Foster and Macshane, for the way in which they have discharged the responsible duties of their respective commands, and to the staff, particularly to the Brigade Major, Lieut, Colonel Otty, for a continuance of his valuable assistance and support.

By Order.

A. C. OTTY, Lieut.-Colonel, Brigade Major.

I cannot close this report without stating my conviction that the barrack field at St. John, being so near to the worst part of the city (morally) is not a desirable place for the essembly of a camp. It was, however, as already shewn, impracticable this year

to form a camp for the St. John corps at any other place.

But, as a general rule, it is of great advantage to troops to be encamped at some distance from a city or large town; at such places commanding officers are not troubled with applications for "passes" from parades or roll calls, and crime is conspicuous by its absence.

#### New Brunswick Engineer Corps.—Captain Perlev.

Inspected by Lieut.-Colonel Otty, Brigade Major, on the 13th November, during my temporary absence on leave. That officer reports favorably respecting the efficiency of this

corps. The "manual and firing exercises and company drill executed fairly."

On the retirement of Major Parks, who has done much for the efficiency of this corps, Captain Perley has succeeded to the command. A practical engineer by profession. energetic in whatever he takes in hand, qualified for the post in other respects, the Engineers will, I trust, continue to improve under this officer.

## 3RD BRIGADE DIVISION. - Brigade Major, Lieut.-Colonel McCulley. "CAMP TEDDERS."

## Newcastle Field Battery of Artillery.—Brevet Major Call.

This battery was inspected by Lieut.-Colonel Foster and myself on the 21st August,

and is referred to in the following terms, by that officer :-

"As this was the first time he had seen the battery, and having been informed that a large number of its present members were recruits, and that nearly all the horses were new at the guns, he was quite unprepared for such an exhibition of proficiency in drill as he saw presented. The various field movements were executed in splendid style, and would have been highly creditable to officers and men of much greater experience."

Lieut.-Colonel Foster states, in which I entirely concur, that "Major Call is an excellent officer, and with the aid of such competent subalterns as Lieutenants Mitchell, Smith and Ramsay, with Surgeon Benson, and such a superior class of non-commissioned officers and men, the battery must hold a high position in the Active Militia of the

Dominion."

"Accompanied by Brigade Major McCulley he attended the shot and shell practice at a point about two miles above Newcastle. The practice was very good, as will be seen by the accompanying report. Several handsome prizes given by the officers and friends of the battery were competed for, and the Brigade Major and himself were permitted to add to the list."

"He made a careful inspection of the guns, limbers, waggons, and stores, and found all in sound condition; but the gun carriages, limbers and waggons, are in want of two good coats of paint."

Lieut.-Colonel Foster in conclusion, offers some excellent suggestions with respect to the erection of a drill shed at Newcastle, &c., all of which I beg to support.

It affords me great pleasure to add my testimony to that of Lieut.-Col. Foster in stating that I consider this was the most satisfactory inspection of this battery since its first organization.

Besides having a zealous and efficient officer at its head, and being fortunate in

securing the services of the senior captain of the 73rd (on his retirement from the battalion) as a subaltern officer. The non-commissioned officers of this corps belong to a superior class, and, as a result, discipline is maintained, and the drills are systematically performed

In connection with , this camp it is also a pleasure to record the increased interest manifested by the citizens of Newcastle, in the welfare of the corps. From the Collector of Customs downward, they seemed to vie with each other in their liberality in giving prizes for good shooting, &c.

## No. 7. Battery Garrison Artillery .- Brevet Major Gillespie.

This corps proceeded, its full authorized strength, to the brigade camp at St. John, and performed the prescribed drill and practice at that place.

#### 73rd Battalion .- Major Shirriff.

This corps performed its annual drill at "Camp Scoudouc," except Nos. 2 and 3 companies which, as a special case, were permitted to drill at local head-quarters, and were subsequently inspected by Lieut.-Colonel Otty, during my temporary absence on leave, and pronounced efficient.

In the retirement of Lieut.-Colonel Ferguson, the corps has lost the services of a thoroughly practical and energetic commanding officer, one who was ever ready to carry out the "regulations" to the letter, while not neglecting the interests of the battalion.

Major Shirriff succeeds to the command.

## Dalhousie Infantry Company.—Captain Barberie.

Inspected by the Brigade Major, Lieut.-Colonel McCulley, on the 13th August, and is referred to by that officer, in the tabular report enclosed herewith.

## Artillery.

(1.) In submitting the accompanying report from Lieut.-Colonel Jago, of the Artillery. I desire especially to point out the following subjects, adverted to by that officer, who states :--

I cannot help expressing regret that the only two field batteries in this district are both armed with the smooth bore nine pounder gun, a weapon long ago considered unsuited

for the support of infantry armed with the Snider Rifle.

(2.) Lieut.-Colonel Jago anticipates pernicious effects from the General Orders of August 15, 1874, directing that all uniforms, &c., of volunteers should be returned into their armories after the inspection of the annual drill.

With regard to the working of this order on country battalions of infantry he does not venture to offer an opinion; but he wishes to call the attention of the Major-General Commanding, to the fact that a body of artillerymen can never hope to be made

effective by 12 days' annual drill in camp only.

For teaching practically the lessons learned by weekly drills in their drill rooms, he considers the time sufficient or as nearly so as can be obtained without a great increase of expense. Further returns of the shot and shell practice forwarded with Col. Foster's report, and with which he has every reason to feel gratified, are the result of the patient weekly drilling of recruits at standing gun drill, pointing drill, fuse and shell instruction, &c., equally with the twelve days in camp.

The men of the different battalions appear also to like the weekly drills, and they

were usually fairly attended.

When it is considered drills are all voluntary (the 12 days having been performed,) it appears to him a pity that obstacles should be thrown in the way of the men receiving instructions which cannot fail of at least doing some good.

Lieut.-Colonel Jago adds :- "I hardly like to bring again before you the desirability

in my opinion of arming the Garrison Artillery with revolvers. With the utter state of defencelessness of the Garrison Artillery man in case his position is attempted to be carried

by storm, we are all aware.

"Whether a battery would not be likely to fight the guns longer when the men had the consciousness of possessing a handy and reliable weapon about their persons admits, I think, of no question, and it appears to me in view of the rapid increase of population in our cities, there might unfortunately come a day when the magistrates would gladly avail themselves of the services of a trained body of men armed with revolvers."

#### Target Practice.

The annual course of target practice was carried out with good results, under regulations somewhat similar to those published in General Orders (14), 1872; 200, 400 and 600 yards being the ranges, and the targets being the same size as usual, with square bulls eye and centre.

The question as to the desirableness of adopting Wimbledon targets at the annual target practice of the Active Militia is, I think, deserving consideration. These targets have been adopted with advantage by our New Brunswick Rifle Association.

It is to be regretted that it is impracticable during the limited period of the annual drill, to have sufficient position and aiming drills to warrant a high "figure of merit" in

each corps.

It is also to be regretted that the battalion and company money prizes for the best shots have not been granted this year. As stated in my last report, 1873, the amounts though small, \$10 and \$5 respectively, had been granted for two years in succession, except in the case of the artillery, who received money prizes for shot and shell practice during many years past, and the prizes were closely contested, and when won were much valued, accompanied as they were with badges. I am happy to be enabled to report that no accident has occurred during any course of target practice in my district, the rules framed for the guidance of officers commanding corps to prevent accident having been strictly observed. The accompanying return shows the "figure of merit" and names of best shots in the district.

## School of Military Instruction.

The attendance at the Military School, at Fredericton, has been very good, 66 cadets having obtained 2nd class certificates. Of these, 39 belonged to the Active Militia at the time of their admission to the school; some of the others have since joined the force; but five, however, are officers in it.

It is true the majority of the officers of this district are already in possession of certificates of fitness, and the Brigade Major and myself have done all in our power to ensure the attendance at the school of the remainder, pointing out to them the superior advantages of Military School training to that obtained by other means to qualify them

for certificates granted by Boards of Examiners.

In the command of the school I have been ably assisted by Lieut.-Colonel Otty, Brigade Major, and the quickness with which intelligent and educated cadets mastered what they had to learn is worthy of note, reflecting credit upon themselves and the instructors. I may add that a few cadets remained the full time—90 days—before being enabled to qualify, and one cadet failed to secure the required certificate.

## Rifle Associations.

There is but little to add to the remarks submitted in my report for 1873 on this subject.

Lieut.-Colonel Beer has been re-elected President of the New Brunswick Provincial Rifle Association, and he is assisted in his duties as such by the same efficient secretary, Captain and Adjutant O. R. Arnold.

The annual match of this association, held at Sussex during the first week in September last, was as successful as usual.

The county associations continue to improve.

The only thing to be regretted, I conceive, is that in all rifle matches the number of competitors is not, as a rule, in fair proportion to the number of active militiamen in the district.

In fact that but few except "crack shots" consider it worth their while competing.

The following associations held competitions this year, the returns of which will shortly be transmited:—

New Brunswick Provincial Rifle Association.

Charlotte County do
St. John do do
Carleton do do
York do do
Northumberland County do

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

GEORGE J. MAUNSELL, Lieut.-Colonel, Deputy Adjt.-Gen. Commanding Mil. Dis. No. 8.

Lieut.-Colonel W. POWELL,

Deputy Adjt.-General, Headquarters.

(A)

SAINT JOHA, N.B., Dec. 22nd. 1874.

SIR,—I have the honor to forward to you the report of Lieut.-Col. S. K. Foster, commanding New Brunswick Brigade of Garrison Artillery, on the inspections of the different batteries in the Province for this year.

I have to thank this officer for kindly undertaking this duty for me, and thereby

enabling me to enjoy my leave of absence in England.

From the report I gather that the whole of the batteries in the district are in an effective condition, and that the different camps were conducted in a manner that must prove beneficial to officers and men.

I cannot, however, help expressing my regret that the only two field batteries in your district are armed with the smooth bore nine pounder gun, a weapon long ago con-

sidered unsuited for the support of Infantry armed with the Snider Rifle.

I agree most thoroughly with Col. Foster in the necessity of the gun carriage being painted at stated periods, in order to ensure the preservation of the wood, and I beg to recommend that all gun carriages, which are kept under cover, be painted every two years, and also that carriages exposed to the weather be painted annually.

I cannot, however, omit in this letter, adverting to the permicious effects I anticipated f on the General Orders of August 15, 1874, directing that all uniforms &c., of volunt ets, should be returned into their armories after the expiration of the annual drill.

Wit regard to the working of this order on country battalions of infantry, I do not venture to offer an opinion, but I should wish most respectively to call the attention of the Major-General Commmanding to the fact that a body of artillery men can never hope

to be made effective by 12 days' annual drill in camp only.

For teaching practically the lessons learned by weekly drills in their drill room, I consider the time sufficient, or as nearly as can be obtained without a great increase of expense, but the returns of the shot and shell practice, forwarded with Col. Foster's report, and with which he has every reason to feel gratified, are the result of the patient weekly drilling of recults at standing gun drill, pointing drill, fuse and shell instructions, &u., equally with the twelve days in camp.

The men of the different batteries appear also to like the weekly drills, and they were usually fairly attended.

When it is considered that these drills are all voluntary (the 12 days having been performed), it appears to me a pity that obstacles should be thrown in the way of the men receiving instruction, which cannot fail of at least doing some good.

I hardly like to bring again before you the desirability, in my opinion, of arming the Garrison Artillery with revolvers. With the utter state of defencelessness of the Garrison Artillery man, in case his position is attempted to be carried by storm, we are all aware.

Whether a battery would not be likely to fight the guns longer when the men had the consciousness of possessing a handy and reliable weapon about their persons admits, I think of no question, and it appears to me in view of the rapid increase of population in our cities, there might unfortunately come a day when the magistrates would gladly avail themselves of the services of a trained body of men armed with revolvers.

I have the honour to be, Sir,

Your most obedient servant, DARELL R. JAGO.

LIEUT.-Col. G. J. MAUNNSELL. Deputy Adjutant-General.

(B)

SAINT JOHN, N. S., December 17, 1874.

SIR,—On the 9th day of September last, in accordance with instructions from your office, I made inspection of the Field Battery of Artillery under the command of Captain Donnell, in camp at Woodstock, for its annual drill,

After I had made a careful inspection of the battery, it was put through a variety of field movements, all of which were executed in a style highly creditable to the officers, non-commissioned officers, and men; and the progress made in such a short time, was far in advance of what I had expected to have seen.

I attended the ball practice on the afternoon of the 9th, and morning of the 10th, at a place about two miles above Woodstock, and had an opportunity of seeing some good exhibitions of standing gun drill. The ball practice, as the accompanying report will shew, was good, but the locality would not admit of shell practice.

The battery is composed of an excellent class of young men, belonging to the town of Woodstock and its surroundings. At the inspection were Captain Donnell, Lieutenant Dibblee and Kearney, Surgeon Smith, 75 non-commissioned officers and men, and 40 horses (of a superior quality), for which the County of Carleton is celebrated.

Several very handsome presents were given by friends of the battery, to be competed for at the target practice, one of which, an elegant pitcher, was given by Mr. Appleby, M. P. for the County. At its presentation to the winner, Mr. Appleby expressed his intention of making a similar gift annually.

I would urgently recommend the appointment of a Quarter-Master to each of the Field Batteries.

Respectfully submitted,

S. K. FOSTER, Lieut.-Colonel, Com. N. B. B. G. A.

The Deputy Adjt.-General of Militia, Military District No. 8.

(C)

Saint John, N. S., December 17, 1874.

Sin,—I have the honor to report that in obedience to orders, Batteries Nos. 1, 2. 3, 7, and 10, of the New Brunswick Brigade of Garrison Artillery performed their annual drill on the Barrack Square in this city, for the current year,

During the whole period of its existence, the objects for which the camp was formed were carried out in the most systematic manner, and, I believe, with highly satisfactory results.

The daily routine of duty, subject to such alterations as the changes of the weather might necessitate, was as follows:—

Morning from 6 to 8 A. M. Marching Drill.

" " 10 to 12 " Gun Drill.

Afternoon " 3 to 5 P. M. Gun Drill.

The shot and shell practice extended over a period of six days, and, as the accompanying report will shew, was highly creditable to the corps.

Several handsome prizes for the annual competition were presented, a list of which,

with the names of the donors, is annexed.

From the commencement of the camp to its close, every officer, non-commissioned officer, and gunner did his duty.

Respectfully submitted,

S. K. FOSTER, Lieut.-Colonel, Commanding N. B. Brigade Garrison Artillery.

The Deputy Adjt. General, Military District No. 8.

List of prizes for the annual competition of the New Brunswick Brigade Garrison Artillery for 1874:—

The Lieutenant-Governor, money prize,
The Provincial Secretary, money prize,
The Mayor of St. John, money prize,
The Deputy Adjutant General, Military District No. 8, money prize,
Mrs. Jago, silver cup and money prize,
The Officers of Artillery, silver cup and money prize,
Lieut.-Colonel Thurgar, silver cup and money prize,
Lieut. Colonel Thurgar, silver medal and money prize,
J. D. Robertson, Esq., merschaum pipe, value \$25,
Hilyard & Ruddick, box champagne,
William Breeze, Esq., box claret.

S. K. FOSTER, Lieut.-Colonel, &c.

(D)

SAINT JOHN, N.B., December 17th, 1874.

Sir,—On the 21st day of August last, in the absence of Lieut.-Colonel Jago, I had the pleasure of being present with you, at your annual inspection of the Field Battery of Artillery, under the command of Captain and Brevet-Major Call, in camp for its annual drill, a short distance from the Town of Newcastle.

As that was the first time I had seen the battery, and having been informed that a large number of its present members were recruits, and that nearly all the horses were new at the guns, I was quite unprepared for such an exhibition of proficiency in drill as I saw presented. The various field movements were executed in splendid style, and would have been highly creditable to officers and men of much greater experience.

Major Call is an excellent officer, and with the aid of such competent subalterns as Lieutenants Mitchell, Smith and Ramsay, with Surgeon Benson, and such a superior class of non-commissioned officers and men, the battery must hold a high position in the Active Militia of the Dominion.

Accompanied by Brigade Major McCulley, I attended the shot and shell practice at a point about two miles above Newcastle; the practice was very good, as will be seen by the accompanying report. Several handsome prizes, given by the officers and friends of the battery, were competed for, and the Brigade-Major and myself were permitted to add to

I made a careful inspection of the guns, limber waggons and stores, and found all in good condition; but the gun carriages, limbers and waggons, are in want of two good

coats of paint.

At the request of Major Call, I examined a piece of ground which had been granted by the magistrates of the county, on which a drill shed and the battery accommodations could be erected at a moderate expense. The site is an excellent one, and as the battery is well worthy of every assistance from the Government, I would strongly recommend the subject to its most favorable consideration.

If the Government would supply the battery with riding saddles for the lead and centre off horses, and the new pattern gun carriage, such as those supplied to the Woodstock Field Battery, the gun detachment would all be mounted, and a reduction of eight wheel

horses, and one line of carriages, would be made.

A sufficient amount of ammunition, for all ordinary purposes, can be carried in the

gun limber boxes.

In conclusion permit me to say that, to the teaching of Sergeant Hughes, late of the Royal Artillery, is the battery very largely, if not wholly, indebted for its present state of efficiency.

Respectfully submitted.

S. K. FOSTER, Lieut, Colonel, Commanding N.B. B. G. A.

The Deputy Adjutant-General of Militia, Military District No. 8.

(E.)

SIR.—Having been appointed Musketry Instructor to the volunteers assembled in "Camp Tilley," near the Town of St. Andrews, in July, 1874, I beg to submit the following

report :-

The firing commenced on Thursday, the 2nd day of July, at the local rifle range, situate on the shores of St. Andrews Bay, and was conducted strictly in accordance with the regulations laid down for the guidance of the instructor. Four sets of targets had been provided, and the butts completed and rendered secure to the markers, under my

own supervision.

Two companies from the 67th and 71st Battalion, respectively, paraded each morning for target practice, and, on arriving at the range, were divided into two squads, when the firing commenced at 200 yards, and continued, without intermission, at the various ranges 200, 400, and 600 yards, until the total 15 rounds, five rounds at each target, had been completed. This generally occurred about noon-day, when two additional companies arrived on the ground, and in like manner finished the prescribed practice, thus completing four companies daily.

As the practice continued from day to day, I could not fail to observe that those companies which had greatest opportunities for position and aiming drill, invariably obtained the highest figure of merit, and I can thus speak confidently of the benefits to be derived from said drill. It was my custom to address each company briefly, on arriving at the ground, in regard to the general principles of rifle shooting, and in addition to this I found that by personally instructing each marksman as he came to the firing point, very good results were obtained, and without, in the least, impeding the practice.

The appended recapitulation will show the figure of merit for the brigade, for each battalion, as well as for each company, with such further results of the target practice at

"Camp Tilley" as, I trust, may prove satisfactory.

I find by comparing this detailed statement with that of "Camp Woodstock," held on July, 1872, the average figure of merit stand thus !-

Camp Tilley ..... 16-35 Camp Woodstock..... 10-53

I am happy to report that no accident, even of the slightest kind, occurred during the practice of the brigade.

In closing my report, I beg to state my appreciation of the very valuable aid received from the Assistant Instructor, Sergeant John McMullin.

> I have the honor to remain, Your obedient servant.

THOS. H. HOGG.

Musketry Instructor, "Camp Tilley."

To Lieut.-Colonel Maunsell, Deputy Adjutant-General, Province of New Brunswick.

#### MILITARY DISTRICT, No. 9.

Headquarters, Halifax, N.S. December 21st, 1 December 21st, 1874.

Sig,-I have the honor to inform you that the quota of Active Militia required to be furnished from the district under my command, was fixed at 4,284. Under the present regulations reducing the effective strength of corps, the total nominal strength of the force. were the respective corps complete to their established strength as authorized, would be 237 officers, and 3,180 men.

The total actual strength of the force which mustered at the annual drill for 1874-75.

was 212 officers, and 2,572 men.

Corps of the established strength of 37 officers and 480 men have been relieved from training this season.

Corps of the established strength of 4 officers and 80 men have been absent from

training this season.

The Active Militia in this district consist of the following corps which, at the time of the annual training, turned out as under :-

their longs to becoming more and renew soldierly	Officers.	Men.
Kings County Troop Cavalry	. 2	40
Halifax Light Brigade		79
1st Brigade Halifax Garrison Artillery	20	243
2nd do do	17	226
Lunenburg Battery (not trained)	00	0.0
Mahone Bay Battery	2	39
Digby Battery		34
63rd Rifles (Halifax)	20	229
66th Battalion (Halifax)	28	326
68th Battalion (Kings County)	31	350
69th Battalion (Annapolis)		364
72nd Battalion (Annapolis)	22	240
75th Battalion (Lunenburg-one company not traine	ed). 17	192
78th Battalion Highlanders (not trained)	00	00
Victoria Provisional Battalion	18	210
Cumberland Provisional Battalion (not trained)	00	00

40

The annual drill was performed in accordance with General Orders (14) of 3rd June. 1874, and (15) of 12th June, 1874, as in document A and B herewith enclosed. Annual inspection reports are also enclosed.

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

> > J. WIMBURN LAURIE, Colonel. Deputy Adjutant General, Commanding

Military District No. 9.

The Deputy Adjutant-General Militia, Ottawa

(A)

The Halifax Brigade consisting of

Halifax Light Battery...... Captain Graham 1st Brigade Halifax Garrison Artillery ..... Lt.-Col. Mitchell do ..... Lt.-Col. McPherson 63rd Rifles..... Lt.-Col. Pallister 66th Infantry..... Lt.-Col. Bremner

performed their annual training at brigade headquarters. Owing to various circumstances no brigade drill was performed during the present year, but the force attended one evening

brigade parade.

The Light Battery practiced at 1,700 yards range, with their six pounder Armstrongs. The target, a half barrel with flag staff, was shot away early in the day, and as there was none available to replace it, the remainder of the practice was continued on the raft on which it had been placed. It would in future be advisable to supply a relay of targets for the practice of this battery.

One of the Halifax Harbor Batteries was kindly placed at my disposal by the Lieut.-General commanding the troops for the annual shot and shell practice of the Brigade of Garrison Artillery, and the majority of the batteries performed the regular practice; but, through some misunderstanding, the guns in the battery were dismounted preparatory to re-armament, before the whole of the batteries had gone through this practice.

The rifle target practice of the several corps was, in each case, performed as usual

under the immediate supervision of a field officer.

The several corps composing this brigade were inspected by me regimentally. I was thus enabled to devote more time to the details of inspection than if they had been inspected in brigade.

The appearance of both of these corps is becoming more and more soldierly, both in

uniforms, appointments and general turn-out.

The commanders of corps are zealous and efficient, and they are well seconded by their officers, and great credit is due to them and to all ranks for the results attained.

The battalion drill was very creditably performed, but more practice in skirmishing is required.

#### AYLESFORD CAMP.

The 68th, 69th, 72nd Battalions and Kentville Troop of Cavalry performed their training in brigade camp at Aylesford, during September, under the command of Lieut.-Colonel Milsom. I inspected them the day after their arrival in camp, and again at the conclusion of the training.

Owing to the non-issue of forage caps to the corps of Infantry, the appearance of the men was not as soldierly as it should have been, all sorts of head gear being worn, and there were a good many young lads in the ranks. It is right I should mention that Lieut .-Colonel Starratt and the officers and men of the 69th shew a good deal of esprit de corps, taking great pride both in turn-out and in drill.

These corps worked very fairly in brigade, both in battalien movements and in skirmishing.

The Kentville Troop of Cavalry deserve especial credit for their turn-out. Captain Ryan and his officers and men must have worked unremittingly, and this corps shewed the advantage of having an instructor who had been well trained in the regular army.

The 75th Battalion trained in regimental camp at Mahone Bay, and the Mahone Bay Battery of Garrison Artillery encamped with and was attached to this battalion. As this battalion has no trained Adjutant, Lieut.-Colonel Milsom himself superintended and took charge of the instruction, and the results of the training under such a thoroughly competent instructor were most surprising; the progress made by, and steadiness of the men were most creditable to them, and to Lieut.-Colonel Milsom who took so much pains with them.

The Victoria Provisional Battalion trained in regimental camp at Baddeck, Cane Breton, and was inspected by the Honorable the Minister of Militia, who expressed himself

well pleased with the appearance and training.

I spent some days in the camp and was much gratified with the willingness and desire to learn of the men, and generally with the zeal on the part of the officers; but as many of the men only speak Caelic and do not understand English, it is necessary to interpret all orders and explanations to them, and the progress is, therefore, not so rapid.

The Digby Battery of Garrison Artillery was inspected by Lient, Colonel Milson. He reported the men attentive, and that the shot and shell practice was fairly performed. The Lunenburg Battery of Garrison Artillery, and No. 2 Company, 75th Battalion,

were absent from camp at Mahone Bay, although duly warned to attend,

The 78th Highlanders and Cumberland Provisional Battalion were relieved from annual training this season, under instruction from headquarters.

#### Arms.

The arms in possession of the several corps were, with very few exceptions, issued in 1869; they have therefore been five years in use, and should now receive a thorough overhaul by a competent armourer; a recommendation to this effect was forwarded by me in October, 1872, after consultation with Lieut.-Colonel French.

The city corps keep belts and pouches in a very soldierly manner, and some rural battalions deserve great credit for their attempt to pipe-clay belts and polish pouches, but in camp the conveniencies for this work are scant, and the whole proceeding is so novel to officers and men, that it is a matter of great difficulty to accomplish satisfactory results. and as the present pattern of accourrements has a very slovenly appearance if not properly cleaned, it is worthy of serious consideration whether accontrements more suitable to the circumstances of the Dominion forces and to the training of the corps, when called on to perform, should not be supplied.

#### Uniform.

The cloth tunics supplied will certainly wear twice as long as the serge trowsers, and I would again urge that trowsers should be supplied every two and tunics every four years; and further, that a reasonable money allowance should be made to men or corps that make their clothing last beyond the regulation time, as an inducement to the officers and men to keep the clothing in good order.

The forage cap at present issued is most unsatisfactory; it does not cover the head from sun or rain, and as generally worn is slovenly in appearance—it is discarded the moment parade is over, and a straw hat or something with brim or shade substituteda neat cap with peak would be a great improvement.

6 - 5

#### Training.

I would refer to my remarks in last years report on the subject of instructors for corps, and the best means of carrying out the training, and I would especially dwell on the urgent need of affording preliminary drill to officers and non-commissioned officers, previous to the mustering of the battalions that train in camp. At present the men do not derive the full benefit they should from the time they give to drill, as the officers on whom the instruction devolves (even when previously trained), are quite out of practice at the commencement of the training, and the non-commissioned officers know no more than the men, consequently, although they wear badges and draw higher pay, they exercise but little authority or influence, and are of little help at the training.

J. WIMBURN LAURIE, Colonel, Deputy Adjutant-General, Commanding Military District No. 9.

#### MILITARY DISTRICT No. 10.

#### HEADQUARTERS, WINNIPEG, Dec. 20, 1874.

SIR,—Since my last annual report considerable changes have taken place in the Militia force in this Province, one Troop of Cavalry and six Companies of Rifles having been struck off the establishment of the District, leaving a total of fifteen officers and 295 non-commissioned officers and men, as the quota at present authorized.

Of the companies thus removed they existed only as paper companies, with one exception; of those still maintained, their equipment and organization remains in the same condition as at my last report.

## Strength and Enumeration of Local Corps.

The authorized strength of the local corps in this District, is as follows :-

	Officers.	N. C. O. & Men.
"Headingly" Mounte	ed Rifles 3	55
"Winnipeg" Field I	Sattery 3	75
	pany 3	55
"Mapleton" "		55
"Poplar Point" "	3	55
	Total 15	295

Of these corps, the only one which has been enabled up to the present date, to per form the drill for the present financial year, has been the Winnipeg Field Battery, which paraded for inspection after twelve days of consecutive drill, with the following strength, viz:—

Officers. N. C. O. & Men. 2

The Headingly Mounted Rifle Corps has not as yet been supplied with clothing or equipments, and has, therefore, not been inspected.

The three-Rifle Companies above enumerated, showed at my last inspection subsequent to my annual report, an actual strength on parade of 7 officers and 129 non-commissioned officers and men.

The inspection of the Winnipeg Field Battery was most satisfactory; although but partially equipped and uniformed, the general appearance of the corps, and the steadiness of the men in the ranks was soldier-like.

I respectfully request that for the ensuing year that authorization for pay for horses for the annual drill be granted for this corps, and that it be fully equipped and uniformed.

## Recommendations as to the Establishment of the Active Militia Force.

I have hardly any suggestions to make relative to the Active Force of the Province, beyond those embodied in my report of the 2nd of last January, nor have I found any reason to change my views relative to the suggestions which are therein, and in previous reports from time to time, I have had the honor to present to your notice on the subject.

I would, however, remark that I think the time has now arrived when it would be feasible to organize several corps in various parts of the Province, which would be maintained efficiently.

## School of Instruction for the Province.

The want of a School of Instruction, and the distance of this from the other Provinces where schools are established, is a difficulty which I respectfully suggest might be obviated by establishing a school here, in connection with the force on service, where certificates could be obtained; no expenditure of any great amount need be involved in this method beyond the pay of an Adjutant and Sergeant Instructor, to be taken from the force on service. The duties of Commandant of the school could be assumed without extra pay, by the Deputy Adjutant General of the District. The school need only be open for a limited period during the year.

Should the suggestion be entertained, I shall have the honor, if desired, of reporting fully on this subject.

#### Dominion Forces on Service in the North-West.

The reduction lately effected in the force on service here, has of course considerably altered the establishment of the corps comprising it, and it stands at present as follows:—

The terms on which the reduction was effected, viz: a gratuity of two months net pay, and a sum of money equivalent to the cost of transport to the headquarters of the District of their enlistment, was so acceptable to the men. that nearly double the number of men authorized volunteered for discharge, the preference was, therefore, given to men of the longest service, and, of these, to those of the best character.

## Expedition to the Q'Appelle Lakes.

Apart from the ordinary services of the troops this year, an expedition to the lakes of the Q'Appelle on the occasion of an important treaty with the Cree and the Cjibbewa tribes, is of some military interest, not only from the fact that a point in the interior was reached much farther to the westward than has ever previously been attained by any of Her Majesty's Forces, but that the expedition demonstrated the fact that Infantry can with facility and rapidity be marched over the plains without any large supporting bodies of cavalry, or heavy waggon trains, as in the case of expeditions in the United States.

As the marching is creditable to the troops employed, and the experience gained is likely to be of utility in the future, I embody a brief account of this expedition.

On the 13th of August last, notification was given me by the Honorable Mr. Laird, Minister of Interior, that a party (previously authorized from head quarters) would be required to proceed to Fort Q'Appelle with the least possible delay, to be present at the treaty above referred to.

6-54

On the 17th, transport for provisions, &c., having been in the meantime selected, the detachment marched from Winnipeg, the strength and composition being as follows:—

Officers—Staff 2, Artillery 1, Infantry 5	Total. 8 105
Scouts (half breeds) mounted	113
Louis (min sectio) months	117

The officers comprising the party were, Lieut.-Col. Osborne Smith, C. M. G., commanding; Surgeon A. Codd, Dominion Forces, Lieut. Cotton, Dominion Artillery, acting as transport officer, Ensign G. W. Street, Provisional Battalion, acting Adjutant, Captains A. Macdonald and W. M. Herchmer, Lieut. J. Allan, and Ensign de Cazes, of the Provisional Battalion

The whole being divided into two companies.

One seven pounder mountain howitzer was taken with the party, dismounted, and stowed in a cart.

Beyond the camp equipage and provisions, (the latter of which had to be calculated to last for the march to Q'Appelle, the halt there, and the return as far as Fort Ellice, where I had arranged that supplies should meet us on our return), transport had to be provided for ammunition and the mountain howitzer; the total transport employed, including chargers of mounted officers, being twelve double waggons, fifteen carts, and forty-six horses. Of these, three waggons and seven horses were the property of the Militia Department, the remainder were hired.

A small drove of beef cattle accompanied the party, by this means transport was

economized, and fresh meat was procurable constantly.

The scale of rations was as follows, daily per man :-

											Lbs.
Biscuit whe	en serv	red out		100	car.						 13
Flour	***	"									 $1\frac{7}{2}$
Fresh meat	"	22	*			* *		3		*	 1 1/2
Bacon		**	- 14				 		*		 1

Tea 1 oz., sugar 2 oz., beans, desiccated vegetables, pepper, salt, and baking powder, in sufficiency. On occasions of heavy marches, or bad weather, an extra half or quarter ration of one or more articles was given.

The paucity of transport rendered it impracticable to carry more than a limited supply of oats, and for twenty-eight days the horses were, without exception, on grass feed.

Tents, in the prescribed proportion were carried with the detachment. Besides the ordinary field kits, each man was supplied with two pairs of moccasins.

Sixty rounds of ammunition (small arm) per man, and the first reserve, was taken with the detachment, and a reserve of five thousand rounds sent to Fort Ellice. Forty rounds of common case was carried for the howitzer.

On the line of march the men were only compelled to carry their rifles, waistbelts,

ball bags, canteen, bayonet and haversack.

The route on the march to Q'Appelle, which, in consideration of the question of wood and water, and grass feed for the horses, I thought best to take, was the comparatively little used trail south of the Assiniboine, which is crossed by fording that river at a place called the Grand Rapids, about one hundred and forty miles from Winnipeg; from this crossing the trail takes to the southward of Fort Ellice, and strikes the Q'Appelle Valley fifty-six miles to the east of Fort Q'Appelle; this point was reached by the detachment on the fifth of September. Here we were joined by His Honor Lieut.-Governor Morris, and the Honorable Mr. Laird, Commissioners for the treaty, and on the eighth we arrived at the place of destination.

During the negotiations for the treaty, and until the payments to the Indians were completed, the troops remained camped on the banks of the Q'Appelle river, about a quarter of a mile from the Hudson Bay Co.'s Fort.

During these ten days the duties were severe, as in addition to the camp and horse guards, a guard was maintained on the quarters of the Commissioners at the Fort, and a daily guard furnished, which remained under arms at the treaty marques during negotiations.

On the 18th of September we left Fort Q'Appelle, crossed the Assiniboine River and Valley on the 24th, and arrived at Winnipeg on the 5th of October, thus making the entire actual distance of three hundred and thirty-three miles, in sixteen days and a half, inclusive of a day nearly entirely occupied by taking on supplies, and crossing the river at Fort Ellice, being an average of twenty miles and one third a day, at a rate of one mile in 17½ minutes.

The following table of distances and time was kept and cheeked in the most scrupulously careful manner by officers regularly told off, every second of a halt being carefully noted, and the whole tabulated daily by Ensign Street, the Acting Adjutant:

#### MARCHING TIME FROM THE BARRACKS, WINNIPEG, TO FORT Q'APPELLE.

Date.		Time of Marching.	No. of Miles.	Remarks.
1874. August	17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 1 2 3	1 30 3 50 6 05 4 55 5 27 3 40 4 05 6 3 15 4 47 4 50 3 10 7 23 7 07  4 55 5 4 30	5 13 23 16 20 13 14 22 11 15 17 11 25 24	Left Barracks, Winnipeg, at or about 4:20, P.M. Camp, Headingly. Marched off at 6.25 A.M. Halted for night, 5.20 P.M. C'mp Poplar Pt. do 6.40 A.M. do 3.30 P.M. do 7.30 A.M. do 5.10 P.M. Halted at 2.30 P.M. Marched off at 7.20 A.M. Halted for night, 4.10 P.M. do 6.00 A.M. do 4.20 P.M. do 5.50 A.M. Crossed Assinaboine, at Grand Rapids. do 6.10 A.M. Halted for night, 12.05 do 6.20 A.M. do 2.55 P.M. Sand Hill Creek Halted for day at 11.15 A.M. Marched off at 6.05 A.M. Halted for night, 6.00 P.M. do 6,45, A.M. do 6.45 P.M. Beaver Did not march. Very hot day
	5678	3 30 7 03 5 33 2 15 1 45	12 25 18 08 05	do 6.45 A.M. do 10.45 A.M. Very hot do 5.53 A.M. do 4.05 P.M. do 6.07 A.M. do 3.40 P.M. Half day march. Arrived at Q'Appelle at 9.00 A.M.

<sup>\*</sup> The 17th August and 31st same month, and 7th and 8th September, are calculated as one day' march in this average.

### MARCHING TIME FROM FORT Q'APPELLE TO WINNIPEG.

Date.		Tim Marc	hing.	No. of Miles,	Remarks,
1874. September	18 19 20 21 22 23 24 25 26 27 28 29 30 1 2 3 4	375545572 45774 56666655	555 03 29 58 50 225 20 40 23 50 35 35 32 20 23 10	13 24 19 18 21 26 07 15 21 27 14 20 23 23 23 22 22 18	Marched off at 12.30 P.M. Halted for night, 5.00 P.M.  do 6.55 A.M. do 6.05 P.M.  do 7.00 A.M. do 1.55 P.M.  do 7.00 A.M. do 3.00 P.M.  do 6.50 A.M. do 4.20 P.M.  do 6.30 A.M. do 6.00 P.M.  do 6.30 A.M. do 5.35 P.M.  Took in Supplies at Fort Ellice and crossed Assinaboine,  Marched off at 7.00 A.M. Halted for night, 4.35 P.M.  do 7.00 A.M. do 5.20 P.M.  do 6.45 A.M. do 6.10 P.M.  do 8.17 A.M. do 6.10 P.M.  Crossed Little Saskatchewan River.  Marched off at 7.10 A.M. Halted for night, 4.30 P.M.  do 7.30 A.M. do 6.52 P.M.  do 7.30 A.M. do 6.50 P.M.  do 7.05 A.M. do 6.50 P.M.  do 7.05 A.M. do 6.50 P.M.  do 7.05 A.M. do 4.25 P.M.  do 7.05 A.M. do 4.25 P.M.  Marched into Barracks.
		.96	29	333	The second secon
	777				Average time per mile, 17\frac{1}{3} minutes. Average number of miles per day, 20\frac{1}{3}.

Memo:—On the return march the northern or Totojon route was taken, thus accounting for the difference in total distance to and from Q'Appelle.

Notwithstanding the rapid marching, the troops so far from being affected by fatigue appeared to gain daily in health and marching power.

No horses were lost or injured on the march,

No accident occurred.

Crime and irregularities were entirely absent.

The hearty support and co-operation of the officers was all that a commanding officer could desire, and I respectfully trust that the names of those employed may be favorably noted.

I beg especially to bring to the notice of the Major General commanding, the names of Lieutenant Cotton of the Dominion Artillery, and of Ensign Street of the Provisional Battalien, the former of these officers as Transport Officer, and the latter as Acting Adjutant were of the greatest assistance to me throughout.

The experience of this, the first march, I believe, on record, of British troops on the prairies, shows that infantry, even with the very improvised transport we had, can be expeditiously and economically moved from point to point. No horses, except as was done in this instance, should be used that are not either country bred or thoroughly acclimatized, where oats cannot be procured; or losses as disastrous as those experienced in a late expedition by a civil force, are certain to be met with.

Marching on the prairies and the plains is exceptionally difficult. In wet weather the adhesive nature of the soil and dry grass blades is very trying; in dry weather the soles of the boots get so polished in marching over the grass, that the wearer slips as with a knife. The best of "ammunition" boots should alone be issued, with the toes capped with fine sheet copper—an ample supply of moose meccasins should be taken with the quartermaster's stores.

The largest ration (in reason) that can be carried, should be allowed to the men.

No spirits should be taken, but a large ration of tea should be given.

In the spring and autumn, when feathered game is generally abundant, scouts, officers not on duty, and a few men who are fair shets, should be encouraged to start a little in advance, though keeping sight of the column, and shoot—by this means it is estimated that from two, to two and a half tons of pinnated grouse (prairie hen), geese and wild ducks were killed during the Q'Appelle march, and proved a valuable addition to the fare of the men.

A keg of water should be carried in every cart or waggon.

Two-horsed waggons, not loaded over sixteen hundred weight, appear best suited to prairie travel for troops—mules, of which we had two or three teams, are bad in soft or boggy ground.

The great difficulty of finding the requisites of wood, water and grass feed at the same place at convenient distances to equalize the day's march, is always present; but if mounted officers choose to exert themselves by a little galloping, these can often be found a mile or two to the right or left of the beaten trail, even when the scouts declare they do not exist.

Some stringent legislative regulation should pass, even extending to corporal punishment, in cases of grossly mutinous conduct on the part of hired teamsters. Wilfully destroying wheeled transport, or driving off horses to a distance from camp, may not only delay a march, but be disastrous to the party.

A large proportion, if not all, of the officers should be mounted; on the return march from Q'Appelle several of the officers procured ponies, and from their being mounted were of great utility in choosing camping places.

Where feed is not good, horses are most apt to stray; and hobbling, although to be

avoided as much as possible, should on such occasions be resorted to.

A drove of beef cattle proportioned to strength of party, and chances of replenishing, is the most advantageous method of "carrying" meat. Salt, to corn unused portions after killing, for following days consumption, should be taken. Bacon and smoked shoulders are preferable on grounds of economy of transport, to pork; the barrels and brine are dead weight and useless.

Drums and fifes or bugles, should always be taken for marching on prairie land; nothing is so monotonous or fatiguing as a wide expanse of plain, unbroken often by tree or shrub, to march over; when men and horses are "fading down," a cheery march from the band lifts them along surprisingly. It is well worth while to devote transport for band instruments, and to let the bandsmen occasionally exchange their arms for them.

The "Bell Tent," of Dominion Militia pattern with high wall is, I consider, the best for troops on a prairie march, as better resisting the force of a storm, and giving more

accommodation in proportion to weight than any other.

A communication from His Henor the Lieutenant-Governor, on the part of himself and Commissioners, was torwarded on the return of the troops, thanking them for their services; a copy of this has already been forwarded by me to headquarters.

Guard in Aid of the Civil Power.

On the 17th November, 1874, I was served with a requisition for a guard in aid of the civil power, in consequence of an apprehended attack on the gaol in Winnipeg; this guard has since that date been maintained.

Health of the Troops in Garrison.

Although typhoid fever at one season of the year was very prevalent in Winnipeg and the vicinity, the general health of the troops has been good during the past year.

I have the honor to be, Sir, Your obedient Servant, W. OSBORNE SMITH, Lieut. Colonel,

Deputy Adjt.-Genl., Military District No. 10, Commanding

Dominion Foress in North-West.

The Deputy Adjutants General, Head-quarters, Ottawa.

#### MILITARY DISTRICT No. 11.

HEADQUARTERS, VICTORIA, B.C., Dec. 24th, 1874.

Sir, -I have the honor to forward herewith my report of the annual inspection of the corps in this Military District, from which you will perceive that I commenced with the inspection of the corps at New Westminster on the 30th of November.

This company was five short of its establishment through men having left the district recently, but Captain Edmonds reported that there would be no difficulty in replacing

them, which I have requested him to do without delay.

The arms, clothing, and accoutrements were in good order, and the men presented a

very smart and soldier-like appearance on parade.

The weather being most unfavorable I was obliged to hold my inspection in the drill shed, which being small, afforded me but slight apportunity of judging of their improvement in company's drill since my last inspection and prevented me from seeing them skirmish. This I much regretted, as I am given to understand they have been chiefly practised in this drill during the past season. Such movements as were practicable, however were well performed, and I was much pleased with the progress they had made in the manual and firing exercises, which reflected a good deal of credit both on the men and officers, by whom they were instructed.

I was unable to get back from New Westminster so as to hold my inspection of the the Victoria corps at an earlier date than the 5th of December, the steamer having ceased to make semi-weekly trips, thereby necessitating a delay of an entire week at that place.

This is always the case during the winter months, and may be urged as an additional reason for the expediency of altering the inspection season in this Province, as recommend-

ed in my letter of the 12th October last on this subject.

On the 5th December, I paraded the two Victoria companies on Beacon Hill, on which occasion, His Honor the Lieutenant-Governor was present, and having accompanied me through my inspection, expressed himself highly pleased with the appearance of the men, and the manner in which the various movements were subsequently executed.

The clothing and accontrements were in good order, and the arms (with a few slight

exceptions to which attention was called) were clean and well taken care of.

After having marched past His Honor the Lieutenant Governor, which was very creditably performed, the two companies were put through the manual and firing exercises by Captain Pooley, and subsequently drilled as a battalion by Captain Roscoe, in

both of which the officers and men acquitted themselves most satisfactorily.

No. 1 company then skirmished with No. 2 in support, and after executing several movements in a highly creditable manner and expending ten rounds of blank ammunition per man, they retired on the supports and were marched home to the drill shed by the senior officer. Captain Roscoe, presenting a very soldier-like appearance while marching through the city, headed by their band of ten performers, who have alse made considerable

On the 8th of December, I proceeded to Nanaimo and held my inspection there on the

The weather being also unfavorable there for an open air parade, I was obliged to assemble them in the Mechanic's Hall, which was kindly lent for the occasion, and has in fact been temperarily placed at their service as a drill hall pending other arrangements.

This company had only had the advantage of an instructor's service for six weeks previous to the inspection, and I was most agreeably surprised at the state of efficiency to

Their arms, clothing and accourrements were in excellent order, and they presented

I had thom sized, told off and proved by Ensign Harvey, and the arms piled and unpiled, which was very well done.

They were then put through the manual and firing exercises by Captain Bryden, and the bayonet exercise by Lieutenant Prior, all of which were well executed.

The hall being very small I was unable to see much marching or company drill performed by them.

What little was done however gave me much satisfaction under the circumstances.

The instructor-Gunner's Mate Samuel Gill, of Her Majesty's Ship Myrmidon,-was not present, he having been obliged to return to his ship a week previous to my arr val at Nanaimo, but I have much pleasure in testifying to his ability as a drill instructor, and the pains, I am warranted by the result in concluding, he must have bestowed on the company to have brought them so quickly to such efficiency.

It also shows that great attention must have been bestowed by both the officers and

men of this corps for which I must accord them their full share of credit.

This company is as yet provided with no rifle range beyond two hundred yards, so, although many of them have completed their annual practice by firing forty rounds at this distance, I have not thought it necessary to send in their practice returns or show their figure of merit.

They have an admirable site for a six hundred yard range which only requires some clearing, and I have requested Captain Bryden to make an estimate of the cost, which when completed will be forwarded for your information, and the sanction of the Hon.

Minister of Militia and Defence.

I would also strongly and respectfully recommend that a sum of money be granted to this corps for assistance in the matter of the erection of a suitable drill shed, the Mechanics' Hall being entirely too small for the purpose, even were it possible to obtain the use of it at all times.

The board and wages of the drill instructor, Gill, amounted to somewhat more than I anticipated, but as his services were only available for six weeks instead of two months as applied for in my letter of the 13th June, it still comes within the sum therein recommended by me or the full year's drill allowance as sanctioned by a letter from the Acting Adjutant-General, dated Ottawa, June 1st, 1874.

I state the amount, in the margin, for your information, and beg to Nantime: recommend that he be again employed for at least a month in the ensuing

Instructor's summer in order that the corps may have an opportunity of learning pay at \$25 per skirmishing drill which Gunner's Mate Gill had not time to teach them in so at \$27p, month short a period as the term of his last engagement. This will of course 14 month's require an additional appropriation, as the entire drill instruction pay for the

pay \$37.50; 11 require an additional appropriation, as the entire month's board current year has already been all but expended.

The number of men who mustered for inspection in the different localities was necessarily very small, owing to the inconvenient season selected for this purpose, to which I drew attention in my letter of the 12th October, before referred to, and for the same reason a considerable proportion of the men have been unable to complete their annual drill or firing practice for the current year, as they were absent from their company's head quarters the greater portion of the time.

The drill shed at Victoria will, I expect, be completed by the end of this month, and I shall remove my office into it as soon as possible and have the stores which are now in possession of the Hudson Bay Company and Messrs. Sprout & Co., also transferred there immediately, so as to save the expense of rent and storage, and enable the store-keeper to make the proper returns, which up to the present has been quite impracticable, as a great portion of them are inaccessible without the expenditure of an immense amount of labor, which will be unnecessary once they are in the new building.

I look with much interest, however, for a reply to my letter of the 20th November on the subject of stoves and fuel for the building, as I think they will be most essential to the stores and armories particularly, the climate here, in winter, being exceedingly damp.

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I regret that the letter from the Deputy Adjutant-General at headquarters, dated the 14th November, authorizing me to proceed with the organization and enrolment of the Seymour Artillery at New Westminster, did not reach me until after my return from making my annual inspection there, as it will now necessitate my making another trip for that special purpose.

This however I intend doing next steamer and have notified Lieut. Scott to that effect,

I have the honor to be, Sir,

Your obedient servant,

C. F. HOUGHTON, Lieut.-Colonel,

Deputy Adjutant-General, Military District No. 11.

The Deputy Adjutant-General, Headquarters, Ottawa.

#### REPORT ON THE ARTILLERY OF THE PROVINCE OF ONTARIO.

KINGSTON, ONT., December, 1874.

SIR,—I have the honor to inform you that in accordance with instructions received, I inspected the following Batteries of Artillery in this Province, viz:

Hamilton Field Battery

Welland Canal "

Ottawa

Kingston Durham

Wellington

Gananoque

London Torento

Napanee Garrison Battery

Toronto

Cobourg "

My inspection had special reference to the actual efficiency of the batteries, their numerical strength of men and horses appearing in the returns sent in by the Deputy Adjutant Generals of Districts, whose inspection was simultaneous, or within a day or so of mine.

With this end in view, after a minute inspection of men, horses, harnessing, &c., each Field Battery was called upon to march past at a walk and trot, and to perform a few simple field manœuvies under its own officers.

The non-commissioned officers and men were then examined individually and collectively in gun drill and a knowledge of ammunition, and the driving tested in limbering up and coming into action.

I regret not having had an opportunity of inspecting the batteries at their annual

gun practice, and my report is necessarily deficient in this respect.

The only opportunity I had, viz: in the case of the London Field Battery at Port

Stanley, was frustrated by unavoidable circumstances.

The Toronto Field Battery whom I had also hoped to have inspected at this exercise, performed their practice before going into camp, a custom which I hope will in future be discontinued, having in view the number of recruits to whom for want of sufficient preliminary drill such practice must be almost worthless.

I have now the honor to submit the following detailed report on the several batteries

above mentioned :-

#### Hamilton Field Battery.

Inspected at Niagara Camp, 27th June, 1874, Captain Smith and Lieut. McMahon, Guns and carriages kept in very good order, but latter require painting. Herself

very good. Harness iron work rather rusty, with a good many straps deficient, principally side reins. Driving generally very good, but the drivers required instruction in fitting harness, and in many cases were unable to work their horses on the bit.

The marching past and field manœuvres under Captain Smith were very well

execute

The non-commissioned officers and men appear to have been carefully instructed, and are well up in gun drill but are somewhat deficient in a knowledge of ammunition. On the whole the present efficient state of this battery reflects great credit on its commanding officer, and it is to be hoped that his efforts may soon be seconded by properly qualified officers.

#### Welland Canal Field Battery.

Inspected in Niagara Camp, 27th June, 1874, Lieuts. King and McCracken. Guns and carriages in good condition; required repainting and slight repairs. Horses—a good many appeared to be too small for their work, but as they had two days before inspection performed the arduous task of marching 26 miles to camp on a hot day without any casualties, exception can hardly be taken in this particular.

Harness-not so clean as it might have been, with several deficiences.

This battery has not drilled since 1872 and there were a large number of recruits in the ranks and among the drivers, in consequence the gun drill was badly performed, and

very little could be done in field manœuvring.

Marching past was, however, very well performed, and I have great hopes that with the increased facility for drilling afforded by a drill shed about to be built for this battery at Port Robinson, their turnout next year will leave little to be desired, as the greatest zeal appears to animate all ranks, and both officers are well up in their duties.

#### Ottawa Field Battery.

Inspected at Camp, Ottawa, 30th June, 1874, Captain Stewart, Lieuts. Billings and Savage. Guns and carriages in good condition, but require repairs and painting Horses very good. Harness clean and well fitted, and in consequence the battery looked very well on parade. Driving good. Marching past and field manœuvres under Captain Stewart very well performed, but the subaltern officers and sergeants did not appear to know their positions or duties.

The non-commissioned officers and men were well up in gun drill, but deficient in a

knowledge of ammunition.

It would appear greatly conducive to the efficiency of this battery, were promotion among its non-commissioned officers to be regulated by efficiency and not altogether by seniority.

## Kingston Field Battery.

Inspected at Camp, Kingston, 1st July, 1874, Major Kirkpatrick, Captains Graham and Wilmot. Guns and carriages in good condition, but require painting. Horses with a few exceptions very good. Harness not so clean as it ought to have been, with several deficiencies. Marching past and field manœuvres were well executed, and the non-commissioned officers and men were well up in gun drill.

This battery had the advantage of a Sergeant Instructor from the School of Gunnery, and a number of the men had been attached to "A" Battery, but I noticed the battery subaltern officers and sergeants appeared to be unable to instruct their men, and in conse-

quence the latter appeared at a disadvantage.

## Durham Field Battery.

Inspected at Camp, Cobourg, July 2nd, 1874, Captain Graham and Lieut. McLean, This battery had only just received its equipment. Guns and carriages require repaired

and painting. They have no ammunition wagons, and the equipment was very deficient The horses were very good. The harness was new and well fitted.

Considering it was their first appearance with guns and horses, this battery presented

a very creditable appearance on parade.

All ranks seems to have exerted themselves to the utmost, and in consequence the driving, marching past, and field manœuvres were very efficiently performed.

Great progress has been made in gun drill, which is to be hoped will be perfected

during the winter.

Both officers have received Gunnery School Certificates, and are competent to instruct. A Sergeant Instructor from the School of Gunnery was attached to this battery during the drill.

#### Wellington Field Battery.

Inspected at Camp, Guelph, 3rd July, 1874, Captain Macdonald, Lieuts. Nicholl and McRae. Guns and carriages in good condition. Harness nearly all new and well fitted. Horses with one or two exceptions very good.

Marching past and field manœuvres under Captain Macdonald and the subaltern officers, very well performed. Non-commissioned officers and men very well up in gun drill.

Two of the officers, and nearly all the non-commissioned officers, have obtained Gunnery School Certificates, and are able to instruct their men, so that, as might be expected, this battery is in a very efficient state.

I noticed, however, as in all the other batteries, a want of knowledge among the gunners of the ammunition and stores they are required to use; and it is to be regretted that this battery was not afforded any opportunity of performing its annual practice.

There appears to be no proper gun sheds where the equipment can be kept, or an opportunity afforded for the instruction of the men during the winter months.

#### Ganvanque Field Battery.

Inspected at Camp, Gananoque, 11th September, 1874, Captain McKenzie, Lieuts Mitchell, Britton and McCammon. The first time this battery has turned out with guns, having received the latter from Ottawa Field Battery, but without waggons. Gun carriages require painting and repairs, and the equipment is very deficient. Harness new and generally well-fitted, but was not so clean as it ought to have been. Horses rather undersized, but apparently active and fit for work. Marching past well executed, and considerable progress has been made in field manœuvres. Gun drill well performed, and both officers and men appeared to have paid much attention to this particular. Captain McKenzie and Lieut. Britton, have obtained Gunnery School Certificates, and are competent to instruct.

It is to be hoped that this battery will continue to improve its efficiency by occasional drills during the winter months, and I should recommend that next year it should join a

brigade camp for annual drill.

A Sergeant Instructor and two drivers were attached to this battery from the School of Gunnery, and contributed much to its efficiency by their instruction.

## London Field Battery.

Inspected at Camp, Port Stanley, 18th September, 1874, Lieut.-Colonel Shanly, Lieuts. Peters and Williams. Guns and carriages and equipment in good condition, but the latter is deficient in some particulars. Horses very good. Harness in good condition, but deficient of side reins, and no curb bits are used; harness well fitted.

Field managuvres under Lieuts. Peters and Williams, fairly well performed considering the nature of the ground which was limited in extent. Gun drill good, both non-commissioned officers and men appearing to understand their duties.

The subaltern officers are able to instruct their men.

This battery marched from Camp London, the day before inspection, 33 miles, for the purpose of performing their annual gun practice at Port Stanley.

I would hope that a similar opportunity may be afforded to all the Field Batteries

in this Province, as the value of such practical training is indisputable.

#### Toronto Field Battery.

Inspected at Camp Holland Landing, 8th October, 1874. Captain Gray, Lieuts. Denison, Wright, and Green.

Guns, carriages, and equipments in good condition.

Horses generally undersized and not very good, owing to the time of year reported to be unfavorable for obtaining good horses, latter being much required for farming work.

Harness very clean and bright considering incessant wet weather while in camp, and generally well fitted, but no bits or side reins were used.

Marching past and field manœuvres under Captain Gray and the subaltern officers

very good, but the driving was indifferent.

Non-commissioned officers and men efficient in gun drill with a good knowledge of ammunition.

Officers and non-commissioned officers able to instruct their men.

The Battery marched to camp from Toronto, 38 miles, in about 14 hours, with a halt of two hours, and returned in about the same time.

I have been informed that no injury to the horses or casualty occurred, but the distance seems excessive for untrained horses with strange and perhaps ill-fitting harness.

## Napanee Garrison Battery.

Inspected at Napanee, 12th September, 1874. Captain Hooper, Lieuts. Henry and Abram.

This battery is composed of men of good physique and well uniformed.

I inspected them in the manual exercise which was well performed; the firing exercise not so good; company drill indifferent.

The non-commissioned officers and men were fairly up in gun drill, but owing to their having only one 32-pound gun on a standing carriage with a few handspikes and no equipment of drill stores or means of mounting and dismounting, no extended drills could be carried on, and there was little knowledge shown of ammunition.

Had this battery performed its annual drill in barracks at Kingston, with the advantage of drill stores and instructors, and a possibility of actual gun practice, a different and much more satisfactory result might be looked for, and I would strongly recommend that such may be arranged for next year.

The officers were able to instruct in gun drill.

## Toronto Garrison Battery.

Inspected at Toronto, 9th October, 1874. Captain Gibson.

This battery paraded without arms so that I was unable to inspect them in manual and firing exercise.

They had not been instructed in company drill and their squad drill was very indifferent.

At standing gun drill, however, the battery appeared very efficient, and the noncommissioned officers were able to instruct their men.

Owing principally to the want of actual gan practice, there appeared to be little knowledge of ammunition or stores, and for want of proper material no instruction in mounting or dismounting ordnance, or in fact, in anything but gun drill had been attempted.

As in the case of the Napanee Battery I should recommend that this battery perform

its annual drill in barracks, either in Kingston or in Toronto.

## Cobourg Garrison Battery.

Inspected at Cobourg, 20th November, 1874, Captain Dumble. Appearance of battery on parade very good, uniforms being in good order and men of good physique.

Manual exercise very good; firing exercise indifferent; no opportunity of seeing the

battery at company or squad drill, weather being unfavorable.

Standing gun drill very good. The Sergeants are able to instruct; no knowledge of

ammunition or stores.

Like the other Garrison Batteries, no means of learning any other drills (except mortar drill) or of performing annual practice, recommendations as to annual drill the same as for the Napanee and Toronto Batteries.

#### CONCLUDING REMARKS.

#### Practice.

The general deficiency previously noted in knowledge of ammunition and stores can hardly be overcome by instruction during the limited time allowed for the annual training, when both officers and men have other and more pressing duties to perform.

Such knowledge is only to be acquired by careful training supplemented by deliberate

and systematic target practice.

This very important part of the annual training of Batteries of Artillery does not seem to have had proper attention paid to it, and I am not aware of any orders, excepting those for annual drill of 1872-73, relating to the proper number of rounds to be fired, nor of any rules regarding the time of such expenditure.

I would strongly recommend that three days at least at the conclusion of the ordinary drill be set apart for gun practice, exclusive of the time required to march to

and from the practice ground.

I trust that next year this subject may receive increased attention, for it must be borne in mind that excellence in this particular, joined with capability of inovement is the only true criterion of efficiency.

## Clothing.

The clothing has generally appeared to be complete and in good order, but I would strongly urge the issue of one pair of cloth trousers with straps, or of booted overalls, to each driver and mounted non-commissioned officer. The present issue of serge trousers without straps being quite unsuited to mounted duties. In many batteries I noticed drivers without either whip or spurs. The latter do not appear to be issued by Government. They are very essential and I would strongly recommend their issue.

## Painting, Repairs, &c.

I should recommend immediate steps being taken for the repairing of carriages, &c., of such batteries as may require it, for the execution of necessary repairs, and for the completion of the proper equipment of small stores, &c.

## Harnessing, Driving, &c.

Careful instruction seems to be much needed in the minor details of harnessing, driving, riding, &c. These, though very essential, are apt to be overlooked, and I can only propose as a remedy for these and other similar defects, that greater inducements be held out to officers and non-commissioned officers to attend the School of Gunnery, where, alone, such details can receive the attention they require. The issue of pay according to rank while at the School of Gunnery, would, I think, be greatly conducive towards the desired result.

#### Garrison Batteries.

From my inspection of the three Garrison Batteries previously mentioned, I am quite able to concur in the opinion expressed by Lieut.-Col. French in his last report, as to the expediency of bringing all garrison betteries into forts for proper instruction in artillery exercises and for discipline.

Should, however, that not be found practicable, the efficiency of these batteries would be greatly increased by issuing to each of them two 18-pounder siege guns on travelling carriages. They could then join a Brigade Camp and perform annual gun practice.

In concluding my report on the inspection of the above mentioned batteries, I have the honor to inform you that, from what I have observed, I am led to thoroughly endorse the recommendations made by Lieut.-Col. French in his last report, pages 38 and 39, Annual Report for 1873, relative to this subject.

I would also beg to state my unqualified satisfaction with the general appearance and efficiency of these batteries, and with the zeal and esprit-de-corps, which appears to animate all ranks, leading them to great exertions in endeavoring to perfect themselves in their

sometimes arduous duties.

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

D. T. IRWIN, Major, Commandant, School of Gunnery, & Asst. Insp. of Artillery for Province of Ontario,

The Deputy Adjutant General, Headquarters, Ottawa.

## REPORT ON THE ARTILLERY OF THE PROVINCE OF QUEBEC.

CITADEL, QUEBEC, 31st December, 1874.

SIR,—I have the honor, in submitting my annual report, respectfully to inform you that I have little to add to the remarks and recommendations made in my reports for the last two years, except that the casemates of the Cidatel of Quebec are, as you are no doubt aware, being placed in a state of thorough repair as well as those at Point Levis.

I beg to submit a copy of my last year's report on armament (A) which was not published, only adding to it the recommendation that the 9-pounder muzzle loading rifle gun of 6 cwt. might, advantageously, be substituded for the 9-pounder

gun of 8 cwt, for Field Artillery.

I wish especially to draw your attention to the difficulties that beset a very excellent battery of respectable, intelligent and physically fine men, under command of Major Slous (1st class certificate "B" Battery Gunnery School), at Gaspé. The commanding officer and 12 non-commissioned officers obtained permission to join the Quebec Gunnery School last winter. After making arrangements for that object, the commanding officer and three non-commissioned officers only were permitted to join. The others having given up their winter employment, complained to me, through their commanding officer, that they had suffered seriously in consequence.

The battery is, further, much discouraged in consequence of not being supplied with guns with which, to my knowledge, they were informed they would be supplied two years ago. The expense I represented would be very little, if any, as there are plenty of 24-pounder smooth bore guns and carriages to spare at Quebec, which, with a few rounds of ammunition for practice, the Superintendent of the Marine and Fishery Department

offered to send down, without cost, if authorized.

A large proportion of the uniforms served out to this corps are too small for the men, who are very much above the average in physique.

I need not remark upon the advantage of having an armament, of even smooth bore guns, at Gaspé Harbor, that would cost nothing and not deteriorate, the drills and exercises being the same as for the \frac{64}{32} pounder converted Palliser rifled guns, for which these smooth bore guns could be subsequently exchanged if thought advisable, the iron carriages being suitable for either nature and not deteriorating from exposure to weather, &c., as before stated.

The same remarks as to armament apply to the excellently trained artillery detachment at Grosse Isle Quarantine Station, under the command of Captain F. Montizambert, (1st class certificate "B" Battery Gunnery School.) They have only two 12-pounder smooth bore guns and one unserviceable 18-pounder, while the battery under Major Drumm, at St. Johns, Province of Quebec—a point of importance, commanding the Richelieu River, at the junction of three railroads—has only one gun. None of the above guns are sighted. All these corps offered to throw up batteries and mount guns if supplied from those in store at Quebec and Montreal.

Herewith enclosed:

Tabular return of inspecton on the form supplied (No. 106 a) which is not, you will observe, suitable for Artillery or Engineer corps.

(B.) Report submitted by officer commanding Shefford Field Battery.(C.) Report of officer commanding No. 1, Engineer Company, Montreal.

T. B. STRANGE, Lieut.-Colonel Inspector of Artillery, Province of Quebec.

(A)

#### Armament.

In view of the repeal of the Canada Defence Act by the Imperial Government, at the request of the Dominion, it is, I presume, futile to consider the nature of the rifled armament for Quebec proposed as a gift from the Imperial Government, or to speculate on the possibility of the Act being repealed. It only remains to consider the lowest cost of an efficient armament, vide last year's (1872) Militia Report, page xxix.

"The heaviest guns mounted on the Cidatel at Quebec are four 7-inch breech-loading rifle guns on the salients, there are five more with carriages and platforms, and 200 rounds per gun in charge of the storekeeper at Quebec; and one dismounted where the platform was left incomplete by the Royal Engineers, by whom the racers were laid in the salient of barrack bastion, which commands Dorchester Bridge head and a wide sweep of country. The trifling expense of filling in the concrete alone remains to be authorized.

Two of these guns having been sent to Kingston, I would recommend that the remaining three should be mounted, one on the salient of each fort at Point Levis, where no guns as heavy could be brought against them over land.

The important fortress of Quebec could be re-armed at a comparatively trifling cost, by selling the greater proportion of obsolete smooth bore guns for old iron, and substituting the Palliser converted \( \frac{64}{34} \) pounder muzzle loading rifle guns. The old cast iron carriages, platforms, side arms, stores, shot, shell and ammunition could still be used with these guns, which retain their 32-pounder calibre and exterior form. Such an armament, simple, serviceable, incapable of injury by rough handling or climate, requiring no complicated drill, would fulfil all requirements, and if well posted, prevent or render it entirely hazardous for any enemy to attempt establishing batteries on the land, and St. Charles River front.

The building of a graving dock at Quebec which would, I presume, be available for the Royal Navy, point more closely than I can do to the necessity of protecting such an establishment from the fortress that commands it. The rise and fall of tide in St. Charles

River would be an advantage, giving a wet and dry dock at will, while the exchange of the 24-pounder smooth bore on the lower lines for  $\frac{64}{32}$  Palliser, as proposed, would give complete defensive command.

The latter river could not be entered by iron clads except at a few hours at high

tides, when they would run the risk of being left in the mud.

To cope with heavy iron clads on the St. Lawrence, such as are not, however, at present to be found in any Cis-Atlantic Navy, a few 12-ton muzzle loading rifle guns would be required, one on the King's Cavalier would give an all round fire with a perfect command over the deck of any vessel. Indeed a  $\frac{64}{32}$  pounder shell stricking the deck would, from the Citadel, be quite capable of knocking the bottom out of any iron clad, as they are, of course, unarmed below water, to say nothing of the effects of a bursting shell between decks.

A few rifled guns on the lower lines would be, however, necessary to keep vessels from getting inside the distance at which the Citadel guns could not be depressed. A few torpedoes commanded by guns would, it is hoped, prevent any ordinary floating enemy from bombarding the town.

The Volunteer and Militia Coast Artillery of Great Britain are almost entirely armed with 64 Pounder Pallisers,\* and the Government of India has also decided on a

Palliser armament.

The Colony of Victoria, New South Wales, has purchased 26 of the \$\frac{64}{32}\$ Pounder converted Palliser, as proposed for Quebec; but they probably were compelled to pay for carriages and travelling platforms, &c., an expense which we can avoid by adopting the armament proposed.

Any other description of rifled guns would necessitate the purchase of new carriages and platforms, at a cost ten times greater than that of the proposed

rmament.

Take for example the 7-inch muzzle-loading rifles as the least expensive Garrison Gun—

Gun Sights	7	5	0
Carriages Traversing Platform	140	0	0
Total	£881	3	10

or \$4,288 33, exclusive of racers and the cost of laying them.

30 Guns at £881 3 10 each, £26,435 15 0-\$128,656.97. Compare this to £4,098 12 5-\$19,945.97, the cost of the proposed armament of, say 30  $\frac{64}{32}$  Pounder M.L.R. Guns, at £136 12 5 each, including sights, and from which may be deducted the probable amount to be realized by the sale of old guns.

It will be necessary to examine the old guns to find the exact number unser ice-

able, but it may be roughly estimated as follows, viz:

At Quebec alone 173 tons 16 cwt., at £4 2 6 per ton-£716 18 6.

The above prices are taken from No. 2 balance sheet of the Woolwich price lists, which is 15 per cent. above cost price, but the old guns will probably realize more than the price laid down in consequence of the rise in iron.

The same remarks apply to Kingston, St. Helen's Island, and other places in the Dominion where there are a considerable number of old guns, the sale of which would

go towards paying for an efficient armament.

The existing supply of iron carriages, on which time and climate produce no effect, would serve to mount the new rifle guns.

At Quebec alone the number is as follows:

Carriages 64, platforms 33, all suitable for \$\frac{64}{32}\$ Pounder muzzle-loading guns.

6-6

<sup>\*</sup> Since this report was submitted, I am informed that the Volunteer Garrison Artillery at Halifax, N.S., have also been supplied with them by the liberality of the Imperial Government.

I beg to refer you to my letter dated 8th April, 1873, informing you that the pillar percussion fuzes supplied for the 7th B. L. R. Guns are obsolete, and the number of tin cups below regulation; also the percussion fuzes with the 7-pounder Mountain Guns are not suitable. The Laboratory percussion fuze marked II is now supplied for the 7-pounder. M.L.R., and the General Service Percussion in lieu of Pillar fuzes.

The small quantity of ammunition in charge of the Militia Batteries that I inspected was in good order, except a few rounds of blank 24-pounder in the old and

ruinous magazine at St. Johns, P.Q., which were unserviceable.

The temporary magazine in that barracks contains both heavy gun ammunition and

small arm.

It is dangerous and contrary to regulation to place the latter, which contains

detonating composition, with the former.

The guns in charge of the St. John's Battery and Grosse Isle are not sighted: it would be impossible to make correct practice with them. If authority was given, the Ordnance Armourer from "B" Battery could easily perform this service. There are two small arm armourers paid on "B" Battery muster rolls, and render no service to the Battery, and are not under my control. I suggest that their pay, \$1.50 each, should be drawn from some other source.

The guns and carriages at St. Helen's Island were lacquered and painted by the detachment "B" Battery (in 1873), but there are not sufficient men at my disposal to

perform this service at Quebec except to a very limited extent.

Wooden carriages are preserved by painting and filling up cracks, and the bores of the guns are prevented from corrosion by lacquering in accordance with regulations.

With regard to the ventilation of magazines at Quebec, which are not, however, in

my charge, I beg to refer to recommendations in letter dated 11th July, 1872.

I fully concur in the remarks of Lieut.-Colonel French, late Dominion Inspector of Artillery, pages xxxviii and xxxix, Militia Report for last year (1872), in which he points out "the advisability of commencing even on the smallest possible scale the manufacture and repair of those warlike stores most needed for the defence of the country." I recommended the same 17th May, 1872, and 21st June, 187%.

There are two rates of payments for warlike stores purchased from the Home Government. No. 1 balance sheet shows cost price. No. 2 balance sheet seems to be the rate charged to foreign nations for the purchase of warlike stores, and Colonies seem to be placed on the same footing, with an addition of 15 per cent. to the rate laid down in No. 2 balance sheet, which in the case of R. L. G. Gunpowder, is nearly double the cost price, viz:

No. 1 balance sheet gunpowder per 100 lbs., at £2 10 114; No. 2 balance sheet,

£4 7 43.

In addition to this 100 per cent., there is the fact, that for making up cannon\* and small arm cartridges, repairing small arms, gun-carriages, &c., there are numbers of public buildings lying ille; the use of these rent free would be a sufficient set off to the increased price of labor in this country, particularly if it be borne in mind that the labor of children is employed to a large degree in certain of the minor operations. In the long winter season when labor is abundant, work could be carried on, and discontinued

I would, in conclusion, submit that the establishment of an arsenal on a small scale may be pressed on the attention of the Government, especially since a higher percentage than that heretofore charged is likely to be put on warlike stores, in consequence of the rise in the price of coal and iron in England,

T. B. STRANGE, Lt -Colonel,

Inspector of Artillery, Province of Quebec.

(B.)

[Forwarded to the Deputy Adjutant-General at Headquarters, for submission to the Major-General Commanding. Major Amyrantd is an excellent officer and obtained a 1st class certificate at "B" Battery Gunnery School, Quebec.

T. B. Strange, Lieut.-Colonel, Inspector of Artillery.

MONTREAL, 10th November, 1874.

SIR, -I have the honor to report that in compliance with district orders, the Shefford Field Battery, under my command, mustered at Granby in full marching order at noon on the 14th September last, to proceed to camp at Laprairie,

I had obtained previously the tents and blankets required, and as the battery has not been supplied with ammunition waggons, I placed the tents and all the baggage in four waggons which I provided, along with the provisions necessary for the subsistence of the

battery during the march.

I kept a party of four men and an intelligent non-commissioned officer ahead to procure forage and wood at the halting places previously selected, with also instructions to examine and enquire about the bridges, to leave a man behind if any bridge was thought unsafe, until the battery came up.

The battery moved out of Granby at noon on the 14th September and we reached Abbotsford at 2:30 p.m. where we halted to feed the horses and the men had their

dinner.

We left Abbotsford at 4:30 p.m. and moved towards St. Césaire. About two miles east of that village I found at a bridge over a rivulet, one man of my advance guard who reported the bridge unsafe. I examined the bridge with my officers and decided to cross over it. I, however, for greater safety, unbooked the four leaders of each gun before crossing.

There is a ford on the right of the road and in one hour's work roads could have

been cut down the banks.

The road from Granby to Chambly is an old Government macadamized road, the main artery of traffic from Montreal to the eastern townships previous to the building of railways, and is kept in good repairs by the municipalities who have now charge of it. But the bridge above mentioned, to the village of St. Césaire, the road was originally planked as it was thought the bottom too soft for macadamizing. The planks are now all gone and in spring and fall that part of the road is impassable. In an emergency, however, the road could be made practicable by covering it crossways with rails, plenty of which could be found along the road. At St. Cesaire I sent the tents and baggage ahead, and we arrived at Rougement, our camping place for the night, at 7:30 p.m. and found the tents pitched in an orchard north of road, on dry ground, and all provision made by my advance party.

We left Rougement with all our camp equipage properly packed, at 7:30 a.m., immediately after breakfast, and passing through St. Mairie, Richelieu, and crossing the Richelieu River at Chambly Centre on a very good toll bridge, and reaching the old French Fort on at 10:30 a.m. There the horses were picketed and it being quite warm I gave

leave to the men to bathe in the Basin before dinner.

After dinner, the horses being fed, we left the old Fort at 1:30 p.m., and leaving Chambiy village and the Montreal road to the right, followed the road up the Montreal River which we crossed over a very good wooden bridge at an old grist mill, then passing through Brosseau's and Laprairie village we marched into camp at 5:30 p.m.

Just before reaching Laprairie we had to cross a temporary bridge over the rivulet on the route to St. Lambert which caused me considerable anxiety. The leaders were

unhooked, gunners and drivers dismounted, and we got over safely. Thirty minutes after marching into camp the tents were pitched, the horses feeding,

and the men at their supper.

6-6

<sup>\*19,309</sup> lbs. powder have been made into cannon cartridges at the Quebec Laboratory by the non-commissioned officers "B," Battery, without cost to Government. These cartridges have been distributed for use in the Dominion, including Ontario and New Brunswick.

I issued on the next morning the following standing orders for drill, &c., &c. :-

6 a.m .- Reveille.

 $6\frac{1}{2}$  to  $7\frac{1}{2}$  a.m.—Parade  $\left\{ egin{array}{ll} & Gunners fort drill. \\ & Drivers stable duties. \end{array} \right.$ 

8 a.m.—Breakfast.

9½ to 11½ a.m.—Parade { Gunners gun drill, &c., &c. Drivers driving drill with limbers.

12 to 121 p.m.—Parade, drivers stable.

12½ p.m.—Dinner.

2 to 4 p.m.—Parade, under commanding officer.

5 to 5½ p.m.—Parade, drivers stable.

51 p.m.--Tea.

7 to 8 p.m.—Lecture on gunnery, ammunition, &c., &c., by commanding officer to non-commissioned officers and gunners.

Instructions in harness fitting, &c., &c., to drivers.

As to the proficiency attained it is not for me to say, but I hope that when you inspected the battery you have found that my efforts in bringing my men into a state of efficiency have not been altogether lost.

The shot practice of the battery was carried on in your presence, and we have been highly pleased in hearing of your satisfaction at the result. The shells and fuzes not having been issued yet, I intend to call out the battery for shell practice as soon as I receive them. We have a good range at Granby. The behaviour of my men, their attention to their duties and disposition to learn, were all I could desire. The number of Gunnery School cadets I have in my battery was a great help to me, it gave tone to the whole corps and enabled me to enforce proper discipline without any difficulty. My non-commissioned officers being all Gunnery School cadets, acted as instructors during the camp.

The battery marched home from camp under command of Lieutenant Neil, and all the guns, stores, arms and equipments, harness, &c., &c., were returned into the armory, properly cleaned and in good order, on the 25th September, and the men were dismissed.

When in camp I lost two horses, one died of inflammation of the bowels caused by exposure, and the other was killed on the Grand Trunk Railway. Reports have been made and claims for compensation sent up and I hope it will be granted as it will make it difficult to obtain horses if the Government do not assume the responsibility of such accidents.

According to your desire I also send you with this report an itinerary (not printed) of the march of the battery from Granby to camp, with such report on the road as the time I had allowed me to make. The map shows quite a section of country. It was enlarged from a pretty good map in my possession on the scale of five miles to the inch. The map of Granby, and features of the ground are taken from a rough survey I made previously; the woods were indicated and the map corrected along the road from personal observation. The details on each place are rather incomplete but I could not gather any more in the time allowed me when marching with my battery.

I have the bonor to be, Sir,

Your obedient servant,

T. AMYRAULD, Major. Commanding Shefford Field Battery.

Lieut.-Colonel Strange, Inspector of Artillery, Quebec. (C.)

[Forwarded to the Deputy Adjutant-General, Headquarters, 9th January, 1875.

T. B. Strange, Lieut.-Colonel, I. of A.]

St. Helen's Island, December 7th, 1874.

SIR,—I have the honor to enclose diary of the training of the Engineer Company under my command.

The twelve drills for which they draw pay have been performed, and they are now drilling voluntary twice a week until a course of twelve more shall be completed.

The company musters forty-one of all ranks, and the conduct of the men while going through their training has been steady and attentive.

The want of a more suitable room for both drill and lecture purposes is greatly felt, as the one room in use answers the purpose very poorly in every respect.

This matter was represented at the completion of last years' training, and permission requested to return to the drill shed, Craig Street, where the room formerly occupied is better and more central.

The target practice for this year will be carried out as soon as practicable.

I have the honor to be, Sir,

Your most obedient servant,

JAS. A. DEVINE, Lieutenant,

Commanding 1st Company M. V. E.

To Lieut.-Col. T. B. Strange, Inspector of Artillery and Engineers, Citadel, Quebec.

## APPENDIX No. 2.

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

KINGSTON, ONTARIO, 31st December, 1874.

During the year ending 31st December, 1874, five officers, 152 non-commissioned officers and men joined this school. The numbers from each battery in the Province will be seen on reference to the subjoined list:—

Batteries,	Officers,	Non-Com. Officers and men.	Total.
London Field Battery Wellington do Goderich Garrison Battery Sarnia do	***************************************	12 13 2	12 13 2
Hamilton Field Battery Welland Canal do Toronto do St Catharines Garrison Artillery Toronto do Collingwood do Kingston Field Battery Durham do	1	2 9 20 6 17	2 9 21 6 17 50
Cobourg Garrison Artillery Port Hope do Napanee do	i	1	2
Trenton do Ottawa Field Artillery Gananoque do Ottawa Brigade Garrison Artillery. New Brunswick do Winnipeg Field Battery. Artillery on duty, Manitoba.	i 1 1	3 1 3 1 6	3 1 3 1 6 1 2 1
Total	5	147	152

The following short course certificates have been received during the past year:

Officers			1st class, 6 16	2nd class, 0 20
Total Shewing an increase on last year of	*		22	20°

Fifteen non-commissioned officers and men received their discharge from the school for the purpose of engaging in the North West Mounted Police. During the past year four officers, fifty-nine non-commissioned officers and men joined the school for a short course of instruction.

i. The results of this, the third year of the existence of this school, have as regards the attendance and instruction of non commissioned officers and men been very satisfactory, and I have uniformly found, during my inspection of the greater pertion of the artillery of this Province, the good results attending the intermixture, in the runks of the volunteers of non-commissioned officers and men who have received such instruction and experience in their duties and discipline. The non-attendance of officers in great runmbers for a short course of instruction is much to be deprecated, I attribute their reluctance in coming forward principally to the two following reasons, viz: 1st. The

necessary expense attendant on the purchase of a varied and costly uniform, and the necessity of providing sufficient barrack furniture to supplement the regulation table and chairs, it being borne in mind that for officers attending a course of instruction the pay is only \$1 per diem and rations; and 2ndly—the difficulty, and in some cases, the impossibility of officers and men, who may be engaged in professional or commercial pursuits, absenting themselves from their duties for so long a period as two or three months.

To obviate the above I would suggest as a remedy with regard to the former, that a serge jacket with appropriate facings, to cost about 87 be substituted for the present expensive patrol jacket, and the use of the ordinary tunic at mess, instead of the shell jacket, left optional. That a few necessary articles of furniture be supplied to quarters for "Short Course" officers, and that the pay of such officers and non-commissioned officers,

while at the school, be according to rank.

With regard to the latter I would recommend that, during the summer months, classes of instruction under the superintendance of a properly qualified officer from the School of Gunnery assisted by one or more sergeant instructors, be formed at Ottawa and Toronto, or elsewhere if required, and under rules to be hereafter laid down, at the close of say a two months course of three hours per diem, an examination practical and theoretical could be held by the Commandant School of Gunnery, and 2nd or 3rd class certificates awarded. The holders of these might afterwards qualify for a higher grade by attending one month's course at the school, for additional instruction in interior economy, discipline and riding, &c.

2. I would recommend the adoption of a 3rd class certificate, to meet the case of certain non-commissioned officers and men, who though capable to instruct in drills &c., are of inferior education, such certificates not to qualify the holder as fit for a commission.

3. An increase in the present Field Battery establishment of the Schools of Gunnery, has been previously recommended by the Inspectors of Artillery in Quebec and Ontario. As in "A" Battery there are at present 71 men belonging to different field batteries in the Province, the importance of providing adequate means for their instruction will be at

once apparant.

4. I would recommend the enrolment of certain non-commissioned officers and men for three years' service in "A" Battery. The former would consist of sergeant-major, quarter-master sergeant, sergeant instructors, battery artificers, musicians, care-takers for forts, canteen steward, hospital sergeant, &c., &c. From the nature of their employments, these men are anable to join their own batteries for annual drill, &c., should not therefore be borne upon their strength, whilst the due performance of their duties demands a lengthened experience.

5. It being found that greater numbers of non-commissioned officers and men present themselves for admission for short courses of instruction during the winter, than during the summer months. I would recommend that at such periods the establishment of "A" Battery be increased, to be compensated for by a corresponding decrease during summer.

5. A rifle association has been kept up in the School of Cunnery during the past two years, an annual match being fired in the month of June, and aggregate prizes subscribed for the best scores made on a certain number of Saturday afternoons. Last year the association numbered 77 members.

6. A summer camp for a week in August was formed on the lake shore, about five miles from town, during which the battery was instructed in camp duties, ordinary drills and field gun practice. The officers performed a survey and a road sketch, opportunity was afforded for athletic sports, swimming, &c. The rations were brought out by the battery horses, &c. The conduct of the men was excellent.

7. During the past year all the officers and one non-commissioned officer, have been instructed in surveying, road sketching, reconnoisances and defence of buildings. Con-

siderable progress has been made in the above studies.

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

The Deputy Adjutant General, D. Headquarters, Ottawa. Comma

D. T. IRWIN, Major, Commandant School of Gurnery,

#### REPORT ON "B" BATTERY SCHOOL OF GUNNERY.

CITADEL, QUEBEC, 31st December, 1874.

Sir,—I have the honour to forward a synopsis of the instruction carried out for the last three years in "B" Battery Gunnery School, and beg to state that not having a sufficient staff of assistants, I desire, with your permission to lower the standard of instruction by omitting from the "Long Course," mathematics, as applied to the higher gunnery problems, military history, and the construction of siege batteries, rafts and bridges, for which there is a difficulty in obtaining the necessary material, as well as working parties from the multiplicity of duties devolving on the small force under my command.

I need not in this report, I presume, refer in detail to the recommendations previously submitted with reference to the subdivision of the 174 of all ranks of "B" Battery into a brigade of 3 batteries of 80 each, one serving as a branch School of Gunnery at Montreal, which has already been at work for two years without any expense, as yet, to the Government beyond the pay of the officer and non-commissioned officer and 20 men of the St. He len's Island detachment "B" Battery. It is scarcely necessary to refer to the facility with which cavalry and infantry drills could also be taught by such an establishment as proposed.

Herewith enclosed:

(A.) Return of officers, non-commissioned officers and men, joined during the current year.

(B.) Annual return of certificates granted and shewing the decimal proportion of credit gained.

(C.) Synopsis of instruction—long and short courses.

(D.) Examples of examination; questions for the current year.

T. B. STRANGE, Lieut.-Colonel, Inspector of Artillery, and Comdt. Gunnery School, Quebec.

Deputy Adjutant-General of Militia, Ottawa.

(A.)

## "B" BATTERY, SCHOOL OF GUNNERY.

Return of Officers, Non-Commissioned Officers and Men, joined from 1st January, 1874, to 31st December, 1874, showing the Military District, also the Corps in which each man is nominally enrolled.

CITADEL, QUEBEC, 31st December, 1874.

			Cor	ps in	whic	h enr	olled	35 1		10.		
	Mil	itary No	Dist	rict,	Military District, No. 7.					No.		Valenta apple
RANKS.	Shefford Field Battery.	Montreal Garrison Artillery.	Sherbroke Battery.	Montreal Engi- neers, No. 1 Co'y.	Quebec Field Battery.	Late Beauce Field Battery.	Late Quebec Garrison Artillery.	Gaspé Battery Garrison Artillery.	Battery Artillery.	Military District	Total.	Remarks.
Officers	****		****	1		1		1	•••	*1	4	*Capt. Taschereau, com- manding Artillery in Manitoba.
and Men	10	3	27		16	2	12	3	31	****	134	There are no Artillery or Engineers in Military District No. 6.

The Deputy Adjutant-General, Headquarters, Ottawa. T. B. Strange, Lieut.-Col., Commandant G. S. Quebec.

## (B.)—"B" BATTERY

NAMES of OFFICERS, Non-commissioned Officers and Gunners and Drivers who 1874, showing the subjects of examination

			named to the last of	-	
Subjects of Examination,	Corps.	Class Certificate Granted.	Gunnery.	Artillery Material.	Shifting Ordnance.
Decimal proportion of credit gained.			Decimal.	Decimal.	Decimal.
Captain Taschereau, E Captain Huddle, A. O. R.		First First Second	*80	·64 ·63	84
Lieut Whittaker, S Lieut Wiesenbone, J. R. Lieut Elliott, T. W Lieut Pangman, J. Lieut Boswell, St. G. J.	G. 1 . Drigade, G. A	Second		pers of the	
Lieut Sheppard, Hi Duchesnay, E	Late Quebec G. A., Late Beauce F.B	First First Second	*80 *92 *88 *73	.60 .91 .55 .70	
Corporal Taylor, J Corporal Neil, U Corporal Ingalls, A. G Corporal Woolley, A.	Shefford, F. B.,	Second Second Second	.90 .77 .80 .47	*88 *66 *37 *30	*84 *65 *90 *73
Pombardier Erskine, Ja.  Bombardier Seale, G.  Corporal Tilton O.  Bombardier Kirk, M.  Company Compan		Second Second Second	·74 ·67 ·47 ·86	*42 *58 *50 *00	78 75 59 75
Gunner Gardiner, G. Driver Scott, A. Sergeaut Be-chcrvais, J. Sergeaut Carter, A. Sergeant Patterson, W.	13.1	Second Second Second Second	78 *44 *81 *85	*00 *00 *88 *81	65 88 84
Sergeant. Martin. Corporal Noakes SergtMajor. Pendleton. Sergeant Winne	G. T. Brigade,	Second Second Second Second	The new	·75	Non Com
Sergeant. Wilson Sergeant. Riddl e Sergeant Blackhall Corporal Holman	Brigade, V. A.	Second Second Second Second		ruction, th	
Acting Bombardier. Thompson, S Acting Bombardier. Murphy, P Acting Bombardier. Richie, A Gunner		Second Second Second	.73 .40 .80 .37	1:00 :98 :92 :92	*88 *58 *66 *76
Gunner. McDonald, Aj Gunner. Dolan, P. Corporal. Walsh, P. Corporal Dolby, A. J. Corporal Laloux, E.	AND "Patterns And	Second Second Second	*66 *33 *82 *92	92 96 92 51	*80 *88 *63 *89
Acting Eombardier Elvin, R		Second Second Second Second	·78 ·75 ·55 ·81	'31 '56 '39 '30	.58 .86 .58 .65
Gunner         Perry, R           Günner         Baker, J           Gunner         Watson, J		Second Second Second Second	· 74 · 51 · 97 · 70	· 31 · 48 · 77 · 50	·40 ·49 ·87 ·64

The Deputy Adjutant-General, Headquarters, Ottawa.

## SCHOOL OF GUNNERY.

have qualified and received Gunnery Certificates, Long and Short Courses, during and decimal proportion of credit gained.

CITADEL, QUEBEC, 31st December, 1874.

-			colds His to	CITAD	EL, QUE	BEC, 31st December, 1874.
Fortifica- tion and Sieges.	Military Surveying	Tactics.	Strategy.	Military Law.	Average decimal proportion of Credit	Remarks.
Decimal,	Decimal.	Decimal.	Decimal.	Decimal.	gained.	Maria Sand and Section 1
were return	ed Correct		ir instru <i>s</i> ti	.85 .90 on, the {	.78 .68 .83 .91 .80	ShortCourse, BranchSchool, Montreal.
	·60 ·75 ·82	80		76 69	'62 '69 '71 '81 '66 '74	
**********	********				-87 -68 -68 -50 -64	
***********			(849) 4414		.66 .52 .80 .66	
				[	*85 *83 *80 *60 *73 *83	
missioned O credit only o	i each bein	g retained		or their	79 70 50 84 77	ShortCourse, BranchSchool, Mont
**********					· 87 · 65 · 75 · 68 · 79	Reprinted manufactures of the control of the contro
****** *** .	•••••••				72 79 77 55 72 50	
**********					· 58 · 48 · 49 · 87 · 61	

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

(C)

## SYNOPSIS OF OFFICER'S SHORT COURSE, GUNNERY SCHOOL, QUEBEC.

#### PRACTICAL EXERCISES AND DUTIES.

Field Gun drill

Gun practice

Interior Economy

Riding and driving drill

Field Battery movements

Knotting and lashing

Mounted Sword exercise

Making up ammunition

Examination of Ordnance

Stable and Regimental duties

#### Garrison Artillery.

Arm drill Company drill Heavy Gun drill, S. B. do., Rifled

Mortar drill

do., (removal on Trench carts)

Gyn drill

Shifting Ordnance -Sling waggon

Knotting and lashing

Gun practice

Making up ammunition Examination of Ordnance

Attending Courts-martial. Taking angles with Sextant for Range finding Visiting (weekly) Artillery stores and district Interior Economy and Regimental duty

Attending Courts-martial.

Officer's will give their special attention to those subjects which belong to their own branch of Artillery service, but will be expected to have a general idea of the whole.

> T. B. STRANGE, Lieut.-Col., Commandant S. G., & I. of A.

Field Artllery.

Taking angles with Sextant for Range finding

Disabled Field Ordnance, removal of

## SYNOPSIS OF HORT COURSE, GUNNERY SCHOOL, QUEBEC.

#### THEORY.

Gunnery, exclusive of applied Mathematics Knowledge of Artillery Material, such as exists in Citadel, Quebec Laboratory Operations as performed at Quebec Examination and Sighting Ordnance Elementary Fortification Minor tactics of Artillery, in connection with the other arms Range finding, use of Sextant and Prismatic Compass General knowledge of Militia Regulations, Queen's Regulations and Articles of War, as applicable to Militia.

> T. B. STRANGE, Lieut.-Col., Commandant S. G. & I. of A.

## SYLLABUS OF OFFICER'S LONG COURSE, GUNNERY SCHOOL, QUEBEC.

To be able to Instruct in

Gun drills Mortar drill and practice Gyn drill Shifting Ordnance.

To have a Good Knowledge of

Infantry drill Riding drill and Stable duties Field Artillery movements and positions Artillery Material and Stores Examination and Sighting Ordnance Laboratory Operations Construction of Siege batteries, rafts, and bridges

Gunnery and applied Mathematics

Fortifications and Sieges

Military surveying and Reconnaissance

Tactics of all arms, Strategy, and Military History of one Campaign Interior Economy, Regimental duty, and charge of Armament of the fortress.

Queen's and Militia regulations, and Articles of War as applied to Canadian Militia.

> T. B. STRANGE, Lieut.-Col., Commandant S. G., & I. of A.

> > (D.)

### OFFICERS' LONG COURSE.

GUNNERY SCHOOL, QUEBEC April, 1874.

## Gunnery.

1. Define the terms energy of a projectile in foot lbs; energy in foot tons, and give . the formulæ for finding the total amount of work stored up in a projectile, and per inch of circumference?

2. Why have solid shot been abandoned in favour of shell for rifle guns? 3. Find the charge and length of fuse in a 13 inch mortar at 1,800 yards.

4. Supposing a 12 lbs, projectile was substituted for that of 9 lbs, with the M. L. R. field guns, the charge of powder remaining the same, the initial velocity of the 9 Pr. being 1,400 feet, per second, and that of the 12 Pr. 1,300; find the remaining velocity of both projectiles at 2,000 yards; and explain the reason why the shot with the lowest initial velocity has the highest remaining velocity at the range given. What do you suppose was the reason for not adopting the most powerful projectile?

5. Could the charge of powder for the above M. L. R. field gun have been advantage-

ously increased to 2 lbs. for the 12 lbs. shell ?

6. Calculate the striking velocity, at a range of 1,000 yards, of a 9 inch Palliser shell 250 lbs. fired from a Woolwich rifle gun, with the initial velocity of 1,420 feet per second?

7. What thickness of iron armour would the above projectile penetrate at the range stated, not taking wood backing into calculation?

Inspector of Artillery and Comdt. S. G.

#### SHORT COURSE.

GUNNERY SCHOOL, QUEBEC, April, 1874.

#### Field Gunnery.

1. Define the following terms: -Trajectory, line of sight, line of fire, point blank range, deflexion, derivation?

2. What is meant by curved fire?

3. What projectiles and fuses would you use respectively against troops in the open, troops behind a stockade, troops sheltered behind rising ground or in woods; and how would you act against artillery whose limbers and horses were sheltered?

4. Give the rough rule for calculating length of fuse for common and Shrapnel shell, (rifled guns,) take Shrapnel at 1,500 yards as an example?

5. State the rules for calculating deflexion for wind across range, and for one wheel being on higher ground than the other?

6. On first coming into action how would you regulate and correct the fire of your

7. State in detail the positions and duties of the members in action with 9 Pr. M. L. R. field guns, and the duties in case the gun detachments were reduced to five and six men by casualties?

> T. B. STRANGE, Lieut.-Col., Insp. of Artillery and Comdt. S. G.

## SHORT COURSE.

Gunnery School, Quebec, April, 1874.

## Field Artillery.

1. Describe the method of preparing and fixing the different fuzes, time and percussion, for the 9 Pr. M. L. R. gun. What precaution is used when the shells are carried filled in the limbers?

2. Give distances of close interval with six horses,

do do Full do

3. State movements of the different divisions in forming column of divisions in rear of the right from line, (with diagram)?

4. With four guns in action, change front half right on No. 3 for action. Shew the movement by a diagram?

#### Harness.

1. Name the different parts of a set of wheel harness?

2. How do you disengage a fallen shaft horse?

3. What shift would you make if the off shaft was broken and no spare one at hand?

4. What principal points are to be observed in adjusting collar, traces, belly band, breeching and side rein?

> T. B. STRANGE, Lieut.-Col., Insp. of Artillery and Comdt. G. S.

#### SHORT COURSE.

GUNNERY SCHOOL, QUEBEC, April, 1874.

#### Field Artillery Material.

1. Describe the construction system of rifling, sighting, weight calibre, and charge of the 9 Pr. M. L. R. field guns.

2. Describe its case shot, and common Shrapnell shell, their action and the fuzes used

with them.

3. Describe a common friction tube, give its diameter, and that of the vent. What substitute could you make if the supply ran short on service.

4. What are the ingredients of service gun powder, in what proportion are they used,

and what is the specific action of each?

5. Is there any advantage in using gun cotton for the bursting charges of shells? Would you prefer dry gun cotton, or shells filled with water, with a little gun cotton pulp in it? What modification of fuse would be necessary?

6. Name the different parts of the gun carriage and limber, the number and nature of rounds carried in it, together with the stores carried on it in marching order.

T. B. STRANGE, Lieut.-Col., Jommandant S. G. Quebec.

#### FIELD ARTILLERY.

GUNNERY SCHOOL, QUEBEC, April, 1874.

#### Tactics.

As the Commander of a single field battery in action, give your ideas as to the solution of the following questions, and illustrate by diagrams :-

1st. Where to fire?

2nd. When to fire?

3rd. What to fire at ? 4th. What to fire?

5th. How replenish your limbers?

6th. When to move? 7th. How to move?

8th. What orders would you give to the officer in charge of your waggons ?

9th. What advice to the officer in command of your escort?

T. B. STRANGE, LIEUT.-Col., Insp. of Artillery and Comdt. S. G.

## SHORT COURSE.

GUNNERY SCHOOL, QUEBEC.

Gunnery.

1st. Define the following terms :-Trajectory. Line of Fire. Line of sight. Angle of Elevation. Angle of Clearance.

2nd. What is windage? Why is it necessary, and what are its advantages and disadvantages ?

3rd. What sights are used with smooth bore guns? How are the tangent scales

graduated?

4th. What is the rule for elevation of S. B. guns having a point blank range of 400 yards? What is the elevation required for 1000 yards?

5th. Give rough rule for finding length of fuze for S. B. common and Shrapnell

shell. How many tenths of a fuze for a Shrapnell at 1,200 yards?

6th. Give the rule which regulates the charges for cast iron mortars. What is the charge for a 13 in. mortar at 1,100 yards?

7th. What are the different kinds of fire into which gunnery practice is divided? Enumerate the different kinds of horizontal fire?

8th. Where is the greatest strain on the gun, and why?

9th. Why is the strain upon the metal of a rifled gun greater than upon that of a smooth bore.

T. B. STRANGE, Lieut.-Col.,

Comdt. S. G.

#### SHORT COURSE.

GUNNERY SCHOOL, QUEBEC.

## Artillery Material.

1st. Into how many classes are projectiles divided ?

2nd. What are the différent conditions requisite in the construction of S. B. Common and Shrapnell shell?

3rd. Describe by aid of diagram a S. B. Shrapnell shell, its uses and most effective range, and what are its disadvantages as compared with a rifled Shrapnell ?

4th. Enumerate and describe the miscellaneous projectiles and their uses?

5th. In what material are cannon cartridges made up, and why?

6th. Into what classes are fuses for S. B. ordnance divided? Enumerate the different time fuzes for S. B. shells, and at what rate does fuze composition burn?

7th. To what projectiles are wooden bottoms always attached, and why?

8th. What is the composition of gunpowder? The proportions of its ingredients, and what are its advantages over other explosive materials?

> T. B. STRANGE, Lieut.-Col., Comdt. S. G.

#### SHORT COURSE.

GUNNERY SCHOOL, QUEBEC.

## Practical Artillery.

1st. How many orders of the lever are there? Describe them.

2nd. Detail the stores brought up by the different numbers in preparing for action with a 32 Pr. S. B. gun.

3rd. What is the disadvantage of using a gyn in siege operations? How many kinds of triangular gyns are there, and what weight is each adapted to lift?

4th. Detail the general duties at a gyn.

5th. Describe the method of dismounting a gun over the front of a carriage and mounting it by parbucking up the side.

6th. In case of a garrison gun carriage being disabled in action, describe the quickest method of shifting the gun to a spare carriage.

7th. Describe in general terms the method of mounting a 10 inch mortar.

T. B. STRANGE, Lieut.-Col., Comdt. S. G. GUNNERY SCHOOL, QUEBEC, November, 1874.

Gunnery.

1. Define the following terms:

"Axis of piece." " Line of sight," " Line of fire." "Trajectory,"

and shew, with the aid of a diagram, of what forces the latter is the resultant.

2. Define windage. Does it exist in all guns? What are its advantages and disad-

vantages?

3. Explain why an elongated projectile from a rifle gun will penetrate an iron clad better than a spherecial shot fired from a gun of the same calibre, and striking with the same terminal velocity.

4. Give the formula for finding the energy of a shot striking, in terms of its weight

and velocity.

5. The accuracy of sphereical common shell will not be as great (especially at long ranges) as that of shot of similar calibre, fired with the same charge. Will this also be the case with elongated shot and shell fired from rifled guna? Give reasons.

6. Shew how you calculate the charge and length of fuse for mortars? Give charge

and length of fuse for 13" mortar at 1,390 yards as an example.

7. Why does Shrapnell shell require a shorter time fuse than common shell? And give a rough rule to find length of fuse for ordinary S. B. guns.

8. How many tangent scales and sights are there for an ordinary smooth-bore siege

gun? Are the degrees the same length; if not, why?

9. It is sometimes required to render captured guns available. Give a ready rule to find the length of a degree for a tangent scale for any gun,

10. How is the derivation or constant deflection of the projectile from rifled guns

arranged for, and the accidental deflection right and left?

11. Supposing the 7" breech-loading gun gave an error of four feet to the right at a range of 1,500 yards, how would you set your tangent scale as regards deflection I

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

GUNNERY SCHOOL, QUEBEC, November, 1874.

## Artillery Material.

1. What do you mean by the term ammunition?

2. How many kinds of incendiary projectile are there? Describe them and their uses.

2. At what rate does fuze composition burn?

4. Into how many classes may ordnance be divided, and sub-divided? State the uses of each class, and the fuzes they will take.

5. State the most effective ranges for the various projectiles used with the 32 pounder S. B. Guns, and if your supply of case and grape ran short, what makeshift would you use on emergency, at close quarter?

6, Describe Pettman's general service fuze and its action; make a sectional sketch

of it; has it any defect for siege purposes or coast defence ?

7. Describe the segment and Shrapnell shell for rifled guns; give a sectional sketch of each; state the circumstances for which each are most applicable, and the fuzes you would prefer to use with each of them.

6-7

8. Describe the rifle gun mounted in the King's bastion its sights, ammunition. and small stores; its advantages and defects; and the service it is most suited for.

9. In what proportion are the component parts of gunpowder mixed? What are the various kinds and classes of service powder, and with what natures of ordnance are they used?

10. Do you know any curious fact, as regards initial strain and velocity, lately brought to light by the bursting of the inner tube of 35 ton gun at Woolwich with pebble

powder ?

11. What deduction may you draw from the above experiment, as regards the

relative values of steel and wrought iron, in resisting the strain of explosive force?

12. What are the lines of least resistance due to the forms of S. B. cast iron ordnance; what is the cause of these planes of weakness; and has this construction been modified of late?

13. Explain the advantages of the Palliser system for converting guns, over that of

Blakely, and the method adopted by various continental nations.

14. Describe in general terms the American method of casting heavy iron ordnance, and the advantage gained by it over the ordinary system.

> T. B. STRANGE, Lieut.-Col. Commandant Gunnery School, Quebec.

Gunnery School, Quebec, November, 1874.

## Practical Artillery, Cordage, &c.

1. Give an approximate rule for calculating the strength of new rope. As an example, find the breaking strain of a gun sling of six inch rope.

2. Describe how you would sling a budge barrel, or any barrel of gunpowder that

was open for use.

3. Supposing you find a weak or damaged place in a rope, on which you expect a steady strain, how would you temporarily overcome the defect? 4. Leaving friction out of the question, give a rule to find the power of tackles, and

state the powers of the following:

Ordinary gun tackle, Heavy gun tackle. Gyn tackle.

5. Is there any drawback to using a gyn in siege operations? Give reasons for or against its use, and calculate the mechanical power gained in terms of P. W., taking levers as seven feet, and diameter of windlass eight inches.

> T. B. STRANGE, Lieut.-Col., Commandant S. G., Quebec.

> > NOVEMBER, 1874.

## Heavy Gun Exercise and Shifts, &c., S. B. Ordnance.

6. In preparing for action with a smooth bore gun, on garrison carriage, give a detail of the stores brought up by each member, and his duties at the gun.

7. State what stores are not interchangeable for the same natures of the above guns and carriages, and how you know the right ones?

8. A standing carriage, bearing a gun of 56 cwt. or thereabouts, has been disabled while run back; describe the quickest way of shifting the gun to a new carriage, with no material but gun stores, and two short skids a yard long. Could you do it without the short skids? How many men would you want, and how long would it take? Detail the duties and position of members, with the aid of a diagram.

9. What is the readiest way of dismounting a 50 cwt. garrison gun, without any

material but the gun stores? How long would it take with fifteen men?

10. Detail the general duties of the gunners in shifting ordnance.

T. B. STRANGE, Lieut.-Col., Commandant G. S. Quebec.

#### OFFICERS' LONG COURSE.

GUNNERY SCHOOL, QUEBEC, November, 1874. Artillery Material.

1. Classify the armament of the fortress in which you have been serving. State the number of projectiles per gun, for land and sea fronts, and how long do you calculate they would last in case of active operations?

2. What kind of armament would you suppose most likely to meet the requirements of modern war with the least cost? Give reasons for your opinion.

3. Describe the rifle guns mounted in the salients, their sights, fittings, and am mu nition, their advantages and defects.

4. What are the proportions of the component parts of gunpowder, and what are the various kinds and classes of gunpowder in the service?

5. Would the result be different in two gun-cotton mines, one exploded by a slow match, and the other by a detonating tube, and could you explode a wet gun-cotton torpedo? 6. What ammunition should not be placed in a magazine, and why ?

7. Describe the process of examining ordnance as you have seen it done.

8. What number of service rounds may be fired from a cast-iron serviceable gun without examination? Where do fissures in the metal first show themselves, and what do you consider the nature and extent of flaws that would render a gun unsafe?

T. B. STRANGE, Lieut.-Col., Commandant S. G. Quebec.

## GUNNERY SCHOOL, QUEBEC, October, 1874. Fortification and Sieges.

1. Trace briefly the progressive stages of fortification and attack from the early ages to those of Vauban, including the siege of Ath, 1697.

2. What were the principle causes that led to the brief defence of most of the

French fortresses in war of 1870-71?

3. State the leading points of difference in the attack and defense consequent upon the introduction of rifled guns and breech-loading small arms.

4. What do you consider the five most important principles of modern defence of fortresses?

5. How do the above principles apply to the fortress of Quebec and its defence?

6. Make a free-hand rough sketch from memory of the fortress of Quebec.

7. State in general terms the advantages and disadvantages attributed to the Moncrief system compared with the modern structures of granite and iron.

> T. B. STRANGE, Lieut.-Col., Comdt. S. G. Quebec.

## GUNNERY SCHOOL, QUEBEC, November, 1874.

### Field Fortification.

1. State what are the principal objects of field fortification, and describe what are the general means adopted to obtain those objects ?

2. State approximately the thickness of parapet required, in earth-pine logs-or

masonry to resist rifled field artillery?

3. Draw rough profiles to scale (10 feet to an inch), of hedges made defensible on level ground, on ground sloping downwards towards an enemy, as well as on ground sloping upwards towards the defenders, should it be absolutely necessary to hold such a position as the latter?

4. In loopholing walls what is the minimum height they should be towards an

enemy?

5. In tracing a work, what are the principal points to be considered?

6 Draw to scale, 20 feet to an inch, -marking dimensions and lettering so as to describe the technical names of slopes—the profile of a field work on the most favourable slope for the action of field artillery, with a thickness of parapet sufficient to resist that of the enemy, the terreplein for a distance of 20 feet behind the crest must be defiladed from a distant hill, the enemy's fire descending at an inclination of one in six. 'The remblai must be proportioned to the deblai, allowance for the increase in bulk of excavated earth not being taken into the account being utilized for traverses?

7. Describe the preparation of a village as an advanced post for defense-with the aid of a sketch shew your arrangements for defending the house or building you had

selected as the keep or central point-

8. In street fighting it is desirable to get from house to house by demolishing

partition-walls. What would be the best way to utilize lithofracteur?

9. Make a sketch of a double lever bridge of pine spars, to span 40 feet of blown up arch of a masonry bridge; give a rough estimate of materials and tools required, no nails being available?

10. Empty casks are procurable from the Commissariat of every army that carries pork, flour, beer, wine or spirits. Describe in general terms the construction of a caskraft, and calculate the floatation power of a cask-raft of thirty fifty-gallon casks, without

taking weight of superstructure into calculation ?

11. An advance on Montreal is threatened. You are desired to render the railway impassable in a few hours. Describe how you would effectually do the work, so as to get the smallest amount of blame for damage; supposing the rumoured advance turned out to be a canard, or supposing a subsequent retreat of the enemy rendered it advisable to re-open communication quickly?

T. B. STRANGE, Lieut.-Col., Comdt. S. G. Quebec.

GUNNERY SCHOOL, QUEBEC, Nov., 1874.

## Military Law, &c.

1. How many classes of Courts Martial are recognized in the service, and what are they? 2. Detail the form of proceeding of a Court Martial.

3. What remedy has a soldier who thinks himself wronged in any matter affecting his pay or clothing by the officer commanding his troop, battery or regiment?

4. How long can a soldier be kept in confinement before being brought in front of his commanding officer?

5. If a soldier has been confined and is subsequently made to do duty under arms, can he be punished for his offence?

6. What number of days confinement to barracks, and how many hours cells, can a

commanding officer award?

7. Gunner Thomas Aitkens has been absent for 3 days from the 20th inst., and returned at 2 p'm., drunk, having lost his forage cap. Frame the charge that would be submitted to the commanding officer for investigation?

> T. B. STRANGE, Lieut.-Col., Comdt. S. G. Quebec.

## OFFICER'S LONG COURSE,

GUNNERY SCHOOL, QUEBEC, November, 1874

Military Surveying.

1. Plot the following bearings and distances to scale 100 yards to an inch :

From.	To.	Bearing.	Distance in Yards
A	В	260°	190
C	В	350	160
D	C	170°	60
D	E	265°	40
F	E	180°	50
F	G	1900	50
H	G	100°	30
H	I	3400	70

2. State briefly the general principles of making a military sketch, and the prin-

cipal points to be noted in a reconnoissance report?

3 Submit your copy of the sketch made by the officers at Beauport Camp last Summer?

4. Describe Lieut.-Col. Drayson's method of range finding ?

T. B. STRANGE, Lieut.-Col., Comdt. S. G. Quebec.

#### OFFICER'S LONG COURSE.

GUNNERY SCHOOL, QUEBEC, November, 1874.

#### Tactics.

- 1. Define the following terms for Infantry, Cavalry and Artillery formations : A rank, a file, fours, section, sub-division, division of artillery and what relation it bears to the battery, compared with that of the squadron and company to the larger unit of the
- 2. For parade purposes what is the extent of front of a squadron, a battery in line at full intervals, a company of 40 files; what intervals should be left between battalions in line of contiguous columns, squadrons, artillery, and other troops, and how is the dressing of artillery regulated with reference to infantry?
- 3. State the most important points for consideration by a battery Commander in the choice of a position, and the principles which govern the action of divisional, as well as of reserve or corps artillery in masses, on the march and in action, giving instances of the latter from the Franco-Prussian war.

4. Show by a diagram your disposition for an advance of the above corps d'armee in fighting order of march towards the frontier, by two parallel roads, sufficiently close together.

5. Suppose the advanced cavalry feeling the enemy falls gradually back on the advanced guard, which seizing a good position, with open ground in front, holds its own until the main body comes up, and the enemy draws off for the night. Shew with the aid of a sketch your arrangement of the corps d'armee, and the covering pickets, (supports and reserves not thrown out). State the strength of the pickets for a front of 1600 yards for each division : double sentries with an average beat of 50 yards are

6. At daybreak the force must be drawn up for battle, with the aid of a sketch shew the general outline you would adopt, the sort of ground you would prefer. You are facing south perpendicular to your communications, those of the enemy running south-west; in what direction would you expect the real attack; how, when and where would you prepare to use your corps artillery and endeavor to develope a counter attack; with what special object? With a second sketch detail the formation for attack of one of your divisions on a front of 1000 yards, skirmishers, supports, flank, battalion, brigade, and division reserves, according to the plan proposed by Captain Hime. Supposing in this case no strong features of ground break the general idea.

Give your reasons for everything.

T. B. STRANGE, Lieut.-Col., Commandant S. G., Quebec.

## OFFICER'S LONG COURSE.

GUNNERY SCHOOL, QUEBEC, Nov. 1874 Military Law, &c.

1. What is the difference between Martial Law and Military Law? State in general terms the persons subject to the latter.

2. Can Militia men be tried by officers of the regular forces and vice versa, and if so under what circumstances?

3 What punishments can a commanding officer award, and in what case has a soldier the right of demanding a court-martial? 4. What is the limit of fine for drunkenness without court-martial and with court-

martial?

5. Can a soldier be tried by a Regimental or Detachment court-martial for drunk enness not on duty?

6. What are the powers of a Regimental court-martial, of how many officers it is composed, and is there any exception to the usual number?

7. How often may the revision of a court martial be ordered, and is it allowable to take fresh evidence in respect of any charge on which the prisoner then stands arraigned? 8. May "hearsay" be taken in evidence?

9. Should soldiers committing minor offences, such as absence from tattoo, overstaying a pass, be lodged in the guard-room. If returning sober after tattoo, how are they

10. What are the rules relative to placing officers under arrest; can a junior place a senior under arrest, and what is it that prevents an officer leaving his room when ordered

T. B. STRANGE, Lieut. Col., Comdt. S. G. Quebec.

#### NON-COMMISSIONED OFFICER'S AND GUNNER'S SHORT COURSE.

GUNNERY SCHOOL, QUEBEC, November, 1874.

#### Gunnery.

1. What is the meaning of the words :--

(a) Dispart,

Preponderance,

Calibre.

Windage.

Axis of the piece.

Line of Sight.

Line of Fire.

Line of Metal:

Point blank.

2. How many kinds of fire are implied under the head of "horizontal fire," and name them ?

3. What piece of ordnance is specially used to obtain vertical fire, and for what pur-

poses is vertical fire chiefly used ?

4. Give the rough rule to find the elevation required for a given range with S. B. guns.

5. Give a rule to find the service charge of a S. B. cast-iron gun.

6. Give a rule to find the bursting charge of Shrapnel shells for S. B. Garrison guns.

7. Give a rule to find the length of fuze required for a given range for S B. Common and Shrapnel shell.

8. Give a rule to find the charge of mortars for given ranges, and find the charge required to project an 8 inch mortar shell to 1,200 yards.

9. Up to what range can you effectively use Case and Shrapnel shell?

T. B. STRANGE, Lieut.. Col., Commandant G. S., Quebec.

## NON-COMMISSIONED OFFICER'S AND GUNNER'S SHORT COURSE.

GUNNERY SCHOOL, QUEBEC, NOVEMBER 1874.

## Artillery Material.

1. Name the different Projectiles fired from a S. B. Gun.

2. For guns of what calibre is Common Shell made ?

3. What fuzes are used with S. B. ordnance shells, and describe the time fuzes?

4. In what respects does the exterior of the Pettman's Land service fuze differ from the General service?

5. What are the different substances of which service Gunpowder is composed, and in what proportion do they enter into its composition ?

6. Describe the different natures of sabots, or wood bottoms. How, with what Projectiles, and why are they used?

7. Describe a Grummet wad and a Junk wad, and what is the use of each?

8. Can the 68 por. projectiles be used with the 8 inch gun ?

9. What are the different kinds of fuze borers in the service, and with what fuze would you use the brace and bit ?

10. If you had no portfires or tubes, how would you make them ?

11. What precaution do you take in extracting a drill shot jammed in the bore?

T. B. STRANGE, Lieut. Col. Commandant G. S. Quebec.

#### NON-COMMISSIONED OFFICER'S AND GUNNER'S SHORT COURSE.

GUNNERY SCHOOL, QUEBEC, November, 1874.

### Shifting and Working Ordnance.

1. Give general duties of different numbers at 7 inch B. L. R. gun drill.

2. Detail stores brought up at the command "Prepare for action," with S. B. Garri-

3. Give a rule to calculate the power gained by any tackle, and with the rule find the power gained by using a sun tackle.

4. Detail general duties at 10 and 13 inch mortar drill.

5. Detail general duties at shifting ordnance and explain in general terms the mode of shifting, on an emergency, a gun from one garrison carriage to another with such stores as are to be found with the guns in a battery.

6. What operations must be performed in laying a gun?

7. How is a mortar laid when the object is not in sight from a mortar ?

8. Detail general duties of numbers of 16 and 18 feet light gyn drill.

T. B. STRANGE, Lieut.-Col., Commandant G. S., Quebec.

## NON-COMMISSIONED OFFICER'S AND GUNNER'S SHORT COURSE.

GUNNERY SCHOOL, QUEBEC. December, 1874.

Gunnery.

1. Define the following terms :-

Trajectory.
Line of Sight.
Angle of Elevation.
Angle of Clearance.
Point-blank Range.

2. What sights are used with S. B. guns? How are the length of degrees regulated on the various taugent scales?

3. Describe a rough method of testing the correctness of Sights on a S. B. garrison gun.

4. Give a rule to find the bursting charge of Shrapnel shell for S. B. gun.

5. How is the range of mortars increased or diminished? and give rule to find length of fuze.

6. Describe the process of laying them when the object cannot be seen from the mortar platform: the results of an uneven platform, and the means of obviating it.

7. If by raising the rear of a garrison carriage a 24 por gun is fired at a greater angle of depression than 15 degs., what should be the weight of the charge of powder used and why?

8. What is the object of firing hot shot, and what precautions must be taken?

9. Give a rough rule to find the length of fuze for Shrapnel and Common Shells for S. B. guns for a given range.

10. Give the different modes of rendering S. B. ordnance useless, entirely, and temporarily.

T. B. STRANGE, Lieut. Col. Comdt. S. G. Quebec,

## APPENDIX No. 3.

## INSPECTION REPORTS.

ABSTRACT shewing the number of Officers and men who have performed the Annual

Drill prior to 31st December, 1874, for the financial year 1874-75, as shewn by the
Reports received at Head Quarters:—

	Officers.	Non - Comm is sioned Officer and men.
Military District No. 1  No. 2  No. 3  No. 4  No. 5  No. 6  No. 7  No. 8  No. 9  Governor General's Foot Guards.	267 311 199 141 270 108 180 148 212 21	3,284 4,365 2,356 1,684 3,297 1,412 2,493 1,897 2,572 336
	,857	23,669

APPENDIX

No LieutCol. J. B. TA	Corps.   Sand Head Quarters.						rength tat ion.  Company.  Company.	Date and place of muster, and number of days' drill performed.	Whether in camp or otherwise.	Miles. Distance the several Corps	Mode. and mode of transport.	Time required to concentrate the Battalion or Corps.
1st Regt. of Cavalry.  No. 1 Troop  No. 2 do  No. 3 do  No. 4 do	Lieut,-Col. Cole, St. Thomas Capt, Barnes, Saint Thomas , Peters, London. , Stewart, Moore- town , Murray, Kings- ville	15	168		15 1 3 2 3	160	40 40 40 40	September.		16 2 60 100	R.R. Rarched	24 hours.
London Field Battery	LieutCol. Shanly,	5	74	*****	5		74	commencing 7th	**	2		12 hours.
Wellington Field Battery	Capt. Macdonald, Guelph	5	74	*****	5	• • • • • • • • • • • • • • • • • • • •	74	for 12 days,	In Brigade Camp	1		12 hours.
Goderich Garrison Artillery	Capt. Thompson, Goderich	2	42		3		40	near London		1		6 hours.
7th Battalion	Capt O'Brien, London Porte, do Morden, do Birrell, do Dixon, do Meintosh, do Peel, do	23	338	**************************************	25 2 3 2 2 2 2 2 2 2	339	41 42 41 42 42 42 42 42 42	Brigade Cump		2 2 2 2 2 2 7	Marched.	6 hours.

No. 3. performed the Annual Drill for 1874-75.

-		-									
Cost of rations per head, per diem, at encampment.	General conduct of Corps.	If any, and what casualties.	Whether in possession of Band. Number of Musicians and proficiency.	General State of Clothing, Arms and Accontrements.	Nature of Movements at Inspection, and how performed.	Whether the men of the several Corps were bond tide enrolled members thereof, according to the Militia Act.	Whether the percentage of Targestas been per reporting numexercised megiving average merit of each Corps and Co	W Jo . W	Inspect	Date when drill was completed.	Remarks.
173 cents per day.	Very good.	None,	No.		Manceuvred in Brigade with Infantry—Skir- mishing — marched past. Require a good Adjutant for drill.		Target practice at Camp.	5.00 10.00 5.00			
	Very good.	None,	No.		Manceuvred in Brigade with Infantry, marched past, &c., very well.	o contrary.					Had four days ex- tra camp at Port Stanley,
•	Very good,	None,	No.		Manceuvred in Infantry, ma very well.	have no reports to the contrary.					
****	.,				Gun and Company drill,	І ћауе					
IZ cents per day.	Good.	None.	Excellent Band, 27 performers.		Company and Battalion drill with skirmishing. Eath officers and men well drilled.		Targot practice at Camp.	15'00 16'00 14'00 13'00 26'00 12'00 11'00 21'00			

	MILITARY DISTRICT No. 1.—Continued.			Establish  Battal'on or Corps.		Batt	nal St resen ispect tal'on or rps.	ion.	nu	· otherwise.	Distance the several Corps	nad to proceed to muster, and mode of transport.	to concentrate the Jorps.
Battalion or Corps.	Companies.	Commanding Officer and Head Quarters.	Officers,	N. C. O. and Men.	N. C. O. and Men.	Officers	N. C. O. and Men.	N. C. O. and Men.	Date and place of muster, and ber of days' drill performed.	Whether in camp or otherwise.	Miles. Distance	Mode. and mo	Time required to Battalion or Corps
22nd Battalion  No. 1 Company  No. 2 do  No. 3 do  No. 4 do  No. 5 do  No. 6 do  No. 7 do  No. 8 do  24th Battalion  No. 2 Company  No. 3 do  No. 4 do  No. 5 do  No. 6 do  No. 6 do	6	LtCol. Richardson, Woodstock Bt. LtCol. Beard, Woodstock Bt. Major Duncan. Embro Capt. Horner, Prince- ton Capt. Ellis, Ingersoll. Capt. Mullins, Nor- wich Capt. McCleneghan, Strathallan Capt. Chambers, East Oxford Bt. Major Munroe, Lakeside LieutCol. Smith, Chatham Capt. Stevenson, Chatham Capt. Stevenson, Chatham Capt. Rowe, Blenheim , Martin, E. Tilbury , Smith, Chatham , Hølland, Bothwell , Hughes, Dresden	19	***		27 2 2 2 2 2 2 2 3 3 2 3 1 2 3 2 1 2 2 2 2	231	60 37 40 43 42 42 42 48 41 35 34 42 38 41	Brigade Camp near London for 12 days, September 7th.	In Camp.	28 30 38 18 50 30 35 36 	RWHR&WH	24 hours.
25th Battalion  No 1 Company  No. 2 do  No. 3 do  No. 4 do  No, 5 do	5	, Watts, Vienna , Weisbrod, Aylmer , Osborne, Wallace- town	16	210		21 3 3 3 3 3 3	240	67 38 44 44 41	7 Thomas, from 11th to	In Camp.	30 12 22 15	Waggon.,	24 hours.

## performed the Annual Drill for 1874-75. -Continued.

-		_								
Cost of rations per head, per diem, at encampment.	General conduct of Corps.	If any, and what casualties.	Whether in possession of Band. Number of Musicians, and proficiency.	General State of Clothing, Arms and Accoutrements.	Nature of Movements at Inspection, and how perfermed.	Whether the men of the several Corps were bond ide emolled members thereof, according to the Militia Act.	Whether the course of Tary has been per reporting num exercised me giving averag merit of each Corps and C	get practic	Inspection.	Date when drill was completed.  Banawas  Banawas
17½ cents.	Good.	None.	Excellent Band, 20 performers.	Very good.	Skirmishing, Company and Batta- lion Drill, Officers and men well drilled.	trary.	Performed target practice at Camp.	11·0 23·0 23·0 14·0 14·0 17·0 15 0	16th September.	17th September.
17½ cents,	Good.	None.	Good Band, 16 performers.	Good.	Skirmishing, Company and Battalion Drill, some companies very good.	I have no reports to the contrary.	Performed tan	12·0 14·0 25·0 12·0 13·0	16th September.	17th September.
22 cents.	Good.	None.	21 performers.	Fair.	Battalion, Company and skirmishing. Fairly drilled as Companies, Battalion drill inferior though Captains know their drill well.		20 rounds per man fired at target practice under Major Carswell.		19th June.	19th June.

			-		-	-	*****	-	-	CONTRACTOR (NAT	resilitration and	-
	TOURD TOUR	Est	ablist	ment.		prese	rength ent etion.	num		d Corps	muster, port.	te the
MILITARY D No. 1.—Con			tal'n or rps.	Com-	0	tal'n r rps.	Com- pany.	muster, and rformed.	camp or otherwise.	e the several	to proceed to muster, mode of transport.	to concentrate the
Battalion or Corps.	Commanding Officer and Head Quarters.	Officers.	N. C. O. and Men.	N. C. O. and Men.	Officers.	N. C. O. and Men.	N. C. O. and Men.	Date and place of muster of days' drill performed	Whether in camp	Miles. Distance	Mode, and mo	Time required to ec
2001	LieutCol. Atwood, London Capt. Garnet, Delaware , Lindsay, Napier , McMillan, Harrietsville , Brown, Thamesford , McMillan, Lucan , McKellar, Parkhill ,, Irvine, Strathroy		****		26 3 2 3 2 3 2 3 2	289	35 38 39 40 36 34 41	Brigade Camp, London, 12 days, September 7th	In Camp.	12 30 16 18 18 30 20	W. RW W. W. R. R. R.	36 hours,
	LieutCol. W. Smith, Stratford Capt. Lang, Stratford., Dodd, Stratford McKnight, St. Mary's Fennell, Listowell White, Blanshard., Gourlay, Fullerton				19 2 2 2 2 2 2 2	217	38 37 37 33 33 33 34	from 29th June.	In camp.	40 50 52 62 55 55	R R RW RW RW	36 hours.
29th Battalion 5 No. 1 Company No. 2 do No. 3 do No. 5 do	Major Peck, Berlin Capt. Nafe, Breton ,, McMillan, Galt ,, Wilford, Cross Hill ,, Phinn, Hespeler	****			16 2 2 3 2	167	39 41 42 40	dph, for 12 days,	In camp.	15 15 20 30 12	R R W W	24 hours.
30th Rifles 10  No. 1 Company No. 2 do No. 3 do No. 4 do No. 5 do No. 6 do No. 7 do No. 8 do No. 8 do No. 9 do No. 10 do	Lieut - Col. Clarke, Guelph	****			27 3 2 2 1 2 2 1 2 2 1 2 3	392	40 40 40 40 40 36 37 40 34 40	At Brigade Camp, Gue	In camp.	24 16 16 5 48 20 40 34 32	W R W RW RW	48 hours.

performed the Annual Drill for 1874-75 .- Continued

Cost of rations per head, per diem, at encampment.	General conduct of Corps.	If any, and what casualties.	Whether in possession of Band, Number of Musicians and proficiency.	General State of Clothing, Arms and Accourrements.	Nature of Movements at Inspection, and how performed.	Whether the men of the several Corps were bond fide enrolled members thereof, according to the Militia Act.	Whether the course of Tary has been per reporting num exercised me giving average merit of each Corps amd C	prescribed get practic formed, ber of non n, if any, e figure o Battalion, company.	f Inspection.	Date when drill was completed,	Remarks.
17½ cents.	Good.	None.	Good, Band, 18 performers	Good.	Skirmishing, Company and Battalion Drill satisfactory,	I have no reports to the centrary.	Performed target prac- tice at Camp.	16 0 25 0 14 0 19 0 15 0 12 0 14 0	Septe	17th September,	
19 cents.	Very good.	None.	Excellent Band, 22 performers.	Good.	Company Drill, Skir- mishing and Balt, Movements. Very steady corps.	I have no reports to the contrary.	Performed target prac- tice at camp.	11 0 14 3 11 0 16 0 16 0 14 3		10th July.	
19 cents.	Very good.	None.	Good Band, 20 performers.	Good.	Company Drill, Skirmishing and Battalion Drill Very fair.	I have no reports to the contrary.	Performed target practice at camp.	16.0 17.0 17.0 16.0	8th July.	10th July.	No. 1 Co'y., 29th Batt., "Preston," best co'y. at camp for clean arms and accoutre- ments.
. 19 cents.	Very good.	None.	Excellent Band, 22 performers.	Good.	Company drill, skirmishing and Battalion drill. A fine Regiment, Skirmish- ing very good.	I have no reports to the contrary,	Performed target practice at camp.	17.00 19.00 15.00 21.00 17.00 21.00 24.00 20.00 20.00		10th July.	

MILITAR No. 1,—			Bat	ablish tal'n or rps.	Company.	Bat	tal'n	rength t at tion.	muster, and number formed.	or otherwise.	e the several Corps	and mode of transport.	to concentrate the Jorps.
Battalion or Corps.	Companies.	Commanding Officer and Head Quarters.	Officers.	N. C. O. and Men.	N. C. O. and Men.	Officers.	N. C. O. and Men.	N. C. O. and Men.	Date and place of muster, of day's drill performed.	Whether in Camp or otherwise.	Miles. Distance the		Time required to Battalion or Corps
32nd Battalion	permitted to Drill, 9	LtCol. Sproat, Walk- erton Capt. Biggar, South- ampton , Mitchell, Paisley , Hunter, Walkerton , Morton, Arran , Ray, Belmore , Gilles, Teeswater.		252		26 2 3 3 3 3 3 3	251	40 39 39 40 40 40	Brigade Camp, Guelph, 12 days, from 29th June.	In camp.	69 101 90 69 95 80 65	RW R R RW RW	36 hours.
33rd Battalion  No. 2 Company  No. 4 do  No. 5 do  No. 6 do  No. 7 do  No. 8 do  No. 8 do  No. 9 do	permitted to Drill.	Lieut. Col. Ross, God- erich Capt. B. Wilson, Wingham , C. Wilson, Clinton , Lekie, Ainleyville , Howard, Exeter , Rane, Porter's Hill , Shepherd, Gorrie , Mallough, Dun- gannon				27 3 2 3 2 3 1 3	254	40 31 39 32 34 35 38	Batt. Camp, 8 days at Goderich, 10th Sept.	In camp.	22 13 38 20 12 52	W R W W W W	36 hours.
Independent Com- panies.		Capt. Wilkinson, Leamington	2 2	42 42		2 1		42 42			130 120	RW R	

# performed the Annual Drill for 1874-75.—Continued.

Cost of rations per head, per diem, at	General conduct of Corps.	If any, and what casulties.	Whether in possession of band. Number of Musicians, and preficiency.	General state of Clothing, Arms and Accoutrements,	Nature of Movements at Inspection, and how performed.	Whether the men of the several Corps were bond jide enrolled members thereof, according to the Millia Act.	Whether the course of tary has been preporting numerized megiving average merit of each Corps and C	en, if any, e figure of Battalian	Inspection.	Date when drill was completed.
19 cents.	Very good.	None.	Good Band, 18 performers.	Fair. No. 1 Co'y. wants new accou- trements.	Co'y, drill, skirmishing and Batt. drill very satis. factory. Officers well drilled.	I have no reports to the contrary.	Performed target practice at camp.	14:00 23:00 20:00 13:00 13:00 21:00	8th July.	10th July.
174 cents.	Very good.	None.	No Band.	. Good.	Company drill, skir- mishing and Batt, drill very satisfactory.	I have no report to the contrary.	Performed target prac- tice at camp.		19th September.	21st September.
17½ cents.	•••			Good.		**********	******	17 00	16th Sept.	These are two of the best drilled companies in the District.

## Inspection Report of Corps which have

MILITARY	D	ISTRICT	Esta	ablish	ment.	Acti	nal st prese	rength nt ction,	number		1 Corps	port.	the the
Lieut,-Col, W. S.	). 2. DU	RIE, D.A.G.M.	1	tal'n or rps.	Com-	Bat Cor	tery r	Com-	muster, and formed.	r otherwise.	the severa	and mode of transport.	concentral
Battalion or Curps.	Companies,	Commanding Officer and Head Quarters.	Mark.	N. C. O. and- Men.	N.C.O. and Men.	ers.	), O. and	rength nt ction, Company.	and place of days drill per	ther in camp c	s. Distance	e, and m	Time required to concentrate Battalion or Corps.
	Comi		Officers	N. O. M.	N.C.	Office	N. C.	N.C.	Date	Whe	Mile	Mode.	Tim
Cavalry.  Governor General's Body Guard	**-	Capt. Denison, Toronto	2		42	3	••••		5th Oct., 1874, Toronto, 12 days.	Not under canvas.	Nil.		***
2nd Regt, of Cavalry		LicutCol. Button, Oak Ridges											
Troop	1-	Capt. Johnson, St.	2		42	3		37	23rd June, 1874, Niagara, 12 days.		12	Marched,	
	2 3	Capt.McConnell,Oak Ridges, ,, Elliott, Markham	2 2		42 42	24.50	****	36 31	29thSep., 1874, Holland Landing, 12 days.	Under canvas.	17 28	Marched.	24 hours.
	4 5 6 8	Capt. Patterson, Grimsby, Marshall, Burford, Brown, Queens- ton, Buchner, Welland	2		42 42 42 42	3 3 2 3	****	38 39 39 35	23rdJune, 1874,Ni- agara, 12 days.		41 96 7 28	Marched Rail and	
		Staff		1	294	8	5		****			W:	
		2000177777	40		204	27	5	255	****				

performed the	Annual	Drill.	for	1874-7	5.—C	ontinue	7
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Cost of rations per head, per diem, at encampment.	General conduct of Corps.	If any, and what casualties.	Whether in possession of Band, Number of Musicians and proficiency,	General state of Clothing, Arms and Accourrements,	Nature of Movements at Inspection, and how performed,	Whether the men of the several Corps were dond file enrolled members thereof, according to the Militia Act.	Whether the prescribed course of target practice has been performed, reporting number of non-exercised men, if any, giving average figure of merit of each Battalion, Corps and Company.  Remarks.  Remarks.
fagara Camp, 28 cents.	Good.	Two horses injured in camp, reported.	No.	Fair,	Troop and Squadron Drill. Brigade Drill with Infantry.	Reported enrolled.	Tr. Rutledge 16 00 to 0 190 Hap 1
н н		Two ho	18		Troop a		Tr. W. Martindale