	Attendance.	Still at School.	Discharged, medically unfit.
Captains	6	.....	.....	4	1	.....	.....	.....	.....	1	.....	....
Lieutenants	23	1	.....	11	10	.....	.....	.....	.....	1	1	.....
Sergeants	21	2	.....	.....	.....	6	8	1	1	2	2	1
Corporals	6	.....	3	.....	.....	4	1	.....	.....	4	.....	.....
Bug ers	5	.....	.....	.....	.....	.....	.....	.....	.....	4	1	.....
Privates	20	.....	7	.....	.....	4	15	.....	.....	8	....	.....
Total	81	3	10	15	11	14	24	1	1	20	4	1

Long Course.

As shown in the above tabular form, one Long Course Officer, Lieut. Arthur d'Orsonnens, attended the Royal Military College and left us in the beginning of June with a first-class Long Course certificate.

During the year changes have been made as to the duration of this Course. I do not know yet how it will work; the Royal Military College Course being of one term only and at a fixed date, the Officer following the Long Course will necessarily have to wait some time to join the Royal Military College, and an interval will occur when he will be without instruction and military supervision. I pray to be allowed to recommend that the Course at the Infantry Schools be extended to nine months, the same as the Artillery Course, thus enabling the Officer to catch the term at the Royal Military College during the year, and as the two courses are concurrent I strongly recommend that the results of the two examinations be added and that from the percentage of the whole, the class of certificate for Long Course be granted by the Commandant of the School of the arm, to which the Officer belongs.

Instruction Outside of the School.

During the year two Brigade Camps were formed not far from St. Johns and I divided my instructors amongst Districts Nos. 5 and 6. I regret I was unable to send any to Quebec. I am glad to say that from reports from the Deputy Adjutants-General the duties of my Non-Commissioned Officers were satisfactorily performed.

RETURN of Non-Commissioned Officers and men detailed for outside duties from 1st January, 1887, to 31st December, 1887.

Rank and Name.	On what Duty.	From	To
		1887.	1887.
Sergt.-Instructor Rivet	Instructor, Joliette College	April 1	April 15
do do	do St. Thérèse	May 27	June 11
do DuPlessis	do Three Rivers	do 27	do 11
Corp. Goodfellow	do Morrisburg	do 27	do 14
	Granby Camp.		
Sergt.-Major Phillips	Brigade Sergt.-Major	June 21	July 1
Corp. Goodfellow	Instructor	do 21	do 1
Private Pidgeon	Provost	do 21	do 1
	Laprairie Camp.		
Sergt.-Instructor Rivet	Instructor	do 21	do 1
do DuPlessis	do	do 21	do 1
Sergt. Lamontagne	do	do 21	do 1
Bugler Walsh	Brigade Bugler	do 21	do 1
do Powell	do	do 21	do 1
Sergt.-Instructor Rivet	Instructor, Rigaud College	Nov. 19	Dec. 7

Administration.

I beg to refer to my last report upon that subject, and beg to draw specially the attention of the Major General Commanding upon the insufficient number of Non-Commissioned Officers and men to carry on the work of the School.

During the year some changes have taken place in the Corps. Captain and Major Vidal has been transferred to "C" Company in Toronto; Lieut. and Captain C. Coursol has been promoted to the command of "B" Company. This opening to promotion in the School Corps by seniority has been well received and is giving much hope and confidence to subaltern Officers who look up to it to qualify for higher ranks.

A Quartermaster has also been added to the strength, in honorary Captain L. E. Frenette, formerly of the 9th Battalion.

The regimental system of each School should be thoroughly established by the appointment of a 2nd Captain and the division of the Corps into two Companies. I was unable the other day to order a Regimental Court-Martial, having no Captain to preside, my only Captain being on the sick list at the time.

I am in need of more Staff Sergeants and I pray that an Hospital Sergeant, an Orderly Room Sergeant and a Signalling Instructor be added to the present establishment, giving those, who have performed these duties for merely nothing, a fresh encouragement and a status they deserve, as well as the uniform of their ranks.

Bands and Buglers.

My past experience with the militia has proved to me the necessity of good buglers in every camp of training for the militia. Some means should be taken to have in the band establishment a N. C. O., specially entrusted with the care and duties of training young buglers, and special certificates should be granted to young men who

have proved themselves steady and able to sound all the calls required, in the field as well as in garrison.

The Bugle Major I also recommend to rank as Warrant Officer, and that bandsmen be classified into two or three classes with different rates of pay, as an incentive to young musicians and the means of keeping in the corps well trained men.

Ranges.

Steps have been taken to obtain a suitable range for our own musketry training as well as for the attached men. I have not been able, as yet, to conclude any arrangements, but correspondence is being exchanged with the Militia Department, and I hope soon for a favorable settlement of the affair.

Recreation, Library and Study.

Efforts of all kinds are made to build a home for the soldier in Barracks, and a permanent committee presided by Sergt.-Major Jos. Phillips, and composed of the Staff Sergeants and others, are continually at work seeking for them amusements which will benefit them physically and keep them out of harm.

Under that committee the library has attained a standard not usually found in Barrack libraries. More than 1,000 volumes, consisting of selected works on history, biographies, travels, science, arts and literature are now at the disposal of the Corps.

To aid and correct, as much as I can within the limits of my power, the want of education in some of the N. C. O. and privates attached to the School, I have established a temporary evening class, where men, during a short course, can go and perfect their writing, learn a little of arithmetic and book keeping, &c. This course is only voluntary but has rendered some service. I can only hope that some day this institution will be officially recognized, as it would be real philanthropy to use the time a soldier has to serve the State to improve his education and render him to society fitted for other works.

Repairs.

Much has been done this year to repair and improve the barracks. The militia architect has successfully drained Barrack A, of which the cellars were for a long time filled with stagnant water.

The old hospital has been covered with sheet iron and rendered water proof, but nothing more. In my estimates, I again ask for a small amount to continue the repairs of that fine old building, and to divide it into married quarters, stores, gymnasium, and shooting gallery for the use of Morris's tubes in all seasons.

Water Supply.

Last year I considered it my duty to draw your attention on the insufficiency of the water power to fight a fire in case of accident. I feel obliged to draw again your attention on the subject, and in the meantime pray for the issue of a fire engine for the Barracks, as well as a telegraphic alarm from the Barracks to the fire department in the town of St. Johns.

I have the honor to be, Sir,

Your obedient servant,

G. D'ORSONNENS, Lt.-Colonel,
Commandant Royal School of Infantry.

To the Adjutant General of Militia,
Ottawa.

"C" Company, and School of Infantry.
New Fort Barracks,
Toronto, 3rd December, 1887.

Sir,—I have the honor to submit, for the information of the Major-General Commanding, the Annual Report of the progress and state of the Royal School of Infantry under my command, for the year 1887.

Again, as in 1886, has the School been in operation for the whole year without ceasing, a "Special" course being given during the usual summer vacation for the convenience of Officers of the City Corps and others who could not attend during the regular terms.

As up to the present time this has been the only Military School in the Province of Ontario, it has been found impossible to pretend to meet the requirements of the force, in the way of instruction, without an extra term.

Below is given a summary of the number admitted and certificates granted since my last report :—

Distribution.	Officers.	N.-C. O. and men.
Remaining from 1886	1	5
Joined in 1887	60	80
Passed do	45	38
Withdrawn or failed	16	44
Remaining	0	3

The certificates given were classified as under :—

1st Class, Long Course, Grade A	2
1st do Short do do	11
2nd do do do do	8
1st do Special do	4
2nd do do do	20
1st do Short do Grade B	2
2nd do do do do	28
Buglers	8

In a former report I complained of the want of care in the selection, by Commanding Officers, of those sent for instruction as Non-Commissioned Officers, and I have a second time to refer to the same subject; a glance at the summary above given shows that not half the Non-Commissioned Officers and men sent obtain certificates, and even with many of those successful, the required number of marks was only just obtained and no more.

Drill Shed.

I must again press for the erection of a Drill Shed at this School. We are terribly at a loss, in the winter months, for a building sufficiently large to meet the requirements of instruction.

Equitation.

The necessity for adding equitation to the course of instruction at the Schools of Infantry appears more prominent each year. In my capacity of Deputy Adjutant General I find the majority of Infantry Mounted Officers poor horsemen, and in consequence more attention is bestowed by them on parade to their horses than to their men.

Camp.

"C" Company, I. S. C., under Lieut. Wadmore, was present in the District Camp at Niagara, and rendered most effective assistance in the form of instructors

as well as soldierly examples. Under authority at the time given, the attached Officers about finishing a Short Course also joined the Camp, and being distributed among the different Corps proved of great use.

Repairs and Works.

I have to report all the repairs and works to barracks, &c., authorized during the year as satisfactorily completed, still leaving, however, very much yet to be done in replacing the remaining old floors, ceilings and window frames, worn out through long use.

The alteration in the system of heating, as recommended by me, has not yet been carried out, but I hope in the interests of economy, comfort and convenience means may be found during the coming year whereby this much needed change may be effected. I would also strongly recommend the substitution of gas or electric light for coal oil in lighting the barracks and approaches thereto, as another necessity and advantage to the service. During the past two years the sea wall on the lake front of the barracks has received a great deal of repair and very little more money expended will make it sound and good for years to come. Along the lake shore, on either side of the barracks, however, the bank is very fast disappearing through the action of the water, and immediate steps are necessary if the land is to be preserved. An esplanade or line of piles should be laid down.

By the artificers and men of "C" Company, a large amount of work has been done during the past year in addition to the regular duty.

A good dock 100 feet long, begun in 1886, is now completed; the main road to the city regraded, together with an entirely new piece of road built to secure a shorter way to the west end of the town, have been among the principal works undertaken and carried out.

Staff.

The Officers and Non-Commissioned Officers doing duty in connection with the School at this station I have pleasure in reporting as most earnest and zealous in their endeavors to promote its efficiency, also Lieut.-Colonel Alger, the District Paymaster and Superintendent of Stores.

By the establishment of an Infantry School at London the promotion from here of Major (now Lieut.-Colonel) Henry Smith, has followed, and I cannot permit the opportunity to pass without recording my opinion of this Officer, as one of the most enthusiastic and hard working in the Militia force.

Major Vidal, from "B" Company, I. S. C., his successor, has reported and taken up his duties.

I have the honor to be, Sir,

Your obedient servant,

W. D. OTTER, Lieut.-Colonel.,
Commandant Royal School of Infantry, Toronto.

"D" Company, and Royal School of Infantry,

London, December, 1887.

This School, of which Lt.-Col. Smith is Commandant, is only in course of organization, and therefore no report on it has been received.

APPENDIX No. 10

CERTIFICATES, ROYAL SCHOOLS OF MILITARY INSTRUCTION.

NAMES of Officers, Non-Commissioned Officers and Men of the Active Militia, who have obtained Certificates during the Year 1887.

ENGINEER.

Name and Rank.	Corps.	Date of Certificate.		Course.			Grade.	
		First Class.	Second Class.	Long.	Short.	Special.	A	B
Balfour, Sergeant E	Montreal Co	May 9			S			B
Brown, Sapper T	do	do 9			S			B
Burpee, Sapper F	Brighton Co		May 10		S			B
Hamilton, Sapper J	do		do 10		S			B
Mills, Sapper A. F	do		do 10		S			B
Ronald, Sapper J. R	do		do 10		S			B
Troy, Corporal J. J	do	May 10		L				B
Turner, Sapper R	Montreal Co		May 9		S			B
Young, Sapper J. R	Brighton Co		do 10		S			B
Total 9		3	6	1	8			9

ARTILLERY.

Amyrauld, 2nd Lieutenant A. H	Shefford Field Battery	Dec. 21			S		A	
Balfour, Gunner R	Welland Canal F.B		Nov. 30		S			B
Bartlett, Gunner J	Halifax Brigade		Mar. 31		S			B
Benton, Brigade Sergeant Major J	Montreal do		Dec. 11			Sp.		B
Bergeron, Lieutenant J. E. P	No. 2 Battery, Levis	Oct. 26		L			A	
Berubé, Sergeant Major A	do		Mar. 31		S			B
Blinkhorn, Corporal G. W.	London Field Battery	Mar. 31			S			B
Brewer, Corporal H. N	Woodstock do	do 31			S			B
Bridgeford, Sergeant J. S	"A" Battery, R. C. A		Jan. 1	L				B
Brimstone, Gunner G	do		Sept. 2		S			B
Cameron, Bombardier E	Toronto Field Battery		Mar. 31		S			B
Campbell, Gunner C	Woodstock do	Mar. 31			S			B
Capes, Gunner S. R	Gananoque do	do 31			S			B
Carroll, Corporal H	Halifax Brigade	do 31			S			B
Chamberlain, Gunner W	Welland Canal F.B	do 31			S			B
Christopher, Gunner A	New Brunswick Brigade		Mar. 31		S			B
Clayton, Gunner J. P	do	Mar. 31			S			B
Connolly, Corporal M	Levis Battery		Mar. 31		S			B
Craig, Bombardier E	Digby do	Mar. 31			S			B
Crawford, Gunner W. M	Winnipeg Field Battery		Mar. 31		S			B
Crowe, 2nd Lieutenant W	Sydney do	Mar. 30			S		A	
D'Aoust, Acting Bombardier G.	"B" Battery, R. C. A	Dec. 28			S			B
DeChamard, Acting Bombardier C.	"A" do do		Sept. 2		S			B
DeWolfe, 2nd Lieutenant J. C	Halifax Brigade	June 5				Sp	A	
Dimock, 2nd Lieutenant J. S	do	do 5				Sp.	A	
Donaldson, Sergeant H	1 P. Brigade F. A	Sept. 2		L				B
Drennan, Captain W. M	Kingston Field Battery	April 12			S		A	

LIST of Certificates—*Continued.*

Name and Rank.	Corps.	Date of Certificate. First Class.	Date of Certificate. Second Class.	Course. Long.	Course. Short.	Course. Special.	Grade. A	Grade. B
Ducharme, Corporal L. J. O	"A" Battery, R. C. A.	Jan. 1		L				B
Faragher, Gunner W	Montreal Brigade		Dec. 11			Sp.		B
Fegan, Sergeant E	do	Dec. 11				Sp.		B
Fellows, Acting Bombardier W	"B" Battery, R. C. A.	Feb. 28			S			B
Fellows, Sergeant W	do	Oct. 26		L				B
Field, Bombardier S	"A" do	Sept. 2			S			B
Finlayson, 2nd Lieutenant J. A	Montreal Brigade	Dec. 11				Sp.	A	
Fisher, Gunner C. H	New Brunswick Brigade		Mar. 31		S			B
Foote, Gunner J	"A" Battery, R. C. A.		Sept. 2		S			B
Fyfe, Bombardier A	Montreal Brigade	Dec. 11				Sp.		B
Fyfe, Bombardier W. C	do	do 11				Sp.		B
Galloway, Corporal A	Hamilton Field Battery.	July 14			S			B
Gaw, Bombardier J. H	Shefford do	Mar. 31			S			B
Gibson, Staff Sergeant G. M	Montreal Brigade		Oct. 26	L				B
Gillies, Sergeant	Durham Field Battery	Sept. 2		L				B
Gore, Bombardier R	"A" Battery, R. C. A.	do 2			S			B
Gowling, Gunner P	Montreal Brigade		Dec. 11			Sp.		B
Grant, Gunner J. C	New Brunswick Brigade		Mar. 31		S			B
Hallatt, Corporal W	Welland Canal F. B.		do 31		S			B
Halliday, Gunner S	do		do 31		S			B
Harper, Gunner T	Montreal Brigade	Dec. 11				Sp.		B
Harris, Gunner W	Hamilton Field Battery	Nov. 30			S			B
Harrison, Bombardier B	do		Mar. 31		S			B
Hogg, Gunner J	Picton Battery		do 31		S			B
Homer, Corporal W. J	Hamilton Field Battery.	Mar. 31			S			B
Irving, Lieutenant P. A	British Columbia Brigade	Dec. 19				Sp.	A	
Keough, Bombardier D	"B" Battery, R. C. A.	do 28			S			B
Kirkpatrick, Gunner W	New Brunswick Brigade	Mar. 31			S			B
Larkin, Gunner J	Montreal Brigade	Dec. 11				Sp		B
Lavoie, Sergeant L	"B" Battery, R. C. A.		Oct. 26	L				B
Little, 2nd Lieutenant H. R	Halifax Brigade	June 5				Sp.	A	
Merewether, 2nd Lieutenant H. D.	1 P. Brigade F. A.	Mar. 21			S		A	
Moore, Captain F. S	P. E. Island Brigade	June 27			S		A	
Mulcahy, Sergeant A	"A" Battery, R. C. A.	Jan. 1		L				B
McDonald, Sergeant J	Sydney Field Battery	Mar. 31			S			B
McGowan, Corporal H	New Brunswick Brigade	do 31			S			B
McKenna, Gunner A	do		Mar. 31		S			B
McKenzie, Lieutenant S. A	Gananoque Field Battery	Nov. 30			S		A	
McLeod, Captain W. McK	Sydney do	Mar. 31			S		A	
Nealy, Bombardier J	New Brunswick Brigade	do 31			S			B
Ogilvy, 2nd Lieutenant J	Montreal Brigade	Dec. 11				Sp.	A	
O'Leary, Gunner M	"B" Battery, R. C. A.	April 16			S			B
O'Leary, Acting Bombardier J	do		Oct. 26	L				B
Palmer, Captain E	P. E. Island Brigade		do 26	L			A	
Parker, 2nd Lieutenant F. W	Halifax Brigade	June 5				Sp.	A	
Pilton, Corporal W	Hamilton Field Battery	Nov. 30			S			B
Prevost, Gunner W	"B" Battery, R. C. A.	April 16			S			B
Prevost, Bombardier W	do	Oct. 26		L				B
Prower, Captain J. E	8th Battalion	Sept. 13		L			A	
Reid, Bombardier E	Shefford Field Battery	Mar. 31			S			B
Reid, Bombardier J	do	do 31			S			B
Richards, Gunner J	Montreal Brigade	do 31			S			B
Ross, 2nd Lieutenant A. G.	Winnipeg Field Battery.		Aug. 21			Sp.	A	
Ruel, Bombardier J. G	Woodstock do	Mar. 31			S			B
Seale, Corporal W. R	Shefford do		Dec. 22		S			B
Secord, Bombardier H. C	Welland Canal F. B	Mar. 31			S			B
Scott, Gunner H	Woodstock Field Battery	do 31			S			B
Southland, Gunner H	Richmond do		Sept. 2		S			B
Stephen, Bombardier W. R	Sault Ste. Marie M. A.		Mar. 31		S			B
Swallow, Gunner A	"B" Battery, R. C. A.	April 16			S			B
Swallow, Acting Bombardier A	do	Oct. 26		L				B
Tobin, Gunner F. K	Digby Battery	Mar. 31			S			B

LIST of Certificates—*Continued.*

Name and Rank.	Corps.	Date of Certificate. First Class.	Date of Certificate. Second Class.	Course. Long.	Course. Short.	Course. Special.	Grade. A	Grade. B
Turnbull, Acting Bombardier J.	"A" Battery, R. C. A.	do 31			S			B
Vaughan, Gunner J.	Halifax Brigade		Mar. 31		S			B
Wallace, Gunner M.	New Brunswick Brigade		do 31		S			B
Willis, Corporal T.	"B" Battery, R. C. A.	Feb. 28			S			B
Wood, Bombardier J.	do	Oct. 26		L				B
Total 94		63	31	15	63	16	18	76

CAVALRY.

Bartlett, Corporal H.	Royal School Cavalry.	Dec. 31, '86			S			B
Billings, Lieutenant J. S.	5th Regiment		Nov. 21		S		A	
Bliss, Lieutenant G. W.	do	April 31			S		A	
Bliss, Captain L. D. C. F.	Ottawa Field Battery.	Sept. 17				Sp.	A	
Bryant, Corporal J.	Royal School Cavalry.	Nov. 22			S			B
Gaines, Troop Sergeant Major J.	4th Regiment	Mar. 31			S			B
Dickson, 2nd Lieutenant R. C.	G.-G. Body Guard	June 15			S		A	
Gerow, Corporal G.	3rd Regiment	Mar. 31			S			B
Hewson, Private C.	8th do		April 30		S			B
Hunter, Corporal T.	4th do	Mar. 31			S			B
Leatherland, Sergeant J. F.	4th do		Nov. 30		S			B
Maunsell, Captain G. S.	8th do	Dec. 31		L			A	
Methot, Corporal A.	Royal School Cavalry	do 31			S			B
Murray, Private J. E.	8th Regiment	Mar. 31			S			B
Oswald, Private C.	G.-G. Body Guard	Dec. 31, '86			S			B
Phinn, Private W.	3rd Regiment	Mar. 31			S			B
Pomroy, Captain A. L.	5th do	April 30			S		A	
Ross, Corporal W. D.	Q. O. C. Hussars	Mar. 31			S			B
Ryan, Corporal C. E.	8th Regiment		Mar. 31		S			B
Servos, Sergeant A.	2nd do		Jan. 10		S			B
Sheck, Sergeant C. E.	8th do	Mar. 31			S			B
Sherman, Corporal W. W.	3rd do	do 31			S			B
Street, Private J. A.	P. L. D. Guards		July 12		S			B
Sutton, 2nd Lieutenant D.	3rd Regiment	April 30			S		A	
Tufford, Private M. W.	2nd do		April 30		S			B
Wallace, Sergeant F. W.	3rd do		Mar. 31		S			B
Warner, Private E.	3rd do	Mar. 31			S			B
Whelpley, Lieutenant F. E.	8th do		Aug. 6			Sp.	A	
Wiles, Private J. H.	8th do		Mar. 31		S			B
Wood, Sergeant R. W.	Kings Troop	Mar. 31			S			B
Total 30		20	10	1	27	2	8	22

INFANTRY.

Allan, 2nd Lieutenant J. A. W.	12th Battalion		Dec. 3			Sp.	A	
Alves, Corporal J.	66th do		June 30		S			B
Arnold, Sergeant G. B.	94th do		Mar. 31		S			B
Ashworth, Captain G. J.	12th do	June 30				Sp	A	
Badgley, 2nd Lieutenant G. W.	3rd do	Nov. 30				Sp.	A	
Bangs, Private E.	"B" Company, I. S. C.	April 1			S			B
Barrett, Private D.	67th Battalion		Mar. 31		S			B
Barton, Private H.	95th do		do 31		S			B
Beckett, 3rd Lieutenant D. W.	56th do		do 31		S			B
Bell, Private W.	67th do		do 31		S			B
Bentley, 2nd Lieutenant W. D.	68th do	April 30				Sp.	A	
Birchard, Lieutenant J.	34th do		Aug. 13			Sp.	A	

List of Certificates—*Continued.*

Name and Rank.	Corps.	Date of Certificate. First Class.	Date of Certificate. Second Class.	Course. Long.	Course. Short.	Course. Special.	Grade. A	Grade. B
Bloomer, Private R. F	"C" Company, I. S. C.		Dec. 3		S			B
Botsford, Lieutenant A. W	31st Battalion		June 30		S		A	
Boulter, Sergeant F	82nd do	Dec. 14			S			B
Bourke, Corporal J	"C" Company, I. S. C.		April 15		S			B
Bowman, 2nd Lieutenant J. W	13th Battalion		Aug. 13			Sp.	A	
Boyer, Captain G E	67th do	Mar. 31			S		A	
Braithwaite, Sergeant C. P	School Mounted Inf.	June30,'86			S			B
Brearley, Private M	do		Aug. 3		S			B
Bredin, Lieutenant Colonel J. H	59th Battalion	Mar. 31				Sp	A	
Brock, Lieutenant H	2nd do	do 31				Sp.	A	
Brondgeest, Corporal T. W	95th do	do 31			S			B
Broughall, 2nd Lieutenant G. L. W	90th do	April 20				Sp.	A	
Brown, Private H. L	R. S. M. I	Aug. 3			S			B
Brown, 2nd Lieutenant J. S	36th Battalion		Aug. 13			Sp.	A	
Burland, Captain J. H	6th do	July 6				Sp.	A	
Burnham, Corporal W. F	"C" Company, I. S. C.		Dec. 3		S			B
Calder, Sergeant C	11th Battalion		April 1		S			B
Caldwell, Private J	"B" Company, I. S. C.		July 6		S			B
Cameron, 2nd Lieutenant A. B	10th Battalion		Aug. 13			Sp.	A	
Campbell, Private H	55th do		Dec. 2		S			B
Campbell, 2nd Lieutenant J. S	19th do		Aug. 13			Sp.	A	
Cantlie, 2nd Lieutenant G. S	5th do	July 6				Sp.	A	
Carle, Private E. H	67th do	Mar. 31			S			B
Chambers, 2nd Lieutenant E. H	6th do		Mar. 31			Sp	A	
Charest, 2nd Lieutenant C	65th do		July 6		S		A	
Charter, Private A. B	57th do		do 6		S			B
Chute, 2nd Lieutenant N. E	69th do	Mar. 31			S		A	
Clark, Sergeant F. J	95th do	Aug. 3			S			B
Clarke, Sergeant J. A	96th do		Mar. 31		S			B
Cleveland, 2nd Lieutenant G. M	62nd do		Oct. 31			Sp	A	
Coote, 2nd Lieutenant F	89th do		Aug. 31		S		A	
Côté, Captain J. G	81st do		Mar. 31		S		A	
Crockett, Lieutenant G	82nd do	Mar. 31			S		A	
Cullingworth, Sergeant J. E	20th do		Mar. 31		S			B
Davies, Private J. B	74th do	Nov 30			S			B
Davison, 2nd Lieutenant T. E	66th do	April 30				Sp.	A	
Demers, Captain I. E	17th do	Dec. 1			S		A	
Desbarats, 2nd Lieutenant E	3rd do		Mar. 31			Sp.	A	
Desnoyers, 2nd Lieutenant M. G. E	65th do		do 31			Sp	A	
Dewson, Lieutenant W. W	21st do		Aug. 13			Sp.	A	
Dickie, Sergeant A W	68th do		Mar. 31		S			B
Dinsmore, Private W. H	31st do		Dec. 3		S			B
Dobell, 2nd Lieutenant W. M	8th do	Mar. 31			S		A	
D'Orsonnens, 2nd Lieutenant A	87th do	April 1		L		Sp.	A	
Dow, 2nd Lieutenant W. R	9 st do		April 19			Sp.	A	
Downie, 2nd Lieutenant E	72nd do	Mar. 31			S		A	
Doxtader, Sergeant P	54th do	Dec. 3			S			B
Dunn, 2nd Lieutenant C. J	8th do	Mar. 31				Sp.	A	
Eaton, Lieutenant D. I	93rd do	June 30				Sp.	A	
English, Corporal R. H	14th do		July 6		S			B
Farrier, Sergeant J	81st do		April 1		S			B
Ferry, Sergeant E	1st do		do 1		S			B
Findlay, Sergeant W	54th do	Dec. 3			S			B
Finnie, Private W	"A" Company, I. S. C.		Nov. 30		S			B
Flett, Sergeant T. R	90th Battalion	Mar. 31			S			B
Forster, Private W. D	"A" Company, I. S. C.	do 31			S			B
Forsyth, Sergeant R	68th Battalion		June 30		S			B
Foster, Private A	35th do		July 6		S			B
Foucher, Lieutenant J	83rd do		Dec. 1		S			B
Fox, Captain T. W	20th do	Mar. 31				Sp.	A	
Fraser, 2nd Lieutenant J. K	78th do	June 30			S		A	
Gibson, Private J. E	54th do		Dec. 3		S			B

LIST of Certificates—*Continued.*

Name and Rank.	Corps.	Date of Certificate.		Course.			Grade.	
		First Class.	Second Class.	Long.	Short.	Special.	A	B
Girard, Sergeant J	64th Battalion		April 1		S			B
Goodfellow, Corporal R	"B" Company, I. S. C.	April 1			S			B
Gray, Lieutenant J	35th Battalion		June 30		S		A	
Grierson, Lieutenant J. F	34th do		Aug. 13			Sp.	A	
Guay, Private J	"B" Company, I. S. C.		July 6		S			B
Guy, 2nd Lieutenant E P	3rd Battalion		Nov. 30			Sp.	A	
Gwyn, Lieutenant Colonel H. C	77th do		Aug. 13			Sp	A	
Hamilton, Sergeant M	57th do		July 6		S			B
Hebert, 2nd Lieutenant Z. J. R	65th do	Mar. 31				Sp.	A	
Heinricks, Corporal J. S	G.-G. Foot Guards	July 6			S			B
Henry, Private W	57th Battalion		Mar. 31		S			B
Hill, Lieutenant F. W	44th do	Dec. 3		L			A	
Hillary, Lieutenant R. M	12th do		June 30		S		A	
Hinley, Private H	"B" Company, I. S. C.	April 1			S			B
Hiscott, Captain J	19th Battalion	Dec. 3			S		A	
Holden, 2nd Lieutenant W J	32nd do	do 3			S		A	
Hole, 2nd Lieutenant C. C	66th do	April 30				Sp	A	
Horan, Sergeant W	34th do		Mar. 31		S			B
Howden, 2nd Lieutenant J. H	90th do	April 20				Sp.	A	
Ince, 2nd Lieutenant J	2nd do		April 16			Sp	A	
Jack, 2nd Lieutenant C. M	66th do		Oct. 18			Sp.	A	
Jackson, Private J	19th do		Dec. 3		S			B
Jewell, Corporal B. K	82nd do		Mar. 31		S			B
Johnson, Corporal C	12th do		Dec. 3		S			B
Johnson, Private P. C	"A" Company, I. S. C.		Nov. 30		S			B
Johnson, 2nd Lieutenant R. G	2nd Battalion		Mar. 31		S		A	
Johnson, Lieutenant R. G	2nd do	Dec. 3			S		A	
Jones, Private A. E	62nd do		Mar. 31		S			B
Kearney, Corporal G	"A" Company, I. S. C.		Nov. 30		S			B
Keilly, Sergeant M S	82nd Battalion		Mar. 31		S			B
Kelly, Private T. J	"B" Company, I. S. C.	April 1			S			B
Kennedy, Private L	67th Battalion		Mar. 31		S			B
Kirkman, Sergeant E. S.	95th do	Mar. 31			S			B
Kupkey, 2nd Lieutenant J. J	67th do	do 31			S		A	
Labelle, Lieutenant A. E	65th do	do 31				Sp	A	
Laframboise, 2nd Lieutnant C. A	65th do	do 31				Sp	A	
Lamarre, Color Sergeant A	85th do		Dec. 3		S			B
Lamontagne, Sergeant E	9th do	Sept. 1		L				B
Lawless, 2nd Lieutenant W. T	43rd do		Dec. 3		S		A	
LeCain, 2nd Lieutenant G. A	69th do	Mar. 31			S		A	
Lee, Corporal T. C	71st do	do 31			S			B
Lemay, Sergeant E	65th do		Dec. 3		S			B
Lester, Corporal G. W	42nd do		do 3		S			B
Lighthall, Captain A	16th do		Aug. 13			Sp	A	
Lloyd, Sergeant W. K	35th do		Mar. 31		S			B
Mabee, Sergeant J	47th do		July 6		S			B
Macdonell, Sergeant H. E	R. S. M. I	June 30, '86			S			B
Mack, Sergeant S. E	75th Battalion	Mar. 31			S			B
Mackay, 2nd Lieutenant F. S	65th do		Mar. 31			Sp.	A	
Macleod, 2nd Lieutenant N	2nd do		Aug. 13			Sp.	A	
Magee, Captain W. C	62nd do	Dec. 31, '86			S		A	
Malony, Corporal M	"B" Company, I S C.	July 6			S			B
Manning, 2nd Lieutenant J	62nd Battalion	Oct. 31				Sp.	A	
Marquis, Sergeant T. G	73rd do	Nov. 30			S			B
Martin, Captain G. B	11th do	April 1			S		A	
Maxwell, Private R	55th do		April 1		S			B
Meakins, 2nd Lieutenant C. W	3rd do	Nov. 30				Sp.	A	
Menger, Captain J	66th do	Sept. 30				Sp.	A	
Middleton, Captain J	"C" Company, I. S. C		Dec. 3		S			B
Miller, Captain C	8th Battalion	Dec. 3				Sp.	A	
Monette, Private W	64th do		April 1		S			B
Moore, Sergeant R. J	59th do		Mar. 31		S			B

List of Certificates—*Continued.*

Name and Rank.	Corps.	Date of Certificate. First Class.	Date of Certificate. Second Class.	Course. Long.	Course. Short.	Course. Special.	Grade. A	Grade. B
Morphy, Lieutenant H. O.	2nd Battalion	Aug. 31		L			A	
Munro, Lieutenant G	35th do		Mar. 31		S		A	
Murdoch, Sergeant N	96th do		June 1		S			B
Murray, 2nd Lieutenant A. G.	36th do		do 3			Sp.	A	
Mutton, Captain W. G	2nd do	June 30			S		A	
McAully, Corporal W.	94th do		Mar. 31		S			B
McCarthy, Private F	G.-G. Foot Guards		April 1		S			B
McCaskill, Sergeant R. M.	11th Battalion		do 1		S			B
McClaverty, Sergeant W. J.	62nd do	Mar. 31			S			B
McDonald, Private J	"B" Company, I. S. C.	July 6			S			B
McGee, Corporal F. E	67th Battalion		Mar. 31		S			B
McKay, 2nd Lieutenant W. M.	43rd do		Dec. 3			Sp.	A	
McKee, Lieutenant H E	35th do		June 30		S		A	
McKeen, Sergeant J. R	93rd do	June 30			S			B
McKnight, 2nd Lieutenant W.	73rd do	Mar. 31			S		A	
McLaren, 2nd Lieutenant A.	36th do		Mar. 21		S		A	
McLaren, Major H	13th do	June 30			S		A	
McLauchlin, Captain A. H.	67th do	Mar. 8		L			A	
McLeod, Captain T. S	32nd do	June 30			S		A	
McManus, Private F	"A" Company, I. S. C.		Mar. 31		S			B
McManus, Corporal J	54th Battalion		April 1		S			B
McNeil, Corporal A. J	94th do		Mar. 31		S			B
Nelson, 2nd Lieutenant W. J.	2nd do		Aug. 13			Sp.	A	
Nicholl, 2nd Lieutenant J. L.	69th do	Mar. 31			S		A	
Ostell, 2nd Lieutenant J. B.	65th do	do 31				Sp.	A	
Paquin, Lieutenant J. G	81st do		Mar. 31		S		A	
Perreault, Private H	81st do		April 1		S			B
Phillips, 2nd Lieutenant A. A.	36th do		Dec. 1		S		A	
Pickett, Sergeant D. W.	67th do		Mar. 31		S			B
Proudfoot, Sergeant J. G.	78th do		do 31		S			B
Purdy, Major E. F	82nd do		Feb. 28			Sp.	A	
Rainsford, Private T. W.	71st do		June 30		S			B
Ray, Major S. W.	96th do	Mar. 31			S		A	
Rennie, 2nd Lieutenant R	2nd do		Aug. 13			Sp.	A	
Robinson, Corporal H.	81st do		Mar. 31		S			B
Rochon, Sergeant A	81st do	April 1			S			B
Ross, Sergeant W.	81st do	June 30			S			B
Savard, Sergeant H.	61st do		April 1		S			B
Scott, Private F.	71st do		Mar. 31		S			B
Scott, Lieutenant J. H	32nd do	Aug. 6			S		A	
Seeton, Lieutenant E. A.	36th do	April 30				Sp.	A	
Shaw, Sergeant W. M	68th do		Mar. 31		S			B
Shea, Private E	G.-G. Foot Guards		April 1		S			B
Shea, Private J. R	46th Battalion		Mar. 31		S			B
Sheriff, Lieutnant J. G	82nd do	Nov. 30			S		A	
Skinner, Q. M. Sergeant W.	66th do	Mar. 31			S			B
Smith, 2nd Lieutenant A. H.	49th do	July 6				Sp.	A	
Smith, Sergeant W. H	77th do		Mar. 31		S			B
Snider, Private G. J	74th do		June 30		S			B
Soy, 2nd Lieutenant R. C.	93rd do	Mar. 31			S		A	
Sparham, Captain T. W	42nd do	do 31			S		A	
Spurr, Major S	72nd do	do 31			S		A	
Stather, Corporal G. F.	68th do		Nov. 30		S			B
Stevens, Sergeant A. J	74th do	Nov. 30			S			B
Street, Bugler F	67th do		Nov. 30		S			B
Stroulger, Private C	G.-G. Foot Guards	April 1			S			B
Sturton, Sergeant H. A.	61st Battalion	do 1			S			B
Sullivan, Sergeant J	64th do	do 1			S			B
Swartz, Private E. O	32nd do		July 6		S			B
Symes, Private J	35th do		Dec. 3		S			B
Talbot, 2nd Lieutenant A. H.	90th do	April 20			S		A	

LIST of Certificates—*Concluded.*

Name and Rank.	Corps.	Date of Certificate.		Course.			Grade.	
		First Class.	Second Class.	Long.	Short.	Special.	A	B
Taylor, 2nd Lieutenant P. B	G.-G. Foot Guards		June 11			Sp.	A	
Thomas, Corporal F. H	do		Dec. 3		S			B
Tidswell, 2nd Lieutenant W. O.	13th Battalion		Mar. 31			Sp.	A	
Tonks, Private A. W	54th Battalion		Dec. 3		S			B
Trousdale, 2nd Lieutenant F	59th do		Mar. 31		S		A	
Valot, Sergeant G. A	66th do		June 30		S			B
Varcoe, Lieutenant J. S	33rd do		Mar. 31			Sp.	A	
Vroom, 2nd Lieutenant J. P	62nd do		Oct. 31			Sp.	A	
Walker, Corporal J	"B" Company, I. S. C.	Dec. 1			S			B
Ward, Sergeant G. L	68th Battalion	Oct. 1			S			B
Ward, Private J	G.-G. Foot Guards		April 1		S			B
Watts, Staff Sergeant E	47th Battalion	Mar. 31			S			B
Wilkin, Private A. H	55th do		Dec. 3		S			B
Wilson, Private J	11th do		April 1		S			B
Withers, 2nd Lieutenant J. C.	69th do		Mar. 31		S		A	
Wood, Corporal C. O	43rd do		May 4		S			B
Wood, Lieutenant W	8th do	Dec. 3				Sp.	A	
Wright, Corporal I. B	74th do		Nov. 30		S			B
Wright, Sergeant L. S	24th do		Mar. 31		S			B
Wyatt, Private J. T	54th do		Dec. 3		S			B
York, 2nd Lieutenant I. E.	39th do		June 2			Sp.	A	
Young, 2nd Lieutenant A. W	24th do	Mar. 31			S		A	
Total 219		92	127	5	159	55	101	118

MILITARY QUALIFICATION.

Knight, Cadet M. S	Royal Military College	Nov. 21			S		A	
Mackay, Cadet J. D	do	Sep. 30			S		A	
Murphy, Cadet M. S	do	do 30			S		A	
Total 3		3			3		3	

RECAPITULATION.

Certificates.	First Class	Second Class.	Long.	Short.	Special.	A	B	Total.
Engineer	3	6	1	8			9	9
Artillery	63	31	15	63	16	18	76	94
Cavalry	20	10	1	27	2	8	22	30
Infantry	92	127	5	159	55	101	118	219
Military Qualification	3			3		3		3
Total	181	174	22	260	73	130	225	355

APPENDIX No. 11.

ROYAL MILITARY COLLEGE OF CANADA.

Annual Report.

(From the Commandant Royal Military College, to the General Officer Commanding the Militia of Canada.)

Kingston, 25th October, 1887.

Sir,—I have the honor to submit the Annual Report on the Royal Military College for the year 1887.

Graduates of June, 1887.

The undermentioned gentlemen Cadets having completed their four years' course at the College, have received Diplomas of Graduation dated 30th June, 1887:—

Diploma with Honors—

Battalion Sergeant-Major A. L. P. Davis—distinguished in Mathematics, Military Engineering, Artillery, Engineering Drawing, English, Chemistry, Physics, Civil Engineering, Drills and Exercises.

Ordinary Diplomas—

Company Sergeant-Major F. M. Gaudet—Distinguished in Artillery, French, English, Civil Engineering, Drills and Exercises.
Company Sergeant-Major J. M. Clapp—Distinguished in Civil Engineering, Drills and Exercises.
Company Sergeant-Major A. Adams—Distinguished in Civil Engineering.
Sergeant R. J. Macdonald—Distinguished in Freehand Drawing and Conduct.
Company Sergeant-Major H. A. Morrow—Distinguished in Conduct and Discipline.
Cadet R. B. Jack—Distinguished in Civil Engineering.

2nd Class Diploma—

Sergeant G. S. Bowie.

Medals Presented for General Proficiency.

The medals presented annually by His Excellency the Governor General for general proficiency throughout the whole course have been awarded as follows:—
Gold Medal—Battalion Sergeant-Major A. L. P. Davis.
Silver Medal—Company Sergeant Major F. M. Gaudet.
Bronze Medal—Company Sergeant-Major A. Adams.

Sword for Good Conduct and Discipline.

The sword awarded annually for good conduct and discipline was won by Company Sergeant-Major H. A. Morrow.

Prizes.

The undermentioned Cadets of the Graduating Class obtained prizes for the subjects specified, having gained, respectively, the highest total of marks in each during the entire Course:—

Mathematics and Mechanics—Battalion Sergeant-Major Davis.
Surveying, Military Topography and Practical Astronomy—Co. Sergt.-Major Gaudet.
Reconnaissance—Co. Sergt.-Major Gaudet.
Military History, Tactics, Military Administration, Law, &c.—Batt. Sergt.-Major Davis.
Military Engineering—Batt. Sergt.-Major Davis.
French—Co. Sergt.-Major Gaudet.
English—Batt. Sergt.-Major Davis.
Chemistry—Batt. Sergt. Major Davis.
Physics—Batt. Sergt.-Major Davis.
Geology—Co. Sergt.-Major Gaudet.
Freehand Drawing and Painting—Sergt. Macdonald.
Civil Engineering—Co. Sergt.-Major Adams.
Drills and Exercises—Batt. Sergt.-Major Davis.

The following Cadets obtained the prizes awarded for the highest total of marks obtained during the term in their respective classes:

1st Class—Batt. Sergt.-Major Davis.
2nd Class—Sergeant Joly.
3rd Class—Cadet Fraser.
4th Class—Cadet Campbell.

The prizes for Artillery and for Engineering Drawing which are awarded at the end of the third year were gained as follows:—

Artillery—Sergeant Farwell.
Engineering Drawing—Sergeant Grant.

Highest Total of Marks Obtained in Each Subject During Year.

The following list gives the names of the Cadets who gained the highest total of marks during the year in the different subjects:—

Subjects.	1st Class.	2nd Class.	3rd Class.	4th Class.
Mathematics and mechanics	Davis	Joly	Fraser	Campbell.
Practical geometry and engineering drawing		Grant and Joly	do	
Military engineering	Davis	Farwell	Johnston, G.	Leckie.
Surveying and military topography	Gaudet	do	Fraser	
Reconnaissance				
Artillery		Farwell	Whitehead	
Military history (strategy, tactics, administration and law)	Davis	do	Rogers	
French	Gaudet	Panet	Fraser	Amos.
English			Murray	Williams, L.
Chemistry	Davis	Farwell		
Physics	do	Joly		
Geology	Gaudet			
Freehand drawing and painting	Macdonald	Bremner	O'Brian	Leckie.
Civil engineering	Adams			

Commissions in Her Majesty's Regular Army.

The following graduates of 1887 have received Commissions in the Imperial Army:—

For Royal Engineers, Batt. Sergt. Major A. L. P. Davis.
For Royal Artillery, Sergt. R. J. Macdonald.
For Infantry, Co. Sergt. Major H. A. Morrow.

An additional Commission in the Royal Artillery having recently been offered to the graduating class, Lieut. Morrow has been recommended for it.

Since the Report for 1886 was written, Sergt. C. C. Van Straubenzee, who had only completed three years at the College in June of that year, has been (as a special case) gazetted to a Commission in the Royal Artillery.

The two Infantry Commissions annually offered have again lapsed, there being no candidate for them.

Examiner's Reports.

The several Examiners report as follows:—

Artillery—

2nd Class.—The obligatory portion is well up to the average, but I regret that pressure of work causes the general neglect of the voluntary sections in favor of higher marked subjects.

Messrs. Farwell, Joly and Lesslie made a close run for first place There are no disqualifications in this class.

3rd Class.—This class, on the whole, is hardly up to the mark, and there is one disqualification. Mr. Whitehead is the best.

With regard to drills and exercises, I have nothing of a special nature to report; the time for Field Artillery drill, always dependent on the weather, has been very short this year. Sergt. Major Clapp voluntarily undertook the instruction under me, and has proved himself very efficient.

Military History, Administration, Tactics, &c.—

1st Class.—The general average is low, only one cadet having obtained 70 per cent. Mr. Davis is first in the class and is recommended for the prize.

2nd Class.—Farwell, Heneker, Lesslie and Joly have all done well. The rest are below the average.

3rd Class.—A very poor class. Rogers and G. Johnston have done fairly well, but several have failed to qualify. I consider that this class has had greater opportunities for learning and more careful instruction than any previous class, and it must be solely due to want of application that so many have failed.

Mathematics and Mechanics—

1st Class.—Three Cadets took up the Elements of Mechanism as a voluntary subject and got fair marks. During the whole course Batt. S. M. Davis came out first with a decimal of ·84 and ·54 respectively in obligatory and voluntary sections. Mr. Davis would have been a mathematician if he had application and had been pressed by others in his class. Co. S. M. Gaudet got ·67 and ·37 in obligatory and voluntary sections, and is fairly good.

2nd Class.—In this class all the Cadets but one have obtained the requisite decimal. This class is not as good as appears from the decimals obtained, as the papers I set this year were decidedly easier and the subject of Graphic Statics and Work were altogether omitted. Cadets Joly, Lesslie and Farwell have done well in the obligatory portion, and the same three with Cadet Heneker have worked well at the Integral Calculus as a voluntary section.

3rd Class.—This class varies from indifferent at the top to very bad at the bottom. The many failures show themselves in the marks, and unless a great improvement takes place next year I doubt if there will be any Cadet in the class who will be fit for recommendation for a commission in the R. E. or R. A.

4th Class.—There is excellent promise in this class. Cadets Campbell, Williams, Morris, Newman and Browne did especially well. In some of these I believe there is both ability and application. In this class, as usual, there are some very bad ones at the bottom.

Surveying, Military Topography and Reconnaissance—

1st Class.—The survey work proper has been good; astronomical work only fair. Color Sergeant Majors Gaudet and Clapp attempted the higher voluntary work. Sergeant Macdonald has proved himself to be an admirable draughtsman; also in the Reconnaissance work, Sergeant Macdonald made the best marks.

2nd Class.—The work done by this class has been very fair as a whole, while that of some individual members, such as Sergeants Joly, Lesslie and Farwell has been very good both in survey work and astronomy. Sergeant Farwell promises to be a good draughtsman and good at Reconnaissance.

3rd Class.—I regret to say that I can only report on the work of this class as fair, and that there are no especially good cadets whose names I can bring forward.

Military Engineering—

1st Class.—The seven cadets forming this class have all qualified, both on this term's work and on the full four years' obligatory course.

The class is and always has been a very poor one, and but for hard work among those low down there must have been several failures this term.

No one has, however, done really well this term. Mr. Davis obtains the prize with five marks over 75 per cent. on the full obligatory course. Mr. Gaudet is second, but nearly 500 marks behind, and Mr. Macdonald third, but nearly 400 marks further behind.

No voluntary work has been taken up by this class during the four years' course.

2nd Class.—All who were examined have qualified, with the exception of one who has failed completely, a result I can only attribute to his own idleness.

Messrs. Gunn and Crawford were absent from the final examination. Mr. Farwell is first in the term's work, closely followed by Mr. Heneker. I regret to say that the work of this class during the term has not been so satisfactory as the results of the examinations would seem to indicate. Some of the cadets have worked well, but several with application might have done much better, and a few have been exceedingly idle.

3rd Class.—This class has done fairly well, rather to my surprise, as it began the term very badly. Mr. G. Johnston is first; Mr. Rogers second. Four failed to qualify.

4th Class.—This class has done exceedingly well on the whole; no less than twelve cadets out of twenty-four have obtained over 70 per cent. and of these nine have obtained 75 per cent. Mr. Leckie is first with the high figure of 88 per cent. Mr. Campbell is second with 79 per cent. and Messrs. Amos, Newman, Williams and Jones each obtained 70 per cent.

This is the more creditable on Mr. Newman's part, as he did not join till some months after the remainder of the class. I regret to add, however, that four Cadets failed to obtain half marks.

Engineering Drawing—

2nd Class.—There is no obligatory work for this class. Eight Cadets took up the voluntary work; of these seven qualified. The only good papers were those sent in by Messrs. Grant and Panet.

Mr. Grant takes the prize in this subject, closely followed by Messrs. Joly and Farwell.

3rd Class.—This class has done much better than I expected. Only two Cadets have failed to qualify and six have done very well, viz., Messrs. Fraser, 84, Williams, 81, Whitehead, 80, Rogers, 79, Baker, 75 and Gillmore, 74 per cent. This result is, however, partly due, I believe, to the fact that the examinations were a little easier than usual.

4th Class.—This class has worked exceedingly well. Mr. Campbell is first in the obligatory work, very closely followed by Messrs. Leckie, Amos and Morris, R. On the obligatory and voluntary work combined Mr. Leckie is first. Five Cadets have, however, failed to obtain $\frac{4}{10}$.

A very large number took up the voluntary work, eighteen in all, of whom all but two qualified.

Freehand Drawing—

1st Class.—In submitting examination returns, I beg to state that Sergeant Macdonald of the 1st Class has obtained the highest number of marks for obligatory and Freehand Drawing and is consequently entitled to the prize. The class is but a moderate one, owing to several of its members having taken commissions in H. M's. Regular Army.

2nd class.—Several members of this class have done very well, but there has been a marked want of diligence in some of its members.

3rd Class.—This class is doing very good work as will be seen by their drawings, &c., but Messrs. Armstrong and Murphy have not qualified.

4th Class.—I cannot speak too highly of the diligence and intelligence of the members of this class, the work of which manifests the most satisfactory advancement.

Civil Engineering—

Graduating Class.—Considering the object of the College to be the training of its graduates to become highly educated and trained men of action and high character, I am confident that this object has been gained. There can be no doubt that each Cadet of the class is likely to become a highly useful man in Canadian life. I can with confidence recommend them as desirable assistants on the staff of any public work. Mr. Morrow is a young man possessing valuable elements of character, such as will I hope and expect enable him to take a distinguished place in any profession.

Mr. Adams and Mr. Davis are also young men of high principle and good attainments in Civil Engineering. I know that both these gentlemen are to be relied on for faithful work and I trust they will meet with the encouragement that they deserve.

The remaining members of the class Messrs. Jack, Bowie, Gaudet and Clapp have shown themselves good students.

Mr. R. J. Macdonald is a man who is to be firmly relied on for honor, ability and energy and, I believe he will have a distinguished career.

English—

The subjects of English Language, Literature, Rhetoric and Composition have been studied with diligence and success. Much progress has been made by the 3rd and 4th Classes in Composition.

I beg to call your attention to the very high marks obtained by Cadet L. Williams of the 4th Class in the late examination. He gained the maximum in both papers. For the whole term he made 733 marks out of a possible 800.

Cadet Morris, R., obtained 93 out of a possible 100 in the Language and Rhetoric papers, while in the same paper Cadets Campbell and Newman each obtained 90. In the 3rd Class, Cadet Rogers obtained 90 marks out of 100 in the English Authors and Rhetoric paper, while in the same paper Cadet Fraser obtained 80.

French—

1st Class.—Good. Messrs. Morrow, Davis, and as was to be expected, Mr. Gaudet (a French Canadian gentleman) have done very well.

2nd Class.—Noticeable improvement since last year. Mr. Leslie and also Messrs. Joly and Panet (same remark with those two gentlemen as the one above concerning Gaudet) deserve a special mention.

3rd Class.—Not very bright, *in toto* Messrs. Fraser and Kerr are striking exceptions though, and to their names may be added those of Messrs. Murphy, Johnson H, and Johnson W.

4th Class.—Rather good on the whole. Messrs. Amos, Browne, Campbell, Houliston and Newman have done very good work. I beg to call particular attention to Mr. Leckie whose success may be considered as typical of what natural aptitude combined with an energetic will can achieve.

Physics and Geology.

Owing to the death of Dr. Bayne, the attendance, during the first four months of the term were divided between Professor Harris and Captain Cochrane, while I did not enter upon my duties till the beginning of January.

Only the men of the first class have been under my immediate tuition. Captain Cochrane has had almost entire control of the instruction of the second class; besides, he has had the conducting of the Practical Chemistry of the first class. The courses in Geology and Physics were not quite so extensive as usual, owing to loss of time at the commencement of the term; in Chemistry nearly the ordinary amount of work was done.

The marks obtained in the different examinations were not high, except in the case of obligatory Physics, where Mr. Davis made 81·5 per cent., and six members of the class obtained more than 50 per cent.

In Chemistry Mr. Davis obtains distinction, and is easily ahead of his competitors, though in one examination, Mr. Gaudet was only slightly below him, and in another Mr. Clapp was somewhat his superior.

In Practical Chemistry Mr. Davis far outstripped the others and obtained over 75 per cent. The work on this subject was not so satisfactory as that of previous classes. Four men, Messrs. Clapp, Davis, Gaudet and Jack obtained the marks required to qualify.

In Geology Mr. Gaudet has taken the first place, followed closely by Mr. Clapp, the percentages being respectively 65 and 61.

The second class showed a great interest during the term in both Chemistry and Physics. The examination in Chemistry was not so well done as that in Physics; probably because the former subject is the more difficult. In Physics, nine Cadets took the voluntary examination, seven of whom passed. Mr. Joly and Mr. Farwell are first and second, obtaining 80 per cent. and 78 per cent. respectively. Mr. Joly's paper on Voluntary Physics was well worth 87 per cent.

In Chemistry, Mr. Farwell was first, with 74 per cent., and Mr. Joly second, with 63 per cent. Five Cadets did not obtain qualifying marks at the examination —four of them, however, redeemed themselves by the extra marks given for notes and recitations, and thus passed on the total.

Cadets who have failed to pass.

I regret much to have to report that at the close of the last term nine Cadets had to leave the College under Clause 27 of the General Regulations, having failed to qualify for class promotion. Six of these failures occurred in the 3rd Class. It is evident that when Cadets, owing either to indolence or want of ability, show themselves unable to keep up with the course, it is better that they should leave the College and make room for others who would give the country a better return for the money expended on their education.

Instruction of Militia Officers.

A class of thirteen Militia Officers joined the College in March for the purpose of going through the three months' course required for Long Course Certificates, Grade "A." At the termination of the course certificates were awarded as follows:—

First Class.

		Special Mention.
Capt. A. McLaughlan.....	67th Battalion.	M.E., M.T., and Tactics.
Lieut. F. Hill.....	44th do	M.T., and Tactics.
do G. Maunsell.....	8th Cavalry.	M.E., M.T., and Tactics.
do H. O. Morphy....	Q O. Rifles.	M.T., and Tactics.
do J. E. P. Bergeron..	Lévis Gar. Art.	M.T.
Capt. J. C. Prower.....	8th Rifles.	Tactics.

Second Class.

Capt. E. Palmer.....	P.E.I. Garrison Artillery.
Lieut. G. Thairs.....	19th Battalion.
do A. D'Orsonnens.....	87th do

Four Officers failed to qualify.

I have recommended that the decimal of qualification for "special mention" shall be raised from ·75 to ·80.

Instruction of Militia Engineers.

A Detachment consisting of nine Non-Commissioned Officers and Sappers, Militia Engineers, arrived in February, and went through the Engineer Short Course, under Capt. Davidson, R.E., and Sergt. Major Birtles.

The Staff.

All the members of the College Staff have been diligent and zealous in the discharge of their duties, and I have nothing but what is favorable to report about them. The only change in the Instructional Staff that has taken place was the appointment of Dr. J. Waddell to the vacancy caused by the death of the late lamented Dr Bayne. I have every reason to be satisfied with the selection that was then made.

The services of Sergt. Major Birtles have been most valuable, and I think it highly desirable (considering his long and faithful service both in the Royal Engineers and at the Royal Military College) that he should be granted a Commission in the Militia.

Staff and Cadets in general.

I am thoroughly satisfied with the general good feeling and spirit which prevails in the College. I continue to receive a large number of applications from intending candidates for Cadetships, and feel confident that the competition for admission will be keener year by year. Twenty-five new Cadets joined the College on the 1st September, making up the total strength to 78.

New Works completed during the past year.

Since the last report was written the greater part of the rooms, halls and passages in both buildings have been kalsomined, and the woodwork repainted.

In the Educational Block self-flushing water-closets and urinals have been introduced, in place of the old objectionable trough arrangement.

A rough breakwater has been built on the site of an old wharf, with blocks of rock raised from the shoal in Kingston harbor. This will prove of great use in protecting the wharves, &c., from the effect of the southerly gales.

A new double tennis ground has been constructed near the gymnasium.

In the outer enclosure a board walk has been laid down from the inner gate to the outer back gate. The grounds round Nos. 1 and 2 Officers' Quarters have been properly fenced in with wire, the old picket fence having been utilized in setting up a proper fence along the front of the servants' cottages.

A drain has been laid from Sergt.-Major Birtles's house to the harbor.

New Works Required.

An additional wing as a dormitory for Cadets, with an Officer's Quarters at each end, is most urgently needed. At present eleven of the sleeping rooms have two Cadets each, and seven other Cadets have to sleep in the basement rooms where the hospital is, while next year the pressure is sure to be still greater.

A proper hospital is much required; also a drill shed and other buildings, which have been recommended in previous reports.

I have the honor to be, Sir,

Your obedient servant,

J. R. OLIVER, Colonel, R. A.,
Commandant Royal Military College.

APPENDIX No. 12.

REPORT OF THE DIRECTOR OF STORES, &c.

DEPARTMENT OF MILITIA AND DEFENCE,
STORE BRANCH, OTTAWA, 31st December, 1887.

SIR,—I have the honor to submit the following report of the operations of this branch of the Department, under my charge, for the past year:—

Clothing.

The clothing this year, as in previous years, has been supplied under contract with Canadian manufacturers, and has proved satisfactory on inspection.

During the year 11,979 cloth and serge Tunics, 10,961 pairs of cloth and serge Trousers, 7,497 Forage Caps, and 3,748 Great Coats have been issued.

The following tabular statement shows the issues in detail:—

ISSUES.

Tunics, Cloth.					Tunics, Serge.				Trousers, Cloth, Pairs.			Trousers, Serge, Pairs.			Forage Caps.				Great Coats.		
Cavalry.	Artillery.	Engineers.	Infantry.	Rifles.	Cavalry.	Artillery.	Infantry.	Rifles.	Cavalry.	Artillery.	Infantry.	Artillery.	Infantry.	Rifles.	Cavalry.	Artillery.	Infantry.	Rifles.	Cavalry.	Artillery.	Infantry and Rifles.
531	1360	...	6019	2093	117	763	1096	...	577	781	669	1424	5981	1529	517	1429	4328	1223	92	754	2902

Ammunition.

The quantity of ammunition issued to the Militia force for practice during the year was 339,890 rounds of "Snider" ball and 204,090 rounds of blank, being a slight decrease as compared with last year. (*Vide* Appendix "A.")

The re-payment issues for the year were 549,417 rounds of "Snider" ball, 129,343 rounds of "Martini-Henry" ball, 2,812 rounds "Colt's" revolver ball, and 700 rounds "Snider" blank ammunition, making a total of 682,272 rounds to Rifle Associations and Militia Corps for rifle practice and competitions, for which deposit receipts, credited to the Receiver General, amounted to $11,712.72, including the price of powder and friction tubes issued for the noon-gun at Ottawa. (*Vide* Appendix "B.")

The Field and Garrison Batteries of Artillery received the usual annual supply of gunpowder, friction tubes, shot and shell, for practice and salutes. (*Vide* Appendix "C.")

The Cartridge Factory at Quebec has not only supplied the demands for small arm ammunition—ball and blank—during the year, but has also added considerably to the reserve in Magazine charge, the reserve supply of gunpowder being obtained in Canada from the Hamilton Powder Company. Shot and shell, with requisite friction tubes, have, up to the present time, been obtained from the Imperial Government on re-payment. The experiment in the manufacture of common shell for R. M. L. Guns, made under the direction of Major Prévost, Superintendent of the Cartridge Factory at Quebec, has been attended with success. It is therefore expected that the shell required for artillery practice will in future be obtained from that source.

Ordnance.

A return of the Ordnance in charge will be found in Appendix "D."

Two additional 40-pounder Guns, and four 9-pounder Field Guns, with Carriages, &c., have been ordered from the Imperial Government. When the 9-pounder Guns are received and issued, the whole of the Field Batteries—with the exception of the Sydney Battery, which is still armed with the S.B. Guns—will be armed with Rifled Guns, in place of the old smooth bore Ordnance.

Arms.

The Armorers at the several stations are fully employed in repairing the Arms sent in from Corps for that purpose. At Winnipeg, extra assistance has been necessary for the Armorer, owing to the large number of Rifles requiring cleaning and repairs, consequent upon the North-West service during the rebellion.

I have to direct attention to the necessity of appointing an Armorer at London, Ont., and one at St. John, N.B., to attend to the Arms in these Military Districts. Hitherto it has been found necessary to send Arms from these stations to Toronto and Halifax respectively; this course has been attended with some inconvenience, delay and extra expense.

Boards of Survey.

The Annual Boards of Survey, as required by Regulations and Orders, have been held in the respective Military Districts.

The condemned stores have been sold by public auction at most of the stations, when the quantity and probable value of such stores warranted the expense of a sale. The amounts realized from these sales have been placed to the credit of the Receiver General, by deposit receipts, in the usual manner.

The reports of the various Boards on the state of the stores, store ledgers, buildings, &c., in charge of Superintendents, are, on the whole, satisfactory.

The following changes in the store staff in Military Districts have taken place within the past year:—

Major A. J. Armstrong was appointed Superintendent of Stores at St. John, N.B., upon the retirement of Lt.-Colonel W. T. Baird, an old and valued officer of the Militia in that Province, who, while serving in the Store Branch, performed his duties with zeal and efficiency.

The death of Major R. J. McDonell, which I reported with much regret, in the early part of the summer, caused a vacancy in the store branch at Victoria, B.C., which has been filled by the appointment, as Superintendent of Stores at that station of Captain A. W. Jones, of the Victoria Garrison Artillery, an officer highly recommended for the position.

Camp Losses and Deficiencies.

As compared with former years the percentage of losses and damage to Camp Equipment has been considerably reduced. The total amount reported in the

several Military Districts was $375.31, of which sum $131.99 has been paid in to the credit of the Receiver General, by deposit receipts, leaving a balance of $243.32 yet to be recovered.

Issues and Receipts of Stores.

The number of requisitions for issues from stores, and the orders for receipts into store, show a large increase over previous years. The establishment of the Permanent Schools of Instruction and the Royal Military College will account to a large extent for this increase.

The supervision of these issues, the local purchase of barrack stores and supplies, and also the preparing of tenders and contracts for military clothing and other stores, now manufactured in Canada, have added very materially to the work in the Store Branch of the Department.

Militia Properties.

The reports upon the state of the Military properties in charge are satisfactory. The annual estimate of the cost of repairs necessary for the maintenance of buildings, &c., prepared with regard to economy, has been submitted, and no doubt will receive due consideration at the proper time.

The statement underneath shows the number of tenants at the several stations, the amount received for rents of military properties for the year from 1st January to 31st December, 1887, and the arrears due at that date.

It is proposed to furnish in future a return of the receipts for rents, &c., for the fiscal year ending on the 30th June, instead of the calendar year, as hitherto, in order to harmonize the same with the public accounts of the Dominion.

Military Museum.

The Museum at Ottawa continues to attract the attention of Militia Officers and others. A number of articles have been added to the collection during the year. Show cases are now being placed in the room to secure a more convenient arrangement of the smaller articles on exhibition.

Tenants and Rental.

Number of Tenants	Station.	Rents received.	Arrears.	Remarks.
		$ cts.	$ cts.	
1	Chatham, Ont	1 00		
2	Niagara, Ont	216 00	12 00	
3	Toronto, Ont	365 00		
22	Kingston, Ont	537 24	5 38	
3	Ottawa, Ont	6 00		
2	Laprairie, Que	51 00	1 00	
4	Montreal, Que	250 50	1 00	
2	Ile-aux-Noix, Que	106 00		
1	St. John's, Que	.....	80 00	
23	Quebec	2,863 83	134 75	
27	Lévis, Que	571 00	446 45	
8	New Brunswick	179 00	0 25	
15	Nova Scotia	78 17	179 42	
2	P. E. Island	5 87		
115	Total rent received, 1887	5,231 61		
	Total arrears, 1887	.....	860 25	

Deposit Receipts.

The amount received by the Store Branch for stores and ammunition issued on re-payment, and for rents collected on Military property during the year, is shown in the following statement, being from 1st January to 31st December, 1887:—

Ammunition.		Clothing.		Arms and Accoutrements.	Deficiencies.	Rents.	Miscellaneous.	Total Amount.
Rounds.	Amount.	Officers.	Men.					
	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
682,272	11,712 72	24 00	1,084 25	363 10	348 07	5,231 61	2,872 93	21,636 68

I have much pleasure in bringing under your notice the efficient assistance afforded me by the staff in the Store Branch at Headquarters, and the District Superintendents of Stores.

I have the honor to be, Sir,

Your most obedient servant,

J. MACPHERSON, Lt.-Colonel,
Director of Stores and Keeper of Militia Properties.

The Deputy of the Minister of Militia and Defence, Ottawa.

[A.]

S. A. Ammunition issued for Practice during the Year 1887.

Date.	Corps and Station.	Rounds. Ball.	Rounds. Blank.
1887.	*Military District No. 1, London.*		
Jan. 15...	Captain Cox, Commanding No. 5 Company, 7th Fusiliers	840	.....
June 15...	Camp Quartermaster, Camp London	.....	35,730
Sept. 12...	Captain Macqueen, Commanding No. 1 Company, 22nd Battalion	840	.....
do 12...	do Ross do No. 2 do do ...	840	.....
do 12...	do Williamson do No. 3 do do ...	840	.....
do 12...	do Hegler do No. 4 do do ...	840	.....
do 12...	do Bleakley do No. 5 do do ...	840	.....
do 12...	do Ball do No. 6 do do ...	840	.....
do 12...	do Stoddard do No. 7 do do ...	840	.....
do 12...	do Day do No. 8 do do ...	840	.....
do 12...	do Cooke do No. 2 do 28th Battalion	840	.....
do 14...	do Patterson do No. 1 do 24th Battalion.	840	.....
do 14...	do Atkinson do No. 2 do do ...	800	.....
do 14...	Lieut Watson do No. 3 do do ...	740	.....
do 14...	Captain Crogan do No. 4 do do ...	800	.....
do 14...	Lieut. Johnston do No. 5 do do ...	760	.....
do 14...	Captain Young do No 6 do do ...	700	.....
do 16...	do Mason do No. 1 do 30th Battalion.	840	.....
do 16...	do Porter do No. 2 do do ...	800	.....
do 16...	do Beattie do No. 3 do do ...	800	.....
do 16...	do Allan do No. 4 do do ...	800	.....
do 16...	do Kingston do No. 5 do do ...	760	.....
do 16...	do Johnston do No. 6 do do ...	740	.....
do 16...	do McDowell do No. 7 do do ...	800	.....
do 16...	do Jamieson do No. 8 do do ...	700	.....
do 16...	do Booth do No. 9 do do ...	800	.....
do 16...	Lieut Hudson do No. 10 do do ...	800	.....
Oct. 6...	Captain Robson do No. 8 do 26th Battalion.	740	.....
Nov. 18...	Lt.-Col. Williams do 7th Fusiliers	2,000	.....
do 28...	Captain Deany do No. 4 Comp'y, 26th Battalion	820	.....
		24,440	35,730
	Less—Returned by Camp Quartermaster	.....	2,250
	Total Issues	24,440	33,480
	Military District No. 2, Toronto.		
Nov. 30...	Lt.-Col. Otter, Commanding "C" Company, R.S.I.	2,000	.....
June 16...	Camp Quartermaster, Camp Niagara	35,000	.....
July 18...	Lt.-Col. Ballachey, Commanding 38th Battalion	5,040	5,040
do 27...	do Otter do "C" Company, R.S.I.	6,000	1,000
do 30...	do Gibson do 13th Battalion	6,720	6,720
Sept. 27...	Captain Servos do No. 1 Troop Cavalry	840	.....
do 27...	do Gregory do No. 6 do	840	.....
Oct. 27...	Lt.-Col. Grasett do 10th Royal Grenadiers	6,720	.....
		63,160	12,760
	Less—Returned by Camp Quartermaster	7,500	.....
	do by Lt.-Col. Hogg	1,200	2,900
	Total Returned	8,700	2,900
	Total Issues	54,460	9,860

S. A. Ammunition issued for Practice during the Year 1887—*Continued.*

Date.	Corps and Station.	Rounds. Ball.	Rounds. Blank.
1887.	*Military District No. 3, Kingston.*		
May 18...	Lt.-Col. H. R Smith, Commanding 14th Battalion	5,040	5,040
June 27...	Camp Quartermaster, Kingston	20,000	9,000
July 9...	Lt.-Col. Lazier, Commanding 15th Battalion	5,040	.....
do 14...	do Cotton do "A" Battery, R.S.A.	2,000	.....
Aug. 6...	Captain Dumble do Cobourg Garrison Artillery	840	.....
Sept. 19...	Lt.-Col. Rogers do 57th Battalion	5,040	.....
do 19...	do Cotton do "A" Battery, R S.A	4,000	.....
Oct. 17...	do do do do	4,000	.....
		45,960	14,040
	Less—Returned by Camp Quartermaster	2,120	1,950
	Total Issues	43,840	12,090
	Military District No. 4, Ottawa.		
May 16...	Lt.-Col. Macpherson, Commanding Gov. General's Foot Guards.	.....	2,500
do 18...	do White do 43rd Battalion	.....	3,000
June 10...	do Macpherson do Gov General's Foot Guards.	.....	2,500
Aug. 3...	Captain Gourdeau do Princess Louise Dragoon Guards	700	700
Nov. 26...	Lt.-Col. Macpherson do Gov. General's Foot Guards.	5,040	.....
June 21...	Camp Quartermaster, Camp Ottawa	18,820	20,000
		24,560	28,700
	Less—Returned by Camp Quartermaster	3,750	20,000
	Total Issues	20,810	8,700
	Military Districts Nos. 5 and 6, Montreal.		
May 19...	Lt.-Col. Right Hon. Lord Aylmer, Commanding 54th Battalion	.....	5,000
June 8...	do Helton, Commanding 53rd Battalion	3,360	3,360
do 20...	do Kennedy do Montreal Engineers	1,700	1,700
do 20...	do Oswald do do Brigade G. A.	5,040	5,040
do 21...	Camp Quartermaster, Camp Granby	29,500	29,500
do 21...	do Camp Laprairie	24,000	20,500
do 24...	Lt.-Col. Henshaw, Commanding 3rd Battalion	5,040	5,040
do 25...	do Oswald do Montreal Brigade G. A.	.....	1,000
July 19...	do Bond do Prince of Wales Rifles	5,040	5,040
Sept. 6...	do Caverhill do 5th Royal Scots	5,040	.....
		78,720	76,180
	Less—Returned by Camp Quartermaster, Granby.	10,500	25,000
	do do Laprairie.	.....	20,500
	do Montreal Engineers	.....	2,000
	Total Returned	10,500	47,500
	otal Issues	68,220	28,680

S. A. Ammunition issued for Practice during the Year 1887—*Continued.*

Date.	Corps and Station.	Rounds. Balls.	Rounds. Blank.
1887.	*Military District No. 7, Quebec.*		
June 28...	Lt.-Col. Duchesnay, D. A. G, M. D. No 7	34,880	34,880
July 28...	do Hulon, Commanding 89th Battalion	6,720	6,720
Aug. 8...	do Montizambert do "B" Battery R. S. A.	4,000	4,000
		45,600	45,600
	Less—Returned by Lt.-Col. Duchesnay	20,880	38,440
	Total Issues	24,720	7,160
	Military District No. 8, St John, N.B.		
June 13...	Lt.-Col. Armstrong, Commanding N. B. Brigade G. A.	4,200	4,200
do 28...	Camp Quartermaster, Camp St. Andrews	14,200	14,200
do 28...	Lt.-Col. Domville, Commanding 8th Cavalry	3,360	3,360
July 21...	do Maunsell do R. S. Infantry	5,000	1,000
do 27...	Lieut. McMillan do St. John Rifle Company	700	700
do 27...	Lt.-Col. Blaine do 62nd Battalion	4,200	4,200
	Total Issues	31,660	27,660
	Military District No. 9, Halifax.		
July 12...	Lt.-Col. Mowbray, Commanding Halifax Brigade G. A.	5,880	5,880
do 12...	do Mackintosh do 63rd Battalion	5,040	5,040
do 12...	do McDonald do 66th do	6,720	6,720
Aug. 17...	Captain Jolly do Yarmouth Gar. Battery	840	840
Sept. 2...	do Ryan do King's Troop Cavalry	840	840
do 2...	Lt.-Col. Chipman do 68th Battalion	7,560	7,560
do 2...	do Blair do 78th do	5,880	5,880
do 2...	do Harrison do 93rd do	4,200	4,200
do 6...	do Bingham do 94th do	4,200	4,200
Oct. 17...	Captain Gordon do Pictou Gar. Battery	840	.....
do 17...	do Daley do Digby do	840	.....
	Total Issues	42,840	41,160
	Military District No. 10, Winnipeg.		
May 3...	Lt.-Col. Taylor, Commanding Mounted R. S. I	2,000	2,000
June 24...	do Boswell do 90th Battalion	5,040	5,040
do 24...	Major Thibedeau do 91st do	5,040	5,040
do 24...	Lt.-Col. Taylor do Mounted R. S. I	2,000	.....
July 14...	do Houghton do D. A. G., M. D. No. 10	.....	6,000
do 29...	do Taylor do Mounted R. S. I	.....	2,000
Aug. 16...	do Taylor do do	2,000	.....
Sept. 24...	do Taylor do do	1,600	4,000
	Total Issues	17,680	24,080
	Military District No. 11, Victoria, B.C.		
May 16...	Lt.-Col. Wolfenden, Commanding B. C. Brigade Gar. Artillery	2,400	2,400

S. A. Ammunition issued for Practice during the Year 1887—*Concluded.*

Date.	Corps and Station.	Rounds.	
		Balls.	Blank.
1887.	*Military District No. 12, Charlottetown, P. E. I.*		
July 16...	Capt. Weeks, Commanding Engineer Company	900	900
Aug. 10...	Q. M. Capt. Davidson, 82nd Battalion	4,520	4,520
do 10...	do Cameron, P. E. I. Prov. Brigade G. A	3,400	3,400
	Total Issues	8,820	8,820

RECAPITULATION.

Districts.	Rounds.	
	Balls.	Blank.
Military District No. 1, London	24,440	33,480
do 2, Toronto	54,460	9,860
do 3, Kingston	43,840	12,090
do 4, Ottawa	20,810	8,700
do 5 and 6, Montreal	68,220	28,680
do 7, Quebec	24,720	7,160
do 8, St. John, N.B	31,660	27,660
do 9, Halifax, N.S.	42,840	41,160
do 10, Winnipeg	17,680	24,080
do 11, Victoria, B.C	2,400	2,400
do 12, Charlottetown, P.E.I	8,820	8,820
Total	339,890	204,090

J. MACPHERSON, Lt-Colonel,
Director of Stores and Keeper of Militia Properties.

The Deputy of the
Minister of Militia and Defence,

OTTAWA, 31st December, 1887.

[B.]

S. A. AMMUNITION issued on repayment during the Year 1887.

Military District No. 1, London.

Date.	Purchaser.	Corps.	Rounds.	Amount.
1886.				$ cts.
Dec. 24...	Capt, J. Stevenson	26th Battalion	1,000	16 00
1887.				
April 2...	Capt. Ellis	27th Battalion	500	8 00
do 5...	Capt. Moore	25th do	500	8 00
do 7...	Capt. J. Stevenson	26th do	1,000	16 00
do 18...	Capt. E. McKenzie	7th Fusiliers	1,000	16 00
do 28...	Major Wilson	33rd Battalion	2,000	32 00
May 7...	Capt. Ellis	27th do	1,000	16 00
do 13...	Lt.-Col. Dawson	Western District Rifle Association	1,000	16 00
do 19...	Capt. J. Cook	29th Battalion	500	8 00
do 23...	N. Robson	Huron Rifle Association	500	8 00
do 27...	W. Lawrence	Perth do	1,200	19 20
do 30...	do	do do	1,500	24 00
do 31...	John Crowe	Guelph do	1,500	24 00
June 1...	Lt.-Col. Dawson	Western District Rifle Association	1,000	16 00
do 24...	N. Robson	Huron Rifle Association	500	8 00
do 30...	Lt.-Col. Dawson	Western District Rifle Association	1,000	16 00
Aug. 12...	N. Robson	Huron Rifle Association	1,000	16 00
do 13...	Capt. J. Templeton	21st Battalion	500	8 00
do 13...	Lt.-Col. Dawson	Western District Rifle Association { Snider.. / M. H.....	2,000 / 500	42 00
do 16...	do	do do do	1,000	16 00
do 27...	W. Lawrence	Perth do do	1,000	16 00
do 27...	Capt. J. O'Neil	27th Battalion	1,250	20 00
Sept. 2...	Capt. W. Ley	21st do	500	8 00
do 16...	Major Wilson	33rd do	1,000	16 00
do 16...	John Crowe	Guelph Rifle Association	1,500	24 00
do 26...	W. Lawrence	Perth do	1,000	16 00
do 30...	D. H. Henderson	Ingersoll do	500	8 00
Oct. 3...	Capt. Ellis	27th Battalion	1,000	16 00
do 6...	C. H. Henderson	Ingersoll Rifle Association	500	8 00
do 11...	W. R. Elliot	Essex Centre Rifle Association	1,000	16 00
do 11...	Capt. Macqueen	22nd Battalion	1,000	16 00
do 12...	Capt. Hegler	22nd do	500	8 00
do 19...	D. H. Henderson	Ingersoll Rifle Association	500	8 00
do 26...	Capt. Jones	21st Battalion	1,000	16 00
Nov. 14...	Lt.-Col. Dawson	Western District Rifle Association	1,000	16 00
do 14...	Capt. Dawson	21st Battalion	500	8 00
do 25...	Lt.-Col. Dawson	Western District Rifle Association	500	8 00
Dec. 8...	do	do do do	2,000	32 00
do 19...	do	do do do	1,000	16 00
		Total	37,950	609 20

S. A. Ammunition issued on repayment during the Year 1887—*Continued.*

Military District No. 2, Toronto.

Date.	Purchaser.	Corps.	Rounds.	Amount.
1887.				$ cts.
Jan. 7...	Capt. Drinkwater	35th Battalion	1,000	16 00
do 12...	Major Carpenter	77th do	1,000	16 00
do 20...	Capt. Drinkwater	35th do	500	8 00
Feb. 12...	Lt.-Col. Alger	Ontario Rifle Association	11,840	189 44
Mar. 31...	A. Pain	Victoria do	1,500	24 00
April 7...	J. O. McGregor	Waterdown do	1,000	16 00
do 13...	Capt. Cooper	12th Battalion M. H.	600	22 40
do 13...	do	do Snider.	500	
do 15...	J. Crowe	Guelph Rifle Association M. H.	500	36 50
do 15...	do	do do Snider.	1,500	
May 5...	Lieut. A. Bucknell	Victoria do	1,000	16 00
do 13...	Lieut. A. Johnston	20th Battalion. Snider	1,500	31 20
do 13...	do	do M. H.	300	
do 25...	Major Mason	13th Battalion	5,000	80 00
do 27...	Capt. E. G. Zealand	do	1,000	16 00
June 8...	Lt.-Col. Alger	Ontario Rifle Association M. H.	6,400	128 00
do 9...	J. O. McGregor	Waterdown do	1,000	16 00
do 9...	A. Pain	Victoria do M. H.	1,000	20 00
do 29...	Lt.-Col. Telford	31st Battalion	1,000	16 00
do 29...	Capt. Cleland	do	2,000	32 00
do 29...	Major Leslie	36th Battalion Blank.	500	5 00
July 4...	A. Campbell	Owen Sound Rifle Association	1,000	16 00
do 13...	Capt. Cooper	12th Battalion M. H.	600	28 00
do 13...	do	do Snider.	1,000	
do 16...	A. Pain	Victoria Rifle Association M. H.	2,000	40 00
do 19...	Capt. Smith	12th Battalion	400	7 00
do 20...	W. Cowboy	Erin Rifle Association	500	8 00
do 20...	Capt. White	Whitby do	500	8 00
do 20...	Capt. Griffith	37th Battalion	750	12 00
do 28...	A. Campbell	Owen Sound Rifle Association	1,000	16 00
do 28...	Major S. W Ray	Port Arthur do	1,000	16 00
Aug. 2...	J. O. McGregor	Waterdown do	1,000	16 00
do 3...	Capt. Grant	20th Battalion M. H.	200	20 00
do 3...	do	do Snider.	1000	
do 8...	A. Campbell	Owen Sound Rifle Association	1,000	16 00
do 8...	Capt E. G. Zealand	13th Battalion	1,000	16 00
do 11...	W. Cowboy	Erin Rifle Association	500	8 00
do 11...	Lieut Ewan	35th Battalion M. H.	200	7 20
do 11...	do	do Snider	200	
do 18...	A. Campbell	Owen Sound Rifle Association	1,000	16 00
do 29...	G. T. Ware	Port Arthur do	2,000	32 00
do 30...	A. Miller	Elgin do	1,000	16 00
Sept. 1...	W. H. McFadden	Brampton do	500	8 00
do 1...	R. R. Harris	38th Battalion	2,000	32 00
do 5...	Capt. Paterson	34th do	500	8 00
do 5...	W. McDowell	Erin Rifle Association	600	9 60
do 12...	Capt. Jamieson	30th Battalion	1,500	24 00
do 14...	A. Miller	Elgin Rifle Association	2,000	32 00
do 14...	A. Campbell	Owen Sound do	2,000	32 00
do 14...	A. Pain	Victoria do	1,000	16 00
do 14...	A. Bucknell	Lindsay do	500	8 00
do 14...	G. T. Ware	Port Arthur do	2,000	32 00
do 19...	Lieut. A. Bucknell	Victoria do M. H.	300	22 00
do 19...	do	do do Snider	1,000	
do 19...	Major Dunn	Governor General's Body Guard	2 000	32 00
do 20...	Lieut. A. Johnston	20th Battalion	1,200	19 20
do 20...	J. Crowe	Guelph Rifle Association M. H.	500	10 00
do 20...	Capt. Grant	20th Battalion M. H	200	36 00
do 20...	do	do Snider.	2,000	

S. A Ammunition issued on repayment during the Year 1887—*Continued.*

Military District No. 2, Toronto—Concluded.

Date.	Purchaser.	Corps.	Rounds.	Amount.
1887.				$ cts.
Sept. 23..	W McDowell	Erin Rifle Association	500	8 00
do 27...	Major Mason	13th Battalion M. H.	2,000	88 00
do 27...	do	do Snider.	3,000	
do 28...	Capt. White	Whitby Rifle Association	500	8 00
do 29...	Capt. J. Ward	35th Battalion	1,000	16 00
do 30...	A. Campbell	Owen Sound Rifle Association	1,000	16 00
do 30...	Capt. Paterson	34th Battalion	500	8 00
do 30...	J. Crowe	Guelph Rifle Association	500	8 00
Oct. 3...	Major Dunn	Governor General's Body Guard	2,000	32 00
do 7...	J. O. McGregor	Waterdown Rifle Association	2,000	32 00
do 18...	do	do do	1,000	16 00
do 26...	Major Dunn	Governor General's Body Guard	3,000	48 00
Nov. 11...	Lieut. Torry	31st Battalion	500	8 00
do 12...	Lieut Johnson	20th do M. H.	120	10 40
do 12...	do	do Snider.	500	
do 24...	Capt. McMicking	44th do	500	8 00
do 26...	A. Miller	Elgin Rifle Association	1,000	16 00
Dec. 9...	Major Dunn	Governor General's Body Guard	2,000	32 00
do 13...	Capt. Griffiths	37th Battalion	400	6 40
do 31...	Capt. Cooper	12th do M. H.	600	28 00
do 31...	do	do Snider.	1,000	
		Total	101,910	1,696 34

Military District No. 3, Kingston.

May 10...	N. S. Young	Bowmanville Rifle Association M.H.	1,000	24 00
do 11...	do	do do	1,000	16 00
do 17...	Major R. Dingwall	46th Battalion	2,000	32 00
June 14...	N. S. Young	Bowmanville Rifle Association M.H.	1,000	20 00
do 16...	Captain Panton	15th Battalion	2,000	32 00
do 23...	do D. Finlay	47th do	500	8 00
do 30...	Major R. W. Bell	Peterboro' Rifle Association	2,000	32 00
July 13...	N S Young	Bowmanville do	1,000	16 00
do 18...	Major R. Dingwall	46th Battalion M.H.	1,000	20 00
Aug. 6...	Captain Macnachtan	Garrison Artillery M.H.	500	43 00
do 6...	do do	do	2,000	
do 9...	Major R Dingwall	46th Battalion	2,000	31 00
do 11...	N. S. Young	Bowmanville Rifle Association	500	8 00
Sept. 1...	Captain Panton	15th Battalion	1,000	16 00
do 10...	N S. Young	Bowmanville Rifle Association	2,000	32 00
do 15..	Major R. W. Bell	Peterboro' do	3,000	48 00
do 20...	N. S. Young	Bowmanville do	1,000	16 00
do 23...	Major R. Dingwall	46th Battalion	2,000	52 00
do 23...	do do	do M H.	1,000	
do 24...	Lt.-Col. J. Brown	49th Battalion	1,500	24 00
Oct. 3...	N. S. Young	Bowmanville Rifle Association	3,000	48 00
do 6...	Major R. Dingwall	46th Battalion	3,000	48 00
Nov. 8...	Captain Shannon	14th do	1,000	16 00
do 10...	Qtr.-Master G. Thompson	47th do	500	8 00
.....	N. S. Young	Refilling cartridge cases	.....	15 74
		Total	35,500	605 74

S. A. Ammunition issued on repayment during the Year 1887—*Continued.*

Military District No. 4, Ottawa.

Date.	Purchaser.	Corps.	Rounds.	Amount.
1886.				$ cts.
Dec. 18...	H. L. B. Ross.	Governor General's Foot Guards	500	8 00
do 30...	Captain McKay.	41st Battalion ... M.H.	600	14 40
1887.				
Feb. 19...	Ottawa College	... Blanks.	200	2 00
April 5...	A. Menzies.	Arnprior Rifle Association. ... M.H.	500	20 00
do 5...	do	do do ... Snider.	500	
May 4...	Sergeant Cawdron	Governor General's Foot Guards	560	8 96
do 7...	H. L. B. Ross.	do do	1,120	17 92
do 16...	Sergeant Cawdron	do do	840	13 44
do 14...	F. C. Lightfoot.	Ottawa Rifle Club ... M.H.	560	20 96
do 14...	do	do ... Snider	600	
do 14...	Sergeant Cawdron	Governor General's Foot Guards ... M.H.	250	5 00
do 14...	do	do do ... M.H.	600	12 00
do 15...	T. W. Wilson.	Lanark Rifle Association ... M.H.	500	12 00
do 23...	J. H. Fairweather.	Ottawa Rifle Club ... M.H.	600	12 00
do 23...	Captain McKay.	41st Battalion ... M.H.	600	14 40
do 26...	Dominion Police		1,000	16 00
do 30...	Mr. Ellis	Ottawa Rifle Club ... M.H.	600	12 00
June 2...	Lieut. Winters	Governor General's Foot Guards	500	8 00
do 2...	A. Menzies.	Arnprior Rifle Association ... M.H.	1,000	40 00
do 2...	do	do do ... Snider.	1,000	
do 8...	Sergeant Cawdron	Governor General's Foot Guards	560	8 96
do 9...	T. W. Wilson	Lanark Rifle Association ... M.H.	1,200	40 00
do 9...	do	do do ... Snider.	1,000	
do 15...	Lieut. Winters	Governor General's Foot Guards. ... M.H.	500	26 00
do 15...	do	do do ... Snider.	1,000	
do 16...	Sergeant Cawdron	do do ... M.H.	600	12 00
do 27...	do	do do	560	8 96
do 30...	H. S. O'Brian.	Cornwall Rifle Association	1,000	16 00
July 6...	Sergeant Cawdron	Governor General's Foot Guards	1,120	17 92
do 6...	T. W. Wilson.	Lanark Rifle Association ... M.H.	1,000	20 00
do 8...	Captain McKay.	41st Battalion ... M.H.	720	14 40
do 15...	Lieut. Winters.	Governor General's Foot Guards ... M.H.	600	28 00
do 15...	do	do do ... Snider.	1,000	
do 16...	A. Menzies.	Arnprior Rifle Association	1,000	16 00
do 27...	Captain Bliss.	Ottawa Field Battery	100	1 60
do 28...	do Billings.	43rd Battalion	150	2 40
do 28...	Private Sutherland.	Governor General's Foot Guards ... M.H.	600	20 96
do 28...	do	do do ... Snider.	560	
do 28...	Captain Motherwell.	Perth Rifle Association ... M.H.	1,200	24 00
do 29...	J. S. Huntington.	56th Battalion ... M.H.	400	40 00
do 29...	do	do ... Snider.	2,000	
Aug. 2...	E. A. Grant	43rd Battalion	500	8 00
do 5...	Sergeant Cawdron	Governor General's Foot Guards	560	8 96
do 5...	Dominion Police		500	8 00
do 9...	Captain Billings.	43rd Battalion	250	4 00
do 11...	G. E. Myers.	Morrisburg Rifle Association	1,930	31 00
do 12...	Captain Bell	43rd Battalion	500	8 00
do 12...	G. H. Mailleux.	Governor General's Foot Guards	500	8 00
do 13...	Major Carmichael.	Lisgar Rifle Association	500	8 00
do 13...	T. W. Wilson	Lanark do ... M.H.	1,000	20 00
do 16...	Captain Billings.	43rd Battalion ... M.H.	100	2 00
do 16...	Lieut. Winters.	Governor General's Foot Guards	1,000	16 00
do 18...	do H. H. Gray	do do	4,000	64 00
do 26...	Lieut.-Col. Lewis.	Brigade Major ... Pistol.	100	1 00
do 31...	A. Menzies.	Arnprior Rifle Association ... M.H.	1,000	20 00

S. A. Ammunition issued on repayment during the Year 1887—*Continued.*

Military District No. 4, Ottawa—Concluded.

Date.	Purchaser.	Corps.	Rounds.	Amount.
1887.				$ cts.
Sept. 2...	T. W. Wilson.	Lanark Rifle Association.	1,500	24 00
do 3...	Dominion Police		1,000	16 00
do 8...	do		1,500	24 00
do 9...	Captain Bell	43rd Battalion	500	8 00
do 12...	Lieut. Thompson	Governor General's Foot Guards . . M.H.	300	22 00
do 12...	do	do do ....Snider.	1,000	
do 12...	T. W. Wilson	Lanark Rifle Association M.H.	600	12 00
do 15...	Captain Billings	43rd Battalion	500	8 00
do 15...	R. H. Bradfield & Co.	Morrisburg Rifle Association	2,000	32 00
do 15...	W. H. Mossman.	Prescott do	3,000	48 00
do 16...	Sergeant Cawdron	Governor General's Foot Guards	500	8 00
do 17...	Captain Bell	43rd Battalion	500	8 00
do 17...	J. S. Huntington	56th do	1,000	16 00
do 17...	Major Walsh	43rd do	500	8 00
do 20...	J. McLeod	Almonte Rifle Association	500	8 00
do 23...	Captain Bell	43rd Battalion	500	8 00
do 24...	do McKay.	41st do M.H.	1,200	30 00
do 24...	do do	do Snider.	370	
do 26...	do Billings	43rd do	500	8 00
do 27...	Dominion Police		500	8 00
Oct. 3...	A. Menzies.	Arnprior Rifle Association M.H.	3,000	93 00
do 3...	do	do do Snider.	2,000	
do 3...	Captain Motherwell	Perth do M.H.	500	10 00
do 10...	G. W. Armstrong.	Cornwall do	1,000	16 00
do 10...	Captain McKay.	41st Battalion M.H.	600	12 00
do 10...	Sergeant Cawdron	Governor General's Foot Guards M.H.	600	20 00
do 10...	do	do do ....Snider.	500	
do 12...	Major Carmichael.	Lisgar Rifle Association	2,000	32 00
do 13...	T. W. Wilson.	Lanark do M.H.	500	10 00
do 15...	W. H. Mossman.	Prescott do	1,000	16 00
do 15...	G. W. Armstrong.	Cornwall do	500	8 00
do 19...	Major Anderson	43rd Battalion M.H.	1,200	72 00
do 19...	do	do Snider.	3,000	
do 21...	Sergeant Cawdron	Governor General's Foot Guards M.H.	200	4 00
do 24...	Lieut. Winters	do do	1,500	24 00
Nov. 2...	Major Harrison.	49th Battalion	250	4 00
do 3...	Lieut Imlay	56th do	500	8 00
do 3...	Captain Gourdeau	Princess Louise Dragoon Guards	1,000	16 00
do 3...	Mr. Snider	56th Battalion M.H.	400	8 00
do 10...	James McLeod	Almonte Rifle Association	500	8 00
do 15...	do	do do	500	8 00
Dec. 1...	Captain Wright.	43rd Battalion	500	8 00
do 17...	do Irving	42nd do M.H.	250	5 00
do 22...	D. McMaster	M.H.	200	5 00
do 22...	do	Pistol.	100	
	Dominion Rifle Assoc'n.	M.H.	4,200	84 00
	do do		32,792	524 67
	do do	M.H.	17,293	345 86
	do do	M.H.	400	8 00
	do do	Pistol	462	4 62
	Gunpowder for noon gun	600 lbs.; friction tubes, 420		159 26
	Lieut.-Col. Cole	Friction tubes		2 60
	G. Taylor, M.P.	do		2 53
		Total	137,357	2,554 78

S. A. Ammunition issued on repayment during the Year 1887—*Continued.*

Military Districts Nos. 5 and 6, Montreal.

Date.	Purchaser.	Corps.	Rounds.	Amount.
1887.				$ cts.
May 13...	Sergt. J. C. Marks	Rifle Association	5,000	80 00
do 13...	do	do	5,000	80 00
do 23...	do	do M. H.	1,200	24 00
do 30...	Major McLaren	50th Battalion	2,000	32 00
do 30...	Lieut. R. J. Spearing	53rd do	500	8 00
June 2...	do	53rd do	500	8 00
do 2...	Sergt. J. C. Marks	Rifle Association Snider.	6,000	120 00
do 2...	do	do M. H.	1,200	
do 16...	do	do M. H.	3,000	188 00
do 16...	do	do Snider.	8,000	
do 20...	do	do M. H.	600	12 00
do 20...	Capt. Dixon	86th Battalion Blank.	150	1 50
do 27...	Lieut. R. J. Spearing	53rd do	1,000	16 00
July 2...	Sergt. J. C. Marks	Rifle Association M. H.	4,200	84 00
do 13...	H. A. Johnson	5.st Battalion	500	8 00
do 13...	Lieut. R. J. Spearing	53rd do M. H.	500	10 00
do 18..	Sergt. J. O. Marks	Rifle Association. M. H.	4,200	84 00
do 22...	J. F. Scriver	51st Battalion	500	8 00
do 28...	Sergt. J. C. Marks	Rifle Association	8,000	128 00
do 29...	Lt.-Col. Martin	do M. H.	3,600	72 00
do 30...	Lieut. R. J. Spearing	53rd Battalion	500	8 00
Aug. 1...	Capt. Baker	58th do	1,000	16 00
do 4...	Lieut. R. J. Spearing	53rd do	500	8 00
do 5...	Capt. T. L. Brown	54th do Snider.	500	18 00
do 6...	do	54th do M. H.	500	
do 6...	Lt.-Col. Martin	Rifle Association	4,310	68 96
do 17...	Lieut. R. J. Spearing	53rd Battalion M. H.	500	10 00
do 17...	Sergt. J. C. Marks	Rifle Association M. H.	3,000	156 00
do 17...	do	do Snider.	6,000	
do 17...	Lieut. Beattie.	60th Battalion	500	8 00
do 22...	Sergt. J. C. Marks	Rifle Association	4,000	64 00
do 31...	Major McFee	51st Battalion	4,000	64 00
do 31...	Capt. C. M. Bowen	52nd do	500	8 00
Sept. 6...	Major T. Lamb	11th do	2,500	40 00
do 6...	do J. D. Sulman	79th do	500	8 00
do 7...	do T. Lamb	11th do	1,000	16 00
do 10...	Lt.-Col. Cushing.	11th do	500	8 00
do 15...	Sergt. J. C. Marks	Rifle Association Snider.	2,000	68 00
do 15...	do	do M. H.	1,800	
do 15...	Capt. Brooks.	Waterloo Rifle Association	2,500	40 00
do 19...	do Macfarlane.	52nd Battalion	500	8 00
do 21...	Major McLaren	50th do	1,000	16 00
do 21...	Lieut Beattie	60th do Snider.	1,500	25 00
do 21...	do	60th do M. H.	50	
do 26...	Capt. Bowen.	52nd do	500	8 00
do 28...	do Hall	52nd do	1,000	16 00
Oct. 3...	Lieut. R. J. Spearing.	53rd do	1,000	16 00
do 7...	Major McLaren.	50th do	500	8 00
do 12...	Capt. Baker	58th do M. H.	500	10 00
do 24...	Sergt J. C. Marks	Rifle Association M. H.	300	6 00
do 28...	Lieut. R. J. Spearing.	53rd Battalion	2,000	32 00
Nov. 10...	H. A. Johnson	51st do	500	8 00
Dec. 1...	Surgeon Smith	11th do	500	8 00
	Lt.-Col. Stevenson	150 filled cartridges; 250 friction tubes		63 10
	do Martin	Filled cartridges		7 44
		Total	102,110	1,804 00

S. A. Ammunition issued on repayment during the Year 1887—*Continued.*

Military District No. 7, Quebec.

Date.	Purchaser.	Corps.	Rounds.	Amount.
1887.				$ cts.
Jan. 3...	Lt.-Col. H. J. Miller	8th Royal Rifles	700	11 20
do 13...	do W. H. Forrest	Superintendent of Stores	100	1 60
April 1...	do H. J. Miller	8th Royal Rifles	1,000	16 00
do 9...	do do	8th do	500	8 00
do 29...	do do	8th do	1,000	16 00
May 18...	do do	8th do	1,000	16 00
do 23...	Captain Bourget	17th Battalion	1,000	16 00
June 8...	Lt.-Col. H. J. Miller	8th Royal Rifles	1,000	16 00
do 14...	do E. G. Scott	Retired List M.H.	100	2 40
do 22...	Sergeant Richard	17th Battalion	500	8 00
do 25...	Lt.-Col. H. J. Miller	8th Royal Rifles	1,000	16 00
do 28...	do do	8th do	2,500	40 00
July 21...	do do	8th do	1,000	16 00
do 29...	do do	8th do	1,000	22 00
do 29...	do do	8th do M.H.	300	
Aug. 4...	Captain Dunbar	8th do	200	3 20
do 9...	do Pinault	9th Battalion	1,000	16 00
do 10...	Major R. Stewart	Megantic Rifle Association	2,100	33 60
do 12...	A. Couillard	Rimouski do	2,000	32 00
do 13...	Lt.-Col. H. J. Miller	8th Royal Rifles	1,000	16 00
do 15...	Major Demers	17th Battalion	2,000	32 00
do 22...	do do	17th do	1,000	16 00
do 22...	N. Gauvin	Fraserville Rifle Association	2,520	40 32
do 26...	do	do do	1,260	20 16
Sept. 6...	Lt.-Col. Massicotte	70th Battalion	1,500	24 00
do 16...	Major Demers	17th do	1,000	16 00
do 21...	Lt.-Col. E. G. Scott	Retired List	500	8 00
do 23...	Captain Pinault	9th Battalion	500	8 00
Nov. 8...	Lt.-Col. H. J. Miller	8th Royal Rifles M.H.	300	22 00
do 8...	do do	do Snider.	1,000	
Dec. 5...	do Scott	Retired List M.H.	100	2 00
do 17...	do H. J. Miller	8th Royal Rifles	300	4 80
		Total	30,980	499 28

Military District No. 8, St. John, N.B.

May 6...	Captain Loggie	71st Battalion	1,000	16 00
do 10...	Major Baird	74th do	1,000	16 00
do 11...	Lieut. Lordley	62nd do	1,000	16 00
do 13...	C. Elliot	Westmoreland Rifle Association	1,000	16 00
do 15...	do	do do	1,000	16 00
do 25...	Captain Langstroth	8th Cavalry	500	8 00
do 30...	Major F. H. Hartt	62nd Battalion	2,000	32 00
June 2...	G. F. Stocking	Charlotte County Rifle Association	1,000	16 00
do 3...	Captain Loggie	71st Battalion	1,000	16 00
do 13...	do T. J. Hartt	St. John's County Rifle Association	1,000	16 00
July 14...	do Langstroth	8th Cavalry	1,000	16 00
do 16...	C. Elliot	Westmoreland Rifle Association	1,000	16 00
do 23...	Lieut. McMillan	St John's County Rifle Association	500	8 00
do 26...	Captain Langstroth	8th Cavalry M.H.	500	10 00
do 26...	Lieut. Lordley	62nd Battalion M.H.	500	10 00
Aug. 2...	Major F. H. Hartt	do M.H.	500	10 00
do 3...	Lieut. McMillan	St. John's County Rifle Association M.H.	600	12 00
do 8...	Major F. H. Hartt	62nd Battalion	12,000	192 00
do 8...	do	62nd do M.H.	2,000	40 00

S. A. Ammunition issued on repayment during the Year 1887—*Continued.*

Military District No. 8, St. John, N.B.—Concluded.

Date.	Purchaser.	Corps.	Rounds.	Amount.
1886.				$ cts.
Aug. 10...	Captain Loggie	71st Battalion	1,000	16 00
do 11...	Major Arnold	74th do	1,000	16 00
do 11...	C. Elliot	Westmoreland Rifle Association	2,000	32 00
do 12...	Major Baird	74th Battalion	1,600	25 60
Sept. 6...	Captain Loggie	71st do	1,000	16 00
do 7...	Lieut. Mackenzie	Northumberland Rifle Association	1,000	16 00
do 9...	C. Elliot	Westmoreland do	1,000	16 00
do 10...	Major F. H. Hartt	62nd Battalion	2,000	32 00
do 12...	Captain S. D. Crawford	Garrison Artillery	1,000	16 00
do 13...	Lieut. McDonald	Sackville Rifle Association	1,000	16 00
do 17...	Lt.-Col. Beer	74th Battalion	1,680	26 88
do 21...	Captain Loggie	71st do	1,000	16 00
do 28...	do	71st do	500	8 00
Oct. 12...	Major Baird	74th do	1,000	16 00
Dec. 20...	do Hartt	62nd do	1,000	16 00
		Total	46,880	766 48

Military District No. 9, Halifax, N.S.

Dec. 29...	Lt.-Col. Mackintosh	63rd Battalion	1,000	16 00
do 30...	do	63rd do	500	8 00
1887.				
Jan. 28...	Captain Black	63rd do	250	4 00
Feb. 24...	P. F. Grant	Picton County Rifle Association	500	8 00
April 28...	Major T. J. Egan	63rd Battalion	500	8 00
May 4...	Captain Garrison	Halifax Garrrison Artillery	500	8 00
do 5...	Major T. J. Egan	63rd Battalion	500	8 00
do 18...	do	63rd do	500	8 00
do 26...	do	63rd do	2,000	32 00
do 30...	Lt.-Col. Mowbray	Halifax Garrison Artillery	1,000	16 00
June 7...	Captain Gordon	Picton do	500	8 00
do 7..	do Lawrence	78th Battalion M.H.	500	18 00
do 7...	do do	78th do Snider.	500	
do 7...	Lt.-Col. Mowbray	Halifax Garrison Artillery	500	8 00
do 11...	do Mackintosh	63rd Battalion	2,500	40 00
do 11...	do do	63rd do M.H.	500	10 00
do 14...	do do	63rd do	3,500	56 00
do 23...	Lieut. Dimock	78th do M.H.	500	10 00
do 23...	Lt.-Col. Lydiard	68th do	2,000	32 00
do 27...	Captain McLeod	78th do	500	8 00
do 27...	Lt.-Col. Mowbray	Halifax Garrison Artillery	500	8 00
do 28...	do Mackintosh	63rd Battalion	500	8 00
do 30...	do Mowbray	Halifax Garrison Artillery. M.H.	260	13 20
do 30...	do do	do Snider.	500	
July 2...	do do	do M.H.	200	20 00
do 2...	do do	do Snider.	1,000	
do 2...	Lieut. Dimock	78th Battalion M.H.	500	10 00
do 4...	Lt.-Col. Mowbray	Halifax Garrison Artillery	2,500	40 00
do 4...	Major T. J. Egan	63rd Battalion	500	8 00
do 8...	do	63rd do M.H.	500	18 00
do 8...	do	63rd do Snider.	500	
do 18...	Lt.-Col. Mackintosh	63rd do	500	8 00
do 18...	Captain Church	93rd do	500	8 00
do 18...	Lieut. Dimock	78th do	1,000	16 00

S. A. Ammunition issued on repayment during the Year 1887—*Continued*

Military District No. 9, Halifax, N.S.—Concluded.

Date.	Purchaser.	Corps.	Rounds.	Amount.
1887.				$ cts.
July 18...	Lt.-Col. Mowbray	Halifax Garrison Artillery ... M.H.	600	20 00
do 18...	do	do ... Snider.	500	
do 18...	Captain Lawrence	78th Battalion	500	8 00
do 18...	Lt.-Col. Starratt	69th do ... M.H.	500	18 00
do 18...	do do	69th do ... Snider.	500	
do 25...	do Mowbray	Halifax Garrison Artillery	1,000	16 00
do 25...	do Mackintosh	63rd Battalion	1,000	16 00
do 26...	Major T. J. Egan	63rd do ... M.H.	500	10 00
do 29...	Lt.-Col. Mowbray	Halifax Garrison Artillery ... H.H.	600	12 00
Aug. 9...	do Mackintosh	63rd Battalion ... M.H.	5,000	244 00
do 9...	do do	33rd do ... Snider.	9,000	
do 12...	Lieut. D. M. Owen	Lunenburg Rifle Association ... M.H.	800	16 00
Sept. 2...	Major T. J. Egan	63rd Battalion	1,000	16 00
do 8...	do	63rd do	500	8 00
do 14...	Captain J. Daley	Digby Garrison Artillery	1,000	16 00
do 20...	Major T. J. Egan	63rd Battalion	500	8 00
do 24...	Lt.-Col. Starratt	69th do ... M.H.	500	10 00
Oct. 3...	Captain Lawrence	78th do	1,000	16 00
do 3...	do Gordon	Pictou Garrison Artillery	1,000	16 00
do 4...	do Harrison	Cumberland County Rifle Association	1,500	24 00
do 7...	Major T. J. Egan	63rd Battalion	1,000	16 00
do 11...	do Marshall	Annapolis Rifle Association ... M.H.	1,000	20 00
do 18...	Lieut. Bland	Halifax Rifle Club	1,800	28 80
do 21...	Captain Jolly	Yarmouth Garrison Artillery	1,040	16 00
Dec. 17...	do Crane	63rd Battalion	500	8 00
do 17...	do Jolly	100 friction tubes		2 50
		Total	61,010	1,028 50

Military District No. 10, Winnipeg.

April 18...	F. W. Peters	Brandon Rifle Association	1,000	16 00
do 22...	Hingston, Smith Arms Co	... M.H.	600	78 40
do 22...	do do	... Snider.	4,000	
May 7...	Major G W. Street	Manitoba Rifle Association	500	8 00
do 9...	F. W. Peters	Brandon Rifle Association	1,000	16 00
do 16...	Lieut. W. R. Dow	91st Battalion	500	8 00
do 21...	F. W. Peters	Brandon Rifle Association	1,000	16 00
do 25...	E. L. Drewry	Winnipeg Rifle Association ... M.H.	1,200	56 00
do 25...	do	do do ... Snider.	2,000	
do 30...	N. Dickie	Carberry Rifle Club	500	8 00
June 2...	R. C. Brown	Portage la Prairie Rifle Association ... M.H.	1,000	36 00
do 2...	do	do do . Snider.	1,000	
do 2...	F. W. Peters	Brandon Rifle Association	1,000	16 00
do 9...	Thomas Wastie	Western Rifle Association	500	8 00
do 9...	N. Dickie	Carberry Rifle Club	500	8 00
do 17...	Major L. Buchan	Mounted Infantry School	2,000	32 00
do 18...	F. W. Peters	Brandon Rifle Association	1,000	16 00
do 20...	E. L. Drewry	Winnipeg Rifle Association ... M.H.	1,200	56 00
do 20...	do	do do ... Snider.	2,000	
do 24...	N. Dickie	Carberry Rifle Club	2,000	32 00
do 28...	E. L. Drewry	Winnipeg Rifle Association	4,000	64 00
do 28...	R. C. Brown	Portage la Prairie Rifle Association	2,000	32 00
July 4...	Hingston, Smith Arms Co	... M.H.	1,200	88 00
do 4...	do do	... Snider.	4,000	

S. A. Ammunition issued on repayment during the Year 1887—*Continued.*

Military District No. 10, *Winnipeg*—Concluded.

Date.	Purchaser.	Corps.	Rounds.	Amount.
1887.				$ cts.
July 18...	Major G. W. Street	Manitoba Rifle Association	2,000	32 00
do 11...	do	do do	4,000	64 00
do 19...	do	do do	6,000	96 00
do 22...	A. Gothard.....	Brandon Rifle Association	3,000	48 00
do 29...	Lt.-Col. Boswell.....	91st Battalion	2,000	32 00
Aug. 1...	E. L. Drewry.....	Winnipeg Rifle Association..... M.H.	1,200	24 00
do 2...	Major G. W. Street.....	Manitoba Rifle Association..... M.H.	1,800	132 00
do 2...	do	do do ..... Snider.	6,000	
do 3...	Major L. Buchan.....	Mounted Infantry School	1,500	24 00
do 4...	A. L. Ashdown.....	Portage la Prairie Rifle Association. ...M.H.	1,000	52 00
do 4...	do	do do .Snider.	2,000	
do 5...	H. Swinford.....	Manitoba Rifle Association	2,400	38 40
do 6...	do	do do .....Pistol.	1,000	10 00
do 18...	Major G. W. Street.....	do do ..... M.H.	2,400	48 00
Sept. 24...	W. Pierce	Edmonton Rifle Association ..... M.H.	2,000	40 00
do 26...	A. L. Ashdown.....	Portage la Prairie Rifle Association....M.H.	1,500	30 00
do 30...	Major L. Buchan.....	Mounted Infantry School	1,200	19 20
Oct. 11...	Hingston, Smith Arms Co	..... M.H.	600	44 00
do 11...	do do ...	..... Snider.	2,000	
do 11...	A. L. Ashdown.....	Portage la Prairie Rifle Association	1,000	16 00
do 27...	Major G. W. Street.....	Neepawa Rifle Association	500	8 00
Dec. 5...	E. L. Drewry.....	Winnipeg Rifle Association..... M.H.	1,200	56 00
do 5...	do	do do .....Snider.	2,000	
		Total	84,000	1,408 00

Military District No. 11, *Victoria, B.C.*

April 12...	Capt. W. H. Dorman.....	Garrison Artillery.....	2,000	32 00
do 23...	do	do	2,000	32 00
May 3...	do A. W. Jones.....	do	1,375	22 00
do 6...	do W. H. Dorman	do ..... M. H.	500	12 00
do 6...	do	do	2,000	32 00
June 1.	Assist. Surgeon Trew.....	New Westminister Rifle Association.....	2,000	32 00
do 2...	Capt. W. H. Dorman.....	Garrison Artillery..... M. H	600	12 00
do 10...	do	do ..... M. H.	500	10 00
do 11...	do	do	2,000	32 00
July 10...	do	do ..... M. H.	500	10 00
do 14...	Capt. E. H. Fletcher.....	British Columbia Rifle Association.	2,000	32 00
do 14...	do W. H. Dorman.....	Garrison Artillery.....	2,000	32 00
		Total.....	17,475	290 00

S. A. Ammunition issued on repayment during the Year 1887—*Continued.*

Military District No. 12, Charlottetown, P. E. I.

Date.	Purchaser.	Corps.	Rounds.	Amount.
1887.				$ cts.
Dec. 17...	Capt. Henderson	82nd Battalion	500	8 00
do 21...	do G. Alexander	do	500	8 00
do 24...	do F. G. Moore	do	500	8 00
do 24...	do T. S. McLeod	do	500	8 00
do 29...	Major Irving	Provincial Rifle Association	500	8 00
do 31...	Lieut. G. Crockett	82nd Battalion	1,000	16 00
1887.				
Jan. 28...	Capt. Jenkins	Garrison Artillery	500	8 00
April 22...	do G. Crockett	82nd Battalion	700	10 40
May 26...	Major Irving	Provincial Rifle Association	500	8 00
do 30...	Lieut. Stewart	Kings County do	4,000	64 00
June 1...	Capt. Weeks	Queen's do do M. H.	500	10 00
do 1...	do Stewart	82nd Battalion M. H.	500	10 00
do 11...	Major Irving	Provincial Rifle Association	500	8 00
do 22...	Capt. Weeks	Queen's County do M. H.	500	10 00
July 5...	do Passmore	Garrison Artillery M. H.	600	12 00
do 11...	Major Irving	Provincial Rifle Association	500	8 00
do 13...	do Weeks	Queen's County do M. H	800	16 00
do 22..	Major Irving	Provincial Rifle do	500	8 00
do 28...	do	do do	500	8 00
do 28...	Capt. Weeks	Queen's County do M. H.	500	10 00
Aug. 2...	Major Irving	Provincial Rifle do	500	8 00
do 8...	do	do do	500	8 00
do 12...	do	do do	6,000	96 00
do 23...	Capt Weeks	Queen's County do M. H.	500	10 00
Sept. 13...	do	do do	1,500	24 00
Oct. 8...	Capt. Longworth	do do M. H.	500	10 00
do 8...	Major Irving	Provincial Rifle do	500	8 00
Nov. 11...	Capt. Alexander	82nd Battalion	500	8 00
do 28...	Major Irving	Provincial Rifle Association	500	8 00
Dec. 6...	Capt. G. Crockett	82nd Battalion	500	8 00
do 13...	do Henderson	82nd do	500	8 00
do 20...	do Stewart	82nd do	500	8 00
		Total	27,100	450 40

S. A. Ammunition issued on repayment during the Year 1887—*Concluded.*

RECAPITULATION.

Military Districts.	Rounds.	Amount.
		$ cts.
Military District No. 1, London	37,950	609 20
do 2, Toronto	101,910	1,696 34
do 3, Kingston	35,500	605 74
do 4, Ottawa	137,357	2,554 78
do 5, Montreal }	102,110	1,894 00
do 6, do }		
do 7, Quebec	30,980	499 28
do 8, St. John, N.B	46,880	766 48
do 9, Halifax, N.S	61,010	1,028 50
do 10, Winnipeg	84,000	1,408 00
do 11, Victoria, B.C.	17,475	290 00
do 12, Charlottetown, P.E.I.	27,100	450 40
Total	682,272	11,712 72

	Rounds.
Snider—Ball	549,417
Blank	700
Martini-Henry—Ball	129,343
Revolver—Colts'	2,812
	682,272

J. MACPHERSON, Lt.-Colonel,
Director of Stores and Keeper of Militia Properties.

[C.]

RETURN of Gunpowder and Friction Tubes issued for Practice and Salutes during the Year 1887.

Military Districts.	Stations.	Corps.	Gunpowder.	Friction Tubes.
			Lbs.	No.
No. 1	London	London Field Battery	24	50
No. 2	Toronto	Field and Garrison Batteries of Artillery	1,910	1,690
No. 3	Kingston	Field and Garrison Batteries of Artillery, Royal Military College and Royal School of Artillery	1,183¾	1,128
No. 4	Ottawa	Field Batteries of Artillery and Salutes	486	385
Nos. 5 & 6	Montreal	Field and Garrison Batteries of Artillery and Salutes	1,716	1,165
No. 7	Quebec	do do do	7,796¾	1,511
No. 8	St. John, N.B.	do do do	1,693	869
No. 9	Halifax, N.S	Garrison Artillery Batteries	1,887½	375
No. 10	Winnipeg	Winnipeg Field Battery and Salutes	380½	390
No. 12	Charlottetown	Garrison Artillery	991½	372
		Total	18,069	7,935

J. MACPHERSON, Lt.-Colonel,
Director of Stores and Keeper of Militia Properties

[D.]—Return of Ordnance in possession of the Militia

Military District.	Station.	Guns—Field, Sieges and Garrison.																				
		Rifled.											Smooth									
		Wrought-iron.									Cast-iron, convrtd		Bronze.									
		Breech-loading.					Muzzle-loading.											18-pr.		24-pr.		
		6-pr.	12-pr.	20-pr.	40-pr.	7-in.	9-pr.	64-pr.	7-inch.	8-inch.	64—32 pr.	7-inch—68 pr.	8-inch—68 pr.	7-pr.	3 pr.	6 pr.	9 pr.	12-pr.	12-pr. 24 cwt.	38 cwt.	42 cwt.	20 cwt.	48 cwt.	50 cwt.
1	London Field Battery	...	...	...	...	...	4	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Store charge	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Charge of City	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Guelph, 1st Brigade Field Artillery	...	...	...	...	...	4	...	...	...	...	...	...	...	...	...	4	...	...	...	...	...	...	...
	Goderich Garrison Battery	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Sarnia do	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	do Charge of Town	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Stratford do	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Galt do	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Kincardine do	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
2	Toronto Drill Shed	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...
	Field Battery	...	...	...	...	...	4	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Charge of City	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Store charge	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	6	...	...	2	...	...	...	...
	York Pioneers	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...
	Old Fort	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	New do	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Hamilton Field Battery	...	...	...	...	...	4	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Drill Shed	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Charge of City	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Port Robinson, Welland Canal Field Battery	...	...	...	...	...	4	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...
	St. Catharines Garrison Battery	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	...	...	...
	Sault Ste. Marie Mountain Battery	...	...	...	...	...	...	...	...	...	...	...	...	2	...	...	...	...	...	...	...	...	...	...
3	Durham Field Battery	...	...	...	...	...	4	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Cobourg Garrison Battery	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Port Hope do	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Trenton do	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Kingston Field Battery	...	...	...	...	...	4	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Charge of City	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Store charge	...	...	...	...	...	...	...	...	...	...	...	...	...	...	4	9	...	...	4	...	4	...	17
	Tête du Pont Barracks	...	...	...	1	...	4	...	...	...	1	...	...	...	...	...	...	...	...	1	...	6	...	1
	Fort Henry	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	15
	Fort Frederick	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	...
	do Tower	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Murney do	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Snoal do	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	East Branch do	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...
	West do do	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...
	Cedar Island do	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Royal Military College	6	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
4	Gananoque Field Battery	...	...	...	...	...	4	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...
	Brockville, charge of City	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Ottawa Field Battery	...	...	...	...	...	4	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
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	Nepean Point	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	...	...	...	4

and in Dominion Store charge, on 31st December, 1887.

Bore.																												
											Carronades Cast-iron.					Howitzer				Mortars, Cast-iron.								
																Bronze		Cast-iron.		10-inch.								
Cast-iron.																												
32-pr.								8-in.																				Remarks.
32 cwt.	42 cwt.	45 cwt.	48 or 50 cwt.	56 cwt.	58 cwt.	63 cwt.	56-pr.	54 cwt.	65 cwt.	68-pr., 95 cwt.	12-pr.	18-pr.	24-pr.	32-pr.	68-pr.	12-pr.	24-pr.	5½-inch.	8-inch.	8-inch, 9 cwt.	16 cwt.	18 cwt.	47 or 52 cwt.	13-inch, 36 cwt.	Gatling Machine Guns.	Russian Guns.		
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[D]—Return of Ordnance in possession of the Militia

Military District.	Station.	Guns—Field, Siege and Garrison.																					
		Rifled.												Smooth									
		Wrought-iron.								Cast-iron, convrtd				Bronze.									
		Breech-loading.				Muzzle-loading.													18-pr.		24-pr.		
		6-pr.	12-pr.	20-pr.	40-pr.	7-in.	9-pr.	64-pr.	7-inch.	8-inch.	64-32 pr	7-inch-68 pr.	8-inch-68 pr	7-pr.	3-pr.	6-pr.	9-pr.	12-pr.	2-pr., 34 cwt	38 cwt.	42 cwt.	20 cwt	48 cwt.	50 cwt.
	Ottawa, Time Gun	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...
	Montreal Field Battery	...	...	...	...	...	4	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Garrison Artillery	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
5 & 6	Store charge	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	3	...	...	...	19
	Charge of City	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Granby, Shefford Field Battery	...	...	...	...	...	4	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Richmond Field Battery	...	...	...	...	...	4	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	St. John Garrison Battery	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...
7	Quebec Field Battery	...	...	...	...	...	4	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Citadel	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	King's Bastion	...	...	...	...	...	...	...	...	...	1	1	...	...	...	...	...	...	...	...	...	1	7	...
	Mann's do	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...
	Richmond do	...	...	...	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	3	...
	Diamond do	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Dalhousie do	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...
	Parade Ground	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	10	...
	Field Battery	...	...	...	...	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	City lines :—																							
	Upper Casemate	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	St. Louis Curtain	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	do Bastion	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Ursulines' Curtain	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	do Bastion	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	St. John's do	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	10
	Barrack do	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Armory Battery, No. 1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	do 2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Artillery Barracks	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1
	Drill Shed, Louis Road	...	...	...	1	...	...	...	...	...	1	...	...	...	...	...	...	...	...	1	...	...	1	1
	Towers No. 1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...
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	Nunnery Battery No. 1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...
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	Montcalm Battery,	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	4	...	...	...
	Hope Gate do	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	2	...
	Half Moon do	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...
	St. Charles do	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Assembly do	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Grand do	...	...	...	...	...	...	...	...	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...
	Prescott Gate Battery	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Wolfe's do	...	...	...	...	...	...	...	...	...	2	...	...	...	...	...	...	...	...	...	...	...	2	...
	Carronade	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	"E" Magazine Yard	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Under Dufferin Terrace	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...
	Lévis, Artillery Park	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...
	No. 1 Fort	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
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	Island of Orleans	...	...	...	...	...	...	...	...	...	2	...	...	...	...	...	...	...	...	...	...	...	...	2

and in Dominion Store charge, &c.—*Continued.*

Bore.																														
											Carronades, Cast-iron.					Howitzer			Mortars, Cast-iron										
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Cast-iron.																														
32-pr.								8-in.																						Remarks.
32 cwt.	42 cwt.	45 cwt.	48 or 50 cwt.	56 cwt.	58 cwt.	63 cwt.	56-pr.	54 cwt	65 cwt.	68-pr., 95 cwt.	12-pr.	18-pr.	24-pr.	32-pr.	68-pr.	12-pr.	24-pr.	5½-inch.	8-inch.	8-inch, 9 cwt.	16 cwt.	18 cwt.	47 or 52 cwt	13-inch, 36 cwt.	Gatling Machine Guns.	Russian Guns.				
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[D.]—Return of Ordnance in possession of the Militia

Military District.	Station.	Guns—Field, Siege and Garrison.																					
		Rifled.												Smooth									
		Wrought-iron.									Cast-iron, convrtd			Bronze.									
		Breech-loading.					Muzzle-loading.												18-pr.		24-pr.		
		6-pr.	12-pr.	20-pr.	40-pr.	7-in.	3-pr.	64-pr.	7-inch.	8-inch.	64—32-pr.	7-inch—68 pr.	8-inch—68 pr.	7-pr.	3-pr.	6-pr.	9-pr.	12-pr.	12-pr., 34 cwt.	38 cwt.	42 cwt.	20 cwt.	48 cwt.	50 cwt.
	Quebec, store charge																		2	2	8		12	24
	Grosse Isle																		2		1			
	Gaspé Garrison Battery																							2
	Quebec, charge of City																							
8	Newcastle Field Battery						4																	
	Woodstock						4																	
	Dorchester Penitentiary																							1
	St. John, store charge																		3	1				2
	Fort Dufferin										5													
	Carleton Tower																							1
	Fairville																		2					
	Fort Howe																							
	Red Head																							
	Partridge Island																				1			
	Dorchester Battery																							2
	Drill Shed																							2
	Obatham																							1
	St. Andrews																							2
	St. George															2								
	Fredericton															2								
9	Halifax, N.S., Drill Shed														1									
	Point Pleasant										2													
	Picton																		2					
	Granville																		1					
	Digby																							
	Lunenburg																							
	Yarmouth																							
	Sydney, C.B.																4							
	Herring Cove																		1					
	Chester														2									
	Liverpool																							
10	Winnipeg Field Battery						4																	
	Store charge																							
11	Victoria, B.C							3							1									
	Finlayson Point							1																
	Esquimault, Macaulay Point								3															
	Brothers' Island							2		1														
	New Westminster																							
12	Prince Edward Island—																							
	Victoria Barracks														2									
	Fort Edward																							
	Drill Shed																							2
	Georgetown																							2
	Total	6	2	1	4	10	70	6	3	1	17	1	1	2	9	10	23	2	20	19	17	17	54	107

and in Dominion Store charge, &c.—*Concluded.*

Bore. Cast-iron. 32-pr. 32 cwt.	32-pr. 42 cwt.	32-pr. 45 cwt.	32-pr. 48 or 50 cwt.	32-pr. 56 cwt.	32-pr. 58 cwt.	32-pr. 63 cwt.	55-pr.	8-in. 54 cwt.	8-in. 65 cwt.	68-pr. 95 cwt.	Carronades, Cast-iron. 12-pr.	Carronades 18-pr.	Carronades 24-pr.	Carronades 32-pr.	Carronades 68-pr.	Howitzer. Bronze 12-pr.	Howitzer. Bronze 24-pr.	Howitzer. Cast-iron 5½-inch	Howitzer. Cast-iron 8-inch.	Mortars, Cast-iron. 8-inch, 9 cwt.	Mortars 10-inch 16 cwt.	Mortars 10-inch 18 cwt.	Mortars 47 or 52 cwt.	Mortars 13-inch, 36 cwt.	Gatling Machine Guns.	Russian Guns.	Remarks.
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J. MACPHERSON, Lieut.-Col.,
Director of Stores and Keeper of Militia Properties.

APPENDIX No. 13.

REPORT OF THE ARCHITECT, ENGINEER BRANCH.

DEPARTMENT OF MILITIA AND DEFENCE,
OTTAWA, 31st December, 1887.

SIR,—I have the honor to transmit herewith my report upon works and repairs made to the military buildings and fortifications under control of the Department from 1st January last to date.

London.

The contract awarded for the main building of new Infantry School, has been satisfactorily completed. A full description of this building is given in last year's report. The necessary outbuildings are now in course of erection.

Toronto.

At New Fort Barracks, "Infantry School," the following works have been done:—Four fuel vaults to officers' quarters. New flooring to seven rooms, and new ceilings to same rooms, in east building. Repairs to sea wall. New foot paths. Repairs to roads and culverts. Slate roof to hospital. New fuel shed to married men's quarters. Re-shingling roof of drill shed, and a large amount of painting, plastering and lime-whiting and general minor repairs have been done by men of the Company.

At store buildings the roof of one large store and portions of another has been re-shingled and small repairs made to caretakers house.

At Old Fort repairs have been made to one of the magazines.

Hamilton.

The new Drill Shed to replace the one burnt down has been satisfactorily completed by the contractor.

St. Catharines.

Extensive repairs consisting of new sills, new foundations, and re-shingling have been made to this Drill Shed.

Kingston.

At Royal Military College the usual and annual repairs necessary for the proper maintenance of the buildings and grounds have been carried out under the superintendence of Sergeant-Major Birtles, R.M.C.

At Tête de Pont Barracks a large number of small repairs have been made.

The sea wall at Fort Henry has been partly rebuilt and repaired. Roofs over casemates and parapets repaired, and repairs and painting to front of casemates partly done. Other minor and necessary repairs have been made at the fort and advance battery.

Small general repairs have been made at the Artillery Park Barracks, Riding School, Drill Shed, Fort Frederick, and to the detached towers.

Inspector of works outside the R.M. College, Messrs. Power & Son, Kingston.

Ottawa.

The inside and outside of Drill Shed has been repainted, and main hall and rooms around shed limewhitened or kalsomined. New drain put in from building, and pointing outside of building repaired. New galvanized iron roof covering to towers. Small minor repairs have been made to the building generally, and a large number of new trees to replace dead ones planted around Cartier Square.

At new Militia Stores, canal basin, a new chimney has been erected. Roof painted. New eave gutters and fall pipes put up. Flooring of tent room and arms room renewed. Additional shelving and cupboards to camp room. New steps from Sappers Bridge. Roadway improved and water channel and drainage connected with street drain. Hydrant, fire hose and ladders provided in case of fire.

In consequence of want of space at the new stores, carpenters and armorers shops are now being arranged and carried out at the old stores at foot of locks.

Small repairs have been made to the caretaker's house at the rifle range.

At Nepean Point the brush wood has been cut out to allow of better supervision of the magazines, &c., from the caretaker's house.

Prescott.

The drill shed has been reshingled, new eave gutters and fall pipes provided, and other minor repairs made.

The old gallery around Blockhouse, at Fort Wellington, has been taken down and renewed. Roof of Blockhouse painted and provided with new eave gutters and fall pipes and outer walls repointed. Small repairs have been made to the gateway to fort and to the minor buildings inside fort.

St. John's, Quebec.

At Infantry Barracks the following works have been done: improvement of drainage; new wood ceilings; repairs to slating; repairs to floors; new roof to old hospital building; gravelling of square completed, and a large number of small repairs for proper maintenance of buildings and grounds.

Chambly.

Small additional repairs necessary for the preservation of ruins of old fort have been made under Mr. J. O. Dion.

St. Helen's Island, Montreal

The upper part of old military wharf at lower end of St. Helen's Island has been taken down and rebuilt.

The gun shed roof has been painted.

Sherbrooke.

The roof of drill shed has been reshingled and sundry repairs made.

Quebec.

The continuation of city water supply to the various buildings of the Citadel has been now nearly completed. The old drain from officer's quarters across Champlain Street and Allan's Wharf has been taken up and new drain put in.

Owing to the fire which in July last burnt down the temporary roofs over the casemates, the chimneys of casemates have had to be rebuilt and further works will be necessary next spring to repair and make good top of casemates.

Contract has been awarded for the heating by hot water of the officers' quarters.

To the several buildings of Citadel a large number of small repairs have been made.

Gun platforms at Citadel have been repaired.

The old militia stores on D'Auteuil Street are being converted into stabling for Cavalry School Corps.

The old drill shed on St. Louis Street has been taken down and contract for re-erecting same on the Cove Field as Riding School has been awarded.

Contract for required repairs to militia offices, St. Louis Street, has been carried out.

Considerable repairs aad improvements have been made to the cartridge factory.

Retaining walls and fence to glacis on St. Ursule and St. Geneviève Street have been repaired and partly rebuilt.

Fence near High School has been repaired.

Repairs to No. 2, Martello Tower, have been made.

Lévis.

At Engineer's Camp, Lévis, a new main drain has been laid and a large number of repairs made to the several buildings.

St. John, N. B.

New floors to armories of drill shed have been laid.

Repairs have been made to the fencing around military store buildings.

Repairs have been made to magazine, Fort Howe.

Fredericton.

Repairs have been made to roof of drill shed. Repairs have been made to drainage.

A new fence and retaining wall has been built around the grounds in front of officers' barracks.

A large number of repairs have been made to men's and officers' quarters and to Park barracks.

The magazine at Park barracks has been repaired.

Considerable improvements have been made to the water and gas supply and to the general plumbers work of the several buildings.

The men belonging to the company have done a large amount of painting, lime-washing and minor reapirs.

Winnipeg.

At Fort Osborne (mounted infantry barracks), the stabling and officers' quarters have been completed. The buildings throughout the barrack square have been provided with efficient system of drainage, with main drain leading to the river.

Two hundred feet of new fence has been erected, six hundred feet of old fence removed and re erected, and four hundred and twenty-eight feet of new sidewalk has been laid.

Considerable repairs have been made to officers' and men's huts, cook house, wash house, hospital, &c.

New latrines are now in course of erection.

Victoria, B.C.

Buildings rented for temporary occupation of "C" Battery, R.C.A., have been fitted up.

Plans have been prepared and contract awarded for the erection of three barrack buildings to accommodate thirty-six men each.

I have the honor to be, Sir,
Your obedient servant,

H. JAMES,
Architect, &c.

Colonel, The Hon. C. E. PANET,
Deputy Minister of Militia and Defence,
Ottawa.

APPENDIX No. 14.

GOVERNMENT CARTRIDGE FACTORY.

QUEBEC, 1st December, 1887.

SIR,—I have the honor to report on operations at the Government Cartridge Factory, for the year ending the 1st December instant, as follows:—

The quantity of Snider B. L. R. service ball ammun.tion manufactured during this year is 1,900,000 rounds, and of blank 226,500.

A quantity of empty cartridges (274,000) is on hand ready for filling and finishing. Most of the ball ammunition manufactured this year is of the coiled brass case pattern.

The tests applied to the ammunition manufactured have given satisfactory results.

Hereunder is given a synoptical extract of records of proof of the ammunition, covering a period of several months' manufacture.

EXTRACT of the Proof of Ammunition from fixed rests at 500 yards.

Date.	Number of Target.	Figure of Merit.	Wind.	Direction of Wind.	Temperature. D	Temperature. W	Humidity.
1887.							°
April 20	1	14·65	Variable and gusty		44°	37°	54
do 20	2	14·95	do		44	37	54
do 22	1	15·00	Variable		54	47	59
do 22	2	11·58	do		54	47	59
May 16	1	15·00	Variable and gusty		77	62	41
do 31	1	12·55	Gusty		69	59	53
do 31	2	13·35	do		69	59	53
July 2	1	16·82	Variable and very gusty		90	77	50
do 2	2	16·77	do		90	78	53
do 6	1	15·00	Gusty		83	75	64
Aug. 5	1	13·07	Variable		83	74	60
do 5	2	10·56	do		83	74	60
do 12	1	14·92	Variable and gusty		68	63	73
do 12	2	12·75	Gusty		74	67	66
do 15	1	14·90	Variable and gusty		—	—	—
do 19	1	15·75	do		77	67	56
Sept. 1	1	11·35	Gusty		68	61	64
do 1	2	15·62	do		68	61	64
do 6	1	13·83	do		74	67	66
do 6	2	17·92	do		74	67	66
do 28	1	16·57	do		62	54	58
Oct. 26	1	14·97	Variable		—	—	—
do 28	1	19·26	Slightly variable		42	40	85
do 28	2	16·27	do		42	40	85
do 28	3	14·97	do		42	40	85
do 28	4	18·17	do		42	40	85
Nov. 7	1	12·46	Fairly steady		42	39	78
do 7	2	11·26	do		42	39	78
do 22	1	12·25	Variable and gusty		33	31	78
do 22	2	14·96	do		33	31	78
do 30	1	17·25	do		—	—	—

The powder used during the year for S. A. ammunition has been exclusively R. F. G., manufactured by Curtis & Harvey, under War Office supervision.

The regular tests applied to this powder at the Factory have given good results.

An order for the annual supply of artillery projectiles having been given, to be manufactured at the Factory, a foundry and all the necessary appliances for making studless shells and gas checks have been provided.

I erected a cupola furnace in one of the spare Government Buildings adjacent to the Factory, which was formerly used as a lumber store; and the addition of sky lights has made this building perfectly adapted to the purposes of a shell foundry, which could be extended to double its present space at small expense when required.

The cupola furnace is a *caisson* of boiler plate well riveted and lined with fire bricks, resting on a solid foundation of masonry, provided with a conical flue, and with tuyères through which the strong blast of a "Sturtevant" steel pressure blower is forced. The blower though standing seventy feet from the furnace gives a very strong and even pressure of air, and is actuated by the Factory engine, and being placed in the workshop, provides the furnace with air heated to a certain degree, to which I attribute the fact of the metal running down about twelve minutes after the blast is put on, which may be considered an unusually short time.

The questionable usefulness, and the cost of a plant of elaborate moulding tables just at present, induced me to adopt, instead, accurately fitting moulding boxes totally unconnected with any apparatus of a special nature.

I trust to a system of accurate gauging to ensure correct dimensions and the shells being concentric.

The moulding boxes are in two parts, joined and secured by perfectly fitting flanges and removable clamps.

The spindles of the shell cores fit accurately in a conical recess of the cross bars of the moulding boxes, and the shell patterns being provided with a cone similar to that of the spindles, the castings are concentric.

Both 9 and 64 pounder shells are cast according to this method. The 9-pounders are cast two in the same box; the 64-pounders are cast singly.

A mixture of coal and moulding sand, in proper proportions, is used for moulding those shells, to give the castings a smooth surface. A special mixture is used for making the cores.

There is no difference in the process of casting common or shrapnel, only the pattern and the core boxes being different.

As it was necessary to provide gas checks, bushes, tubes, &c., of copper and of gun metal for this manufacture, a brass and copper furnace was erected in the foundry, in which all the above are cast, the necessary patterns, moulding boxes, and other apparatus for this description of work being provided and prepared at the Factory.

A sufficiently large drying room for cores was also erected.

Most of the work and appliances for the iron and brass foundry have been done at the Factory by the Factory personnel, except heavy forging and boiler plate work for which we had not the necessary means.

The finishing of the shells and their several parts is done in the Factory workshop, and apparati. were devised for the work.

A press is now in course of construction which will increase the output of gas checks and may be utilized as well for forming shrapnel steel heads.

Metal from old S.B. ordnance has been utilized in connection with the casting of artillery projectiles. The proportion used is considerable, hence the necessity of breaking up the guns economically. This I have done by uprighting the guns to be destroyed in a pit, using charges of high explosives proportioned to the weight of the piece, and exploding the charges by a current of electricty from a dynamo, or a suitable electric battery.

The cost of breaking up does not exceed a few dollars, including the labor, and a very good metal for casting shells is obtained when mixed with a proportion of old spherical projectiles and new iron.

The grain of the metal approximates that of Woolwich projectiles, and the proportion of carbon is about the same

To settle all doubts as regards extra pressure, due to using gas checks in 9-pr. M.L.R. guns, I initiated experiments to test with instruments the pressures exerted and velocities obtained, with studded and studless shells, respectively. The experiments carried out indicated more velocity and less pressure with studless than with studded projectiles in the 9-pr.

Hereunder is an extract of the results obtained] with R. L. G., charge 1 lb. 12 ounces, projectile 9 lbs. :—

No. of Shot.	Description of Projectile.	Pressure per square inch in fractions of inch.	Observed Velocities in metres.	Remarks.
1	Studless D. C.*	·440	.....	Velocity missed.
2	do	·429	411·6	
3	Studded W.†	·433	401·3	
4	Studless D. C.	·443	406·	
5	Studded W.	·430	403·8	
6	Studless D. C.	·422	.....	Velocity missed.
7	do	·427	411·8	
8	Studded W.	·425	400·	
9	Studless D. C.	·429	411·3	
10	Studded W.	·425	401·1	
11	Studless D. C.	·434	413·1	
12	do	·428	418·6	
13	do	·427	414·6	
14	Studded W.	·424	400·	
15	Studless D. C.	·423	409·3	

* D. C. manufactured at Quebec.
† W. do Woolwich.

The mean observed velocity of the studless shell would be 1,364·84 feet, and the pressure 9 tons nearly, while the mean observed velocity of the studded shell obtained is 1,316·29 feet, and the pressure 9·21 tons per square inch.

Apart from breaking up a number of shells from each cast, it is found necessary to test the quality of metal by actual firing of a percentage, filled and securely plugged. The object of this is to make sure that no flaws or defects exist liable to cause premature explosions. The shells are filled completely, as it has been proved that partly filled shells are, by this fact alone, liable to premature explosion. The lacquer is also a question of importance in this connection.

I therefore proceeded with these tests, using charges of 6 and 8 lbs. R.L.G. in a 64-pr. M.L.R., firing common shell of our manufacture. The tests established the soundness of the metal and general serviceableness of the projectiles; but it was found that the 6 lbs. charges, lately ordered to be used with 64-pr. M.L.R. converted guns, failed to give sufficient rotation, by means of the gas check, to the projectile; and several recovered shells showed clearly that the metal of the gas check had not been pressed deep enough into the serrations on the base of the shell, and gripped insufficiently, not giving the degree of rotation required with 64-pr. shell for accurate shooting.

The 8 lbs. charges of R.L.G. invariably gave good shooting, and the range obtained was 1,600 yards when using elevation for 1,450 yards.

For accuracy the practice confirmed previous results.

A great deal of extra work has been thrown on those responsible for the supervison of this new branch of manufacture which, to be successfully carried out, obviously requires constant care and attention to details.

The yearly supply of raw material for the Government Cartridge Factory was received in good order, and the articles answered to specification, except a lot of base disc iron which was not to gauge and was rejected.

The clerical staff of the Factory is insufficient for the proper performance of the office work.

The system of paying accounts through the District Paymaster without notice of such payments being given to the office of the Factory deprives the Superintendent of a very effective check on errors and of means of protecting himself from pecuniary responsibility, for which he receives no compensation. This is more than can justly be expected from him.

The number employed at cartridge manufacture during the year has been under the average of the preceding year.

The several repairs to buildings and other works authorized have been performed, and a shed estimated for last year has been erected back of the Factory. The covering of the roof is unfinished however, and it is to be regretted that the work was not begun earlier in the season, as now the winter has set in, and owing to the incomplete state of the shed it cannot be utilized.

The wooden buildings at the Laboratory constructed by the Imperial authorities and subsequently used in connection with this manufacture, are now rapidly giving way, and to prevent further decay a stone foundation and new sole plates to replace the rotten ones will be required.

Four of the buildings will have thus to be raised on stone foundations, they are now resting on decayed timber posts. With the repairs above mentioned the buildings will be still serviceable for a number of years.

I have the honor to be, Sir,

Your obedient servant,

OSCAR PRÉVOST, Major,
Superintendent Government Cartridge Factory.

To the Deputy Minister of Militia and Defence,
Ottawa.