

(5th) that in future issues of uniform clothing to the Cavalry, pantaloons, buttoning at the ankle, be substituted in lieu of trousers, (which are better adapted for riding purposes, and can be conveniently worn along with the ordinary long boot used in Canada.)

(6th) that hunting spurs be adopted. A number of Cavalry Snider Carbines are being received from the Imperial Arsenals in England, and the Department will shortly be in a position to re-arm the whole of the Cavalry, with the same carbine used by the Regular Army, which is a far superior weapon to the Spencer Carbine.

During the past summer the Canadian Cavalry Corps made some very creditable marches to and from the District "Camps of Exercise" at the time of Annual Drill; and I would particularly call attention to the long march of the New Brunswick Regiment of Cavalry to and from the Camp at Fredericton, and to the march of a Squadron of Cavalry from Sherbrooke, in the Eastern Townships, to the Camp at La Prairie, proving the efficiency of these Corps; as this arm of the Service fulfills most important purposes by its power of mobility, the desirability of maintaining efficiency in this respect, by practice, is apparent, and I would recommend whenever circumstances admit that as a general rule, cavalry Corps in every district should march to and from the respective Camps of Exercise, at the time of Annual Drill, instead of moving by rail or steamboat on such occasions.

With care and good management, Cavalry are capable of astonishing marches, and not the least extraordinary march of recent occurrence was effected by the Cavalry of the Guard, in England (probably the heaviest Cavalry in the world), who, on the conclusion of the autumn manoeuvres last September, marched back to London in seven and a quarter hours, a distance of thirty-four miles, having previously practised field operations for ten days.

ARTILLERY.

It is with great pleasure I have to state that during the past year, not only has the inspection of the Artillery been better attended to, but means have been adopted by the establishment of "Schools of Gunnery" at Kingston and Quebec, under the command of professional officers of the Royal Artillery, (who are lent by the Imperial to the Dominion Government) to carry out the practical and scientific instruction required, much more thoroughly.

On the departure of the Regular Troops, the Fortifications and armament at Quebec were handed over to the Dominion Government. The new Forts at "Point Levis," opposite Quebec, (which are of a most formidable description) are not yet armed, but the Imperial Government have notified that guns of a powerful description, suited to the requirements of modern warfare, will be mounted on these works.

At Quebec itself, 187 guns are mounted, at Kingston 85, at Toronto 9, and there are guns of position mounted at other places. Although some of these guns are of obsolete pattern, yet many of them are powerful and of considerable calibre, and all would be useful for purposes of war.

The amount of Artillery ammunition at present in store, although adequate for ordinary purposes and sufficient to provide the necessary annual practice allowance for all Artillery Corps for several years, or to meet the probable demand, resulting from possible Fenian invasion, is however, altogether quite insufficient in the event of war.

The organization of the two Schools of Artillery (A and B Batteries), formed at Kingston and Quebec, as authorized in General Orders of 20th October last, has been effected, great eagerness having been displayed by both officers and men of the militia to join them. These Schools not only provide for the scientific and practical instruction in Artillery exercises of such officers and men as are attached to them, but they furnish guards for the forts, magazines, stores and armament at those places.

The School of Gunnery at Kingston, consists of 1 Captain, 3 Lieutenants, 1 Assistant Surgeon, 7 Sergeants, 4 Corporals, 4 Bombardiers, 3 Trumpeters, and 110 Gunners, and is quartered in the "Tete du Pont" Barracks.

The School of Gunnery at Quebec, consists of 1 Captain, 4 Lieutenants, 1 Assistant Surgeon, 7 Sergeants, 6 Corporals, 4 Bombardiers, 3 Trumpeters, 130 Gunners, (among whom there are 89 English-speaking, and 54 French-speaking Canadians) and is quartered in the Citadel.

Both these Batteries are complete in numbers, except as regards skilled Artificers and specially trained Sergeant Instructors, but application has been made to the Imperial Government to obtain the services of the latter, consisting of 1 Master Gunner, 2 Laboratory Foremen, 2 Ordnance Armourers (called in the Regular Army "Armstrong Armourers,") 2 Sergeant Instructors in Garrison Artillery, and 2 Sergeant Instructors in Field Artillery; the latter, in addition to Gunnery, to be able to instruct in Riding, Driving, Field manoeuvres, &c., &c., and as soon as the services of these are obtained both Batteries will be complete.

The Battery at Kingston is under the command of Lieutenant Colonel French, Inspector of Artillery and Warlike Stores. The Battery at Quebec under Lieutenant Colonel T. B. Strange, Inspector of Artillery for the Province of Quebec, and the scientific and practical instruction of officers and men of Artillery militia corps will be carried out by these officers, who both belong to Her Majesty's Regular Army, are carefully trained and skilled Artillerists, well versed in all the duties appertaining to their special arm.

Eight horses have also been authorized for each of these Batteries in order to give instruction in riding and driving drill, and I would beg to recommend that the number of horses be increased from 8 to 16 in each Battery, and thus afford the means of carrying out far more completely Field Artillery Instruction.

The Militia officers attached to these Schools of Gunnery all belong to various Artillery Corps of the Active Militia, and when duly recommended are authorized to join the Schools for the short course of instruction, which lasts three months, receiving during this period pay at the rate of \$1 per diem, with barrack accommodation and the usual ration allowances, fuel, light &c., authorized in the Imperial army, on the termination of which period, should they have shewn any peculiar aptitude for

military science, they may be retained for the "long course" of instruction of nine months, provided they are so desirous, and that there are vacancies for them in the School.

So soon as officers have passed through the probationary three months short course of instruction to the satisfaction of the Commandant of the school, they receive the pay of their rank, in addition to being provided with barrack accommodation, free rations, and the same allowances of fuel, light &c.

On the termination of the long course of instruction, those officers who pass the best examination, and are otherwise most efficient, may be retained from time to time indefinitely, (if approved of at Head Quarters), on the recommendation of the Commandants, according to their merits, desires, and the requirements of the Public Service, such officers being then available to act in their turn as instructors to others, and thus in a few years there will be no inconsiderable number of scientifically trained Canadian Artillery Officers in the Dominion.

The non-commissioned officers and men at the Schools of Gunnery in like manner all belong to various Artillery Corps of the Active Militia, or are enrolled in such previous to admission. Nearly the whole of the number of men at present authorized, will remain at the respective schools for twelve months training and duty, at the termination of which period they may either leave the schools, returning (in a military point of view) to their respective corps; or should they so desire, and it is in the interests of the public service, they may on the recommendations of the Commandants be retained indefinitely from time to time for further duty.

By this system, whilst maintaining the necessary military guard over the forts and magazines at Kingston and Quebec, provision is made for a steady flow of both officers and men through these practical Artillery Schools, which cannot fail in time greatly to increase the efficiency of many Militia Artillery Corps, and to spread very generally throughout the country a knowledge of that especial science.

During the period officers and men are attached to the Gunnery Schools, for duty and instruction they are for purposes of discipline and military duty, under the Queen's Regulations and Articles of War as defined in the Militia Act, the same as if on active service with their respective corps, and are in the event of misconduct, or other causes of an objectionable nature, liable to be summarily dismissed therefrom.

"A" Battery has 37 men, and "B" Battery 30, who formerly served in the Imperial Army, but are now enrolled in the Active Militia of Canada, the uniform worn by officers and men being similar to that of the Royal Artillery, in point of appearance there is little difference; there is every reason to hope also, that in due time there will be no inferiority in point of efficiency.

Of the officers and men now undergoing instruction at the Kingston School of Gunnery, one officer and 63 men belong to the Kingston Field Battery, 19 men to the Toronto Field Battery, 9 men to the Wellington Field Battery, 4 men to the London Field Battery, 1 officer and 2 men to the Ottawa Garrison Artillery, 1 officer and 1 man to the St. Catharines Garrison Battery, 1 man to the Hamilton Field Battery, 4 men to the Toronto Garrison Battery, and 1 officer to the Cobourg Garrison Battery.

The average height of the men at present attending this school is 5 feet 8 $\frac{3}{4}$ inches, their average chest measurement 37 $\frac{1}{2}$ inches. Of those now attached to the Quebec School of Gunnery, 52 belong to the Quebec Garrison Artillery, 23 to the Quebec Field Battery, 38 to the Montreal Garrison Artillery. The average height of the men is 5 feet 8 inches, average chest measurement 37 $\frac{1}{4}$ inches.

The Report of the Dominion Inspector of Artillery, details the course of instruction and duties carried on at the Schools of Gunnery, as well as the object and nature of these institutions, and which, as that officer correctly observes, "marks a new era in the steps taken to train and instruct the Dominion Artillery."

I would again respectfully urge (as recommended in last year's Report,) that, if possible, pay for 32 days drill, instead of 16, be allowed for this special arm; that out of the above period of 32 days, every Battery of Garrison Artillery be brought in succession to some Fort or Battery and drilled in Artillery Exercises for 16 days consecutively, during the summer, the drill for the remaining period of 16 days to be carried out in the winter season, in Drill Sheds at the Head Quarters of Corps, when in addition to gun drill, lectures on Artillery Science may be given; that in the case of Field Batteries, the summer drill of 16 days consecutively, be carried out in some Brigade or Divisional Camp of Exercise, the remaining period, as in the case of Garrison Batteries, during the winter at the Head Quarters of Corps; that as far as possible, the drivers of Field Batteries should be taken from among the agricultural population, possessing horses; that these horses be regularly enrolled in the respective Batteries, their proprietors receiving a retaining fee of \$10 per horse, per annum, on condition of undertaking to provide suitable animals when required, either for annual drill or actual service; that at the time of the annual drill or when called out for duty, the horse allowance be increased from 75 cents to \$1 per horse per diem; and the forage allowance of hay from 14 to 18 lbs.; that the annual Parliamentary vote for improved Artillery be expended in the acquisition of the new M. L. R. 9 pounder field guns (similar to those now being issued to the Horse Artillery in England), these guns, (believed to be the most formidable of the kind yet invented), whilst being lighter than those at present used, have far greater power, accuracy and extent of range.

The proportion of Artillery to Infantry in the Dominion is far too small. I recommend a gradual and steady increase of the Field Artillery, until to every Brigade throughout the Dominion there is attached at least, one Field Battery. At present the proportion of guns to men is little more than one gun to every 1,000 men available, which is quite inadequate, three guns being considered the least, and four a much better proportion for every 1,000 men.

The Report of the Inspector of Artillery, (which will be found attached,) contains many valuable suggestions for increasing the efficiency of this powerful arm, and I concur in the recommendations therein submitted.

ENGINEERS.

At present there are actually only three Companies of Engineers in the Dominion, viz: The Montreal Engineer Company, the St. John (N. B.) Company, and the Grand Trunk Company; the condition of these Companies is stated in the Report of the Inspector of Artillery who is also charged with the instruction, inspection and training of Engineer Corps.

The Engineer force is altogether too small, and up to the present time no proper steps have been taken to teach the officers and men of the existing Companies their special duties; no difficulty, however, need any longer be experienced on this point, for the Artillery officers in command of the Schools of Gunnery at Kingston and Quebec would be able, if assisted by two Sergeant Instructors of Engineers, to impart the necessary instruction to such Engineer officers and men as could attend these schools.

A knowledge of fortification, construction of siege batteries, field works, attack and defence of posts and fortresses is absolutely essential to the Artillery officer, as also a rough practical knowledge of military topography and surveying, construction of military bridges, &c. the above with the addition of Artillery, Mines, and Torpedoes, includes the entire training of the Military Engineer—their education is identical at the Royal Military Academy, Woolwich, and it would be very advantageous to combine the practical training of all Canadian Staff, Engineer, and Artillery Officers at the Gunnery Schools—the subjects of instruction being common to all.

The increase of Engineer Corps generally throughout the Dominion, is recommended until there is at least, one Company of Engineers in each District; also the formation of a Telegraph Company in each Province, provided with Telegraph equipment, and the organization of Pontoon Trains.

On reference to the report of the officer commanding the militia in Military District No. 5, it will be seen that the Montreal Company of Engineers, under command of Capt. Kennedy, rendered good service at the Laprairie Camp last summer, by preparing the rifle ranges, ten in number, and erecting camp huts and other work, thereby saving considerable expense to the public; this company also constructed a two-gun battery (earthwork) for practice.

INFANTRY.

Nearly 30,000 (Officers and men) of the Infantry have performed the Annual Drill during the past summer, the greater portion being present at the various Camps of Exercise.

The suggestions contained in the Annual Report of 1870, for the extension of the period of drill, and the introduction of a general and systematic mode of carrying out "Target Practice" at the time of the Annual Drill having been approved of and authorized, the result has been that as compared with the two former years, a marked improvement has taken place. Indeed no measure could have been better calculated to increase the

efficiency of the Infantry, than the adoption of some system to instruct the whole of the men practically in the use of the rifle, and the granting of numerous prizes for good shooting.

In the course of my Inspections within the last three years, I have seen few of the Infantry Corps who were not, whenever commanded by officers who had learned their drill, after a few days practice fairly acquainted with the few simple Company and Battalion movements necessary in actual warfare; I have seen some Battalions who had the advantage of Drill Sheds at their local head-quarters, very creditably drilled. But when it is remembered that the rifle and the spade are the tools used most in modern warfare, that individual skill in the use of the rifle is more than ever the first consideration in the military training of infantry, and that target practice cannot be carried on in Drill Sheds, the desirability of affording facilities for this, the most necessary kind of training in preference to mere drill shed *drill*, as illustrated at the various Camps last summer, is obvious.

There was a decided improvement, in the condition of the Snider Rifles last year, as compared with the two previous years of 1869 and 1870, the general condition of the uniform clothing, accoutrements and equipments being much the same.

The frequent losses and deficiencies of clothing, equipment &c., which occur in some corps, (the expense of which falls upon the public,) I attribute mainly to the fact, that in all cases the men are not required on the conclusion of the annual drill, when they return their arms and accoutrements into the various armouries, to return at the same time their uniform clothing. With a view therefore, to prevent such loss, I think this should be generally insisted on, the Captains of Companies being responsible for the clothing and equipment, as well as the arms of their men.

TARGET PRACTICE FOR 1871.

During the past season the whole of the Infantry assembled in the various "Camps of Exercise," performed the prescribed course of Target Practice with the Snider Rifle, and Government money prizes with badges were distributed amongst the officers and men, to the successful competitors; to the best shot in each Company \$5, with a badge; to the best shot in each Battalion \$10, with a badge; to the best shot in each District \$15; and to the best shot amongst the non-commissioned officers and men of the Active Militia in the Dominion who performed the prescribed course of target practice, at the time of the Annual Drill the Adjutant General's prize of \$50 with a silver medal was awarded. 584 Government prizes were given, and great interest was taken in the competition.

A return shewing the average shooting figure of merit of every Company, Battalion and Corps exercised, together with the names and scores of the best shots in the same was published in General Orders of 30th November last, (a copy of which will be found in the Appendix,) and although many of the men are as yet very insufficiently skilled in the use of the rifle, the foundation has been laid for a systematic course of practical

instruction and target practice at the time of the annual drill, which cannot fail eventually if persevered in, to increase general efficiency.

On reference to the General Order above alluded to, it will be seen that:

The 27th Battalion, figure of merit 19.92, was the best shooting Battalion. No. 2 Company, (Widder) 27th Battalion, figure of merit 26.57, was the best shooting Company, and Sergeant J. R. Burwell, No. 5 Company, (Iona) 25th Battalion, with a score of 45, was the best shot in Military District No. 1.

The 31st Battalion, figure of merit 17.08, was the best shooting Battalion. No. 6 Company, (Flesherton) 31st Battalion, figure of merit 23.81, was the best shooting Company, and Private John Parks, No. 6 Company, (Flesherton) 31st Battalion, with a score of 51, was the best shot in Military District No. 2.

The 48th Battalion, figure of merit, 14.53, was the best shooting Battalion. No. 1 Company (Tamworth) 48th Battalion, figure of merit 24.05, was the best shooting Company, and Corporal Fredk. Hobbs, No. 1 Company (Bowmanville) 45th Battalion, with a score of 51, was the best shot in Military District No. 3.

The 41st Battalion, figure of merit 15.26, was the best shooting Battalion. No. 4 Company (Merrickville) 41st Battalion, figure of merit 19.24, was the best shooting Company, and Sergeant McIntyre of that Company, with a score of 51, was the best shot in Military District No. 4.

The 60th Battalion, figure of merit 14.13, was the best shooting Battalion. No. 3 Company (Franklin) 51st Battalion, figure of merit 23.06, was the best shooting Company, and Sergeant W. McNaughton, No. 4 Company (Hemmingford) 51st Battalion, with a score of 47, was the best shot in Military District No. 5.

No. 2 Company, Rawdon, figure of merit 12.31, was the best shooting Company and Thos. Copping of same Company, with a score of 47 was the best shot in Military District No. 6.

The 8th Battalion, figure of merit 17.07, was the best shooting Battalion. No. 2 Company, 8th Battalion, figure of merit 21.60, was the best shooting Company, and Sergeant George Baxter, of the same Company, with a score of 47, was the best shot in Military District No. 7.

The 73rd Battalion, figure of merit 17.75, was the best shooting Battalion. No. 4 Company (Black River) 73rd Battalion, figure of merit 20.52, was the best shooting Company, and Sergeant Major Burbridge, No. 7, Battery (Chatham) N. B., Brigade Garrison Artillery, with a score of 50, was the best shot in Military District No. 8.

The Cumberland Provisional Battalion, figure of merit 24.11, was the best shooting Battalion. No. 7 Company (Halifax) 66th Battalion, figure of merit 30.16, was the best shooting Company, and Private W. Colburn, No. 3 Port Philip Company, Cumberland Provisional Battalion, with a score of 49, was in the first return sent to headquarters, reported the best shot in Military District No. 9; but since the publication in General Orders of the names of prize-winners, an amended return has been received from the Acting Deputy Adjutant General, Military District No. 9, intimating that Sergeant

Connors, No. 4 Company, 63rd "Halifax" Battalion of Rifles, stands highest, with a score of 51.

The 1st Battalion Rifles, figure of merit 20.98, was the best shooting Battalion. No. 4 Company (Richmond) 1st Battalion Rifles, figure of merit 27.13, was the best shooting Company, and Private J. Ferguson, with a score of 49 was the best shot in the Grand Trunk Brigade.

The Province of New Brunswick, figure of merit 14.57, was the best shooting Province, Military District No. 8, figure of merit 14.57, the best shooting District. The Cumberland Provisional Battalion, Military District No. 9, figure of merit 24.11, the best shooting Battalion. No. 7 Company, 66th Battalion, in Military District No. 9, figure of merit 30.16, the best shooting Company, and Private John Parks, No. 6 Company, 31st Battalion, in Military District No. 2, who made 51 marks out of a possible figure of 60, scoring at the 600 yards range 18 marks out of a possible figure of 20, at the 400 yards range 18 marks out of a possible figure of 20, and at the 200 yards range 15 marks, the best shot in the Active Militia of the Dominion at the Annual Drill of 1871-2. Private John Parks, 31st Battalion, thus winning in addition to the Company, Battalion, and District prizes, the Adjutant General's prize of a silver medal with \$50.

MILITARY SCHOOLS.

The following Return shows the number of Military School Cadets who have obtained certificates of qualification in 1871, at the various Military Schools which were in operation during the winter months only, in the Provinces of Ontario, Quebec, New Brunswick and Nova Scotia:

INFANTRY SCHOOLS, AND GUNNERY SCHOOLS.

PROVINCES.	INFANTRY.		GUNNERY.	
	First Class Certificates.	Second Class Certificates.	First Class Certificates.	Second Class Certificate.
Ontario.....	7	85	22	14
Quebec.....	30	144	1	8
New Brunswick.....	3	20	} No Schools of Gunnery as yet established for these two Provinces.	
Nova Scotia.....	2	24		
Totals.....	42	273	23	22

From this it will be seen that 360 Certificates have been granted last year, of which 65 were first class, and 295 second class certificates.

Since the first formation of Military Schools in 1864, 6,285 certificates of qualification in drill have been obtained by the large number of Cadets who have passed through these schools.

At present there are eight schools of Military Instruction authorized, six for Infantry drill, and two Schools of Gunnery, the organization of the latter has been detailed in the report on the artillery; there are also two Riding Schools for the instruction of the Cavalry, one at Kingston, the other at Quebec, as branches of the Military Schools at those places.

On the 1st of February, the following number of cadets were attending the Infantry schools, at Toronto, thirty five; at Kingston, twenty six; at Quebec, forty three; at Montreal, twenty six; at Fredericton, forty four; at Halifax, fifteen; being a total of 189. The Gunnery schools as already stated are nearly full there being at present about 280 of all ranks, acquiring a knowledge of Artillery Exercises in A. and B. Batteries. The Infantry Schools are in operation for six months, and the two Cavalry Riding Schools for three during the Winter season, the Artillery Schools for the whole year.

The experience of the past summer has clearly demonstrated the desirability of encouraging all officers and non-commissioned officers to attend the military schools to learn their military duties, and qualify for their respective posts. Unless officers have a knowledge of their duties, it is impossible they can know how to lead or train their men.

There are many excellent officers in the Canadian Militia, indeed I do not believe that the Transport and Commissariat duties required, could have been better performed than they were at the various Camps of Exercise last summer, by officers of the Canadian Militia; the last expedition to Manitoba has given additional proof of their capacity in this respect also, but generally speaking, (as might be expected) *from lack of opportunity to acquire the same*, in a proper knowledge of Regimental Drill, of Camp duties, and Interior Economy, they are very deficient.

If however, Regimental officers and non-commissioned officers would attend the Military Schools in winter, to qualify in *Drill &c.*, they would come to the "Camp of Exercise" in summer, better prepared to train and discipline their men, and thus the Militia of the Dominion would yearly improve, and increase greatly in efficiency.

The system of allowing officers to come up for drill examination (without passing which satisfactorily they cannot receive commissions, or be confirmed in their commands) at the time of the Annual Camps, is very objectionable, such examinations being then from force of circumstances generally of a very superficial character, moreover these examinations at the time of the Annual Drill interfere greatly with the routine of duties; it would be much more satisfactory therefore, if in future all officers should pass such examinations at a Military School where they could be properly instructed and examined, the usual gratuity of \$50 being granted them on obtaining their 2nd class certificates.

ARMS, CLOTHING AND STORES.

The present condition of the Militia Department with regard to arms, clothing and stores, will be seen on reference to the Reports of Lieut.-Colonel W. Powell, Deputy Adjutant General of Militia, and Lieut.-Colonel T. Wily, Director of Stores, &c., both of which will be found in the Appendix.

40,670 Snider Rifles have been issued and are now in possession of the respective corps. There are 6,000 new Snider Rifles in the Reserve Stores, and steps are being taken to procure a supply of the most approved description of Rifles.

A large number of Snider Carbines are being received from the Imperial Arsenals in England for the use of the Cavalry, to replace the present inferior weapon (*viz*: the Spencer Carbine) in possession. There is a sufficient quantity of Snider Ball Ammunition in the various Magazines to meet the ordinary expenditure of the whole of the Active Militia for at least three or four years.

The Department has now obtained a supply of Tents that will suffice for the wants of the Active Militia in this respect at the time of the Annual Camps of Exercise, but the supply of other articles of Camp Equipage, also Blankets, Knapsacks, Haversacks, Accoutrements, &c., &c., is far short of what is required; I therefore recommend that steps be taken to acquire the necessary supply, so that every Military District may in respect of stores and equipment, be complete in itself, and thus the Active Militia in every Province would be enabled whenever required for Actual Service, to turn out at a moments notice properly equipped.

Lieut.-Colonel Wily's Report shews the amount of clothing in store on the 31st December last, and Lieut.-Colonel Powell's Report shews the number of articles purchased this year, all of which will be available as circumstances may require. Owing to the organization of certain corps in the Province of Manitoba, and in view of a similar provision for British Columbia, it will be necessary to increase somewhat the amount of the estimate for clothing for the next financial year, so that the new corps may be clothed, and the necessary reserve formed to replace the annual wear of clothing in possession of existing corps, and in connection with this subject, I have to point out that for "military reasons" it is desirable that the colour and description of the uniform worn by the Militia of Canada, should at all times correspond (according to the respective arms) closely to that used in Her Majesty's Regular Army.

A heavy drain upon the limited stores of the Militia Department has been caused by the two expeditions to Manitoba, and the extension of the Militia system to that Province, this together with the maintenance now of several embodied corps in the Dominion necessarily requires an increased supply of Military Stores.

MEDICAL REGULATIONS.

With the view of establishing uniformity of system in the Medical arrangements at the time of the annual drill last summer, and checking many irregularities on this point

which have occurred in previous years, a number of small portable Medicine Boxes or Field Companions were obtained, sufficient to admit of the issue of one to every Battalion performing annual drill in a Camp of Exercise.

These boxes merely contained such simple and ordinary remedies as might be required for a few days, it being the duty of the Medical officers, immediately on the assembly of each corps, to make a strict examination of the men, sending at once back to their homes any who might be in delicate health, or who might appear likely to become so.

Some complaints having been made as to the deficiency, or inappropriate nature of the medicines supplied, I annex a list of the contents contained in the Field Companions supplied to the Militia Battalions last summer, together with a list shewing the contents of the Field Companions used in the Regular Army.

List of contents of the Medicine Boxes furnished the Canadian Militia in 1871 :

Calomel ; Chloroform ; Diarrhœa mixture ; Ether Sulph ; Fuller's earth ; Morph. Acet ; Pil Cathartic Co. ; Pil Coloc Co. ; Pil Opii—1 gr. ; Pil Opii— $\frac{1}{2}$ gr. ; Plumbi Acet ; Potass Chlor. ; Potass Nit. ; Pulv. Acacia ; Pulv. Cretæ Co. C. Opio ; Pulv. Ipecac Co. ; Pulv. Jalap Co. ; Spts. Ammon. Aromat. ; Tinct. Opii. ; Tinct. Zingib ; Zinci Sulph. ; Calico Bandages ; Flannel Bandages ; Suspensory Bandages ; Linen Sheeting ; Calico ; Lint ; Gutta-Percha tissue ; Oiled Silk ; Cotton Wool ; Adhesive Plaster ; Sponges ; Needles ; Thread ; Tourniquet ; Tape ; Scissors ; Minim Measure ; Scales and Weights ; Spatula ; Enema Syringe ; Surgeon's Tow ; Pins.

Contents of the Medical Field Companion used by the Regular Army :

MEDICINES.—Mixture for Diarrhœa and Cholera, 2 oz. ; Chloroform, 2 oz. ; Tinct. Opii, 2 oz. ; Spirit Ammonia Aromat, 2 oz. PILLS.—(Tins) No. 7. Calomel gr. i. Pulv. Opii gr. i. in each. No. 8. Plumbi Acet. gr. iii. Pulv. Opii gr. i. in each. No. 9. Calomel gr. ii. Pil. Rhei Co. et. Pil. Coloc Co. aa gr. ii. in each. No. 10. Camphor gr. iii. Pulv. Opii gr. ii. et Pulv. Cayenne gr. $\frac{1}{2}$ in each. Four dozen of each kind. POWDERS.—No. 1. Morph. Acet. gr. $\frac{1}{2}$. Plumbi Acet. gr. iv. et Pulv. Acacia gr. ii. in each.—24. No. 2. Antim. Tart. gr. i. Pulv. Acacia gr. iii. in each. No. 3. Calomel gr. iii. Pulv. Jacobi gr. v. et Pulv. Ipecac. Co. gr. xv. in each. 12 of each kind. No. 4. Pulv. Kino Co. i. scruple in each.—24. No. 5. Pulv. Cretæ Co. c. Opio ii. scruples in each.—12. No. 6. Pulv. Jalape Co. ii. scruples in each.—12. APPLIANCES.—Calico rollers—2. Suspensory bandages—2. Clavical bandages—2. Strong calico— $\frac{1}{2}$ yard. Linen sheeting— $\frac{1}{2}$ yard. Lint— $\frac{1}{4}$ lb. Gutta Percha tissue— $\frac{1}{4}$ yard. Cotton wool— $\frac{1}{4}$ lb. Isinglass plaster—1 yard. Adhesive plaster $\frac{1}{2}$ yard. Sponges, surgeons—2. Needles, surgeons—25. Whited brown thread— $\frac{1}{2}$ oz. Razor in case. Shaving soap—1 roll. Screw field tourniquet. Candle and wax matches. Pins— $\frac{1}{2}$ paper. Tape—1 piece. Scissors—1 pair. Minim measure—1. Graduated horn cup—1.

From this it will be seen that the Canadian box is the more complete of the two.

An experienced Medical officer, resident for many years in Canada, and who had served for years in the Imperial Army, was consulted as to the nature of the medicines required, and his selection adopted ; a very limited amount of money was available, and only the most necessary and least expensive medicines could be furnished. Inasmuch,

however, as the climate and nature of the usual complaints differ considerably in the various districts of the Dominion, ague prevailing much more in Western than in Eastern Canada, it would seem advisable to include Quinine in the list of medicines, and steps are being taken to have the Field Companions more suitably and completely supplied for the coming season.

The Medical arrangements last year were carried out Regimentally, and in view of possible accident, all Surgeons and Assistant Surgeons were expected to take with them to the various Camps an ordinary pocket case of instruments.

The position at present of the Medical officers in the Militia is unsatisfactory to these gentlemen, and the organization of so important a branch as the Medical Department of an army is as yet very incomplete.

Medical officers on first appointment to Militia Corps, rank *relatively* with Lieutenants, after five year's service with Captains, Surgeons with Majors, but beyond this no higher relative rank is granted, nor does the present organization extend beyond a mere Regimental system. In order therefore to establish the Medical Department on a proper basis more in harmony with the Military system of the country, and Army Medical necessities, I have to submit that it is desirable on these grounds :

1st. That a Medical Staff Officer of Militia should be nominated, if possible one who has served at least ten years in the Imperial Army.

2nd. That in each Military District the senior Medical officer should be nominated principal Medical officer of the District.

3rd. That each Battalion should have one Surgeon and an Assistant Surgeon, each Squadron of Cavalry one Surgeon or Assistant Surgeon, and each Battery of Artillery one Surgeon or Assistant Surgeon.

4th. In each Military District there should be four Surgeons, and eight Assistant Surgeons on the Staff, who could be called upon in cases of emergency to go on detachment, or take temporary charge as may be directed.

5th. All Surgeons and Assistant Surgeons should, on their first appointment, produce diplomas of legal qualification to practice, and should be licentiates of one of the recognized Colleges or Universities of the Dominion or of Great Britain as recognized by the Medical Board of Great Britain or Canada.

6th. That on appointment an Assistant Surgeon should rank relatively with a Lieutenant, after five (5) years service with a Captain, Surgeons to rank with Majors, and after ten years service to be nominated Surgeon Majors, ranking relatively with Lieutenant Colonels but junior of that rank. Staff Surgeons and Assistant Surgeons to hold the same relative positions as Regimental Medical officers.

7th. The Senior Medical officer of each District to be the District Principal Medical officer, and to rank relatively as Lt.-Colonel, according to date of Commission, but it is distinctly to be understood, that *relative rank* confers no military status or command, it being only established for civil officers attached departmentally to an army, to regulate precedence as to choice of quarters, rates of pay, allowances, &c.

8th. That the rank of Surgeon Major should carry with it \$1 per diem additional

pay to that of Surgeon, whenever Corps are embodied for Annual Drill or Actual Service, and that the Principal Medical Officer of the District should receive \$1 per diem more pay than a Surgeon Major on similar occasions.

9th. That at other times than those of Annual Drill or Actual Service, whenever the services of a District Principal Medical Officer is required for Boards of Examination &c., a fee of \$5 be allowed, but that all returns or reports on Militia service be transmitted by him without extra pay.

10th. That in additions to the Field Companion supplied for every corps, a pair of Hospital Panniers complete with medicines, &c., similar to those supplied to Military District No. 10, be obtained for every District.

The Department not being in a position to supply medicine boxes to several corps attending camps of exercise for annual drill on the day of assembly, medical claims and charges have been forwarded in connection with such camps, many of which are considered excessive.

In selecting ground for the formation of Annual Camps of Exercise, it would be desirable that the District Principal Medical officer should accompany the officer charged with this duty, with a view to securing the best sanitary site, and in the Western Peninsula of the Province of Ontario, care should be taken to encamp on high ground, so as to avoid as far as possible risk of ague in that aguish district.

The adoption of the above recommendations for the Medical branch of the service, would I feel sure result in a much more satisfactory organization.

MILITIA GUNBOATS.

The Report of Mr. G. W. Wyatt, Gunboat Agent (which will be found in the Appendix) details the duties carried out, and services performed during the past year by the two Militia gunboats "The Prince Alfred" and the "Rescue." Three Batteries of Artillery performed their annual drill on board the "Prince Alfred," namely, the St. Catharine's Battery (two officers and forty-eight men), the Collingwood Battery, two officers and twenty-five men, and the Sarnia Battery (three officers and thirty-eight men).

The "Prince Alfred" took part in the operations carried on at Goderich, whilst the "Camp of Exercise" was formed there. This vessel is now armed with two "Armstrong," and four brass "howitzer" guns, and has been much improved by recent alterations. As part of the system of defence from Fenian invasion on the western frontier of Ontario, the "Prince Alfred" would be found very valuable, and she is well adapted for a training ship.

The "Prince Alfred" is too large to admit of her passage through the Welland Canal, and is therefore only available for the defence of the frontier of Lakes Erie and Huron.

The Gunboat "Rescue" is not at present so well suited for the service; but when the alterations proposed by Mr. Wyatt are carried out, this vessel will also form a valuable addition to the defensive resources of the country against Fenian attack.

CONCLUDING REMARKS.

Of the 34,414 men who performed the Annual Drill last year, I personally inspected more than 30,000, travelling on this and other duties during the summer and autumn months upwards of 10,000 miles, visiting also every Brigade Camp (with the exception of one,) and nine out of the eleven Military Districts there are in the Dominion.

Among the various corps assembled at the camps of exercise there were many fine looking men. In some of the rural Battalions whole companies equal in height and physical appearance to the men of the Guards in England. Many farmers possessing ample means are to be found in the ranks serving purely from a patriotic feeling, and no finer physical material for soldiers, can be found in any country, than amongst the backwoodsmen of Canada.

Perhaps the largest men are to be found in the New Brunswick and Nova Scotia Corps, but in the Battalions of Ontario and Quebec there are also very many large men. As an instance of extraordinary height, I may mention that in the Camp at Point Levis, opposite Quebec, I found a man in the ranks of one of the rural Battalions, by name "Richard Mauger" (of French Canadian and Indian blood) nearly 8 feet in height, being also a well proportioned and powerful looking man.

On reference to the Reports of the Officers Commanding Districts, as well as to the tabular Annual Inspection Returns of Corps (all of which will be found in the Appendix), the numerical deficiency which exists in the ranks will be seen. The only Battalion I found actually complete in strength was the 23rd Battalion (a French speaking Canadian Corps) at the Levis Camp. It will be seen also that officers commanding Districts entertain little hope that the full numerical strength of existing corps can be maintained by voluntary enrolment alone.

A very general desire appears to exist on the part of the majority of officers to complete every corps to its full strength, when volunteering is exhausted, by means of the Ballot, as provided for in the Law, and thus not only render the respective corps effective in numbers, but also equalize the pressure of Military service in the different localities, and on the community at large; A feeling appears to prevail in the Force in favour of a Regular instead of a Volunteer Militia. Experience proves that the strongest national Military organization is that one which is founded upon the principle of obligatory service; the people of Canada wisely recognized this fact in the Dominion Militia Act; doubtless the same wisdom and feelings of patriotism with which they were actuated in framing the law will induce them to carry out its provisions, whenever they find that the necessity has arisen. There are upwards of 221,000 men in the 1st Class of the Militia in the four Provinces of Ontario, Quebec, New Brunswick and Nova Scotia alone, young unmarried men between the ages of 18 and 30, the withdrawal of a portion of whom, for a very few days in the year only, from their civil pursuits to train for the defence of the country, would hardly be felt as a tax either by themselves, or the community at large; whilst every encouragement should be continued to maintain corps

of the Active Militia by voluntary enrolment, the numbers required to complete the strength of corps which cannot be maintained at the proper strength by voluntary enrolment, might be taken from this class in the different Regimental Divisions by means of the Ballot. Thus not only would existing corps be kept numerically efficient, but the operation of the ballot in time of peace, confined to the 1st class of Militiamen, who would be trained in rotation to some extent to the use of arms at a time of life when military service entails least sacrifice. Moreover, by carrying out the provisions of the law in this respect when necessary, employers of labour, and others, would probably be deterred from throwing insuperable difficulties in the way of voluntary enrolment, as is often, from selfish motives, the case, and the pressure of military service, which has always fallen and still falls upon the willing few (in many instances upon the heads of families, and upon certain communities only) by being spread more equally over the whole country would as a personal tax be much more lightly felt.

The fact that out of a nominal strength upon paper of 43,000 so large a number as 34,414 men actually mustered and performed the Annual Drill last year, in a time of profound peace with no excitement to stir them, speaks volumes for the military spirit of Canadians generally, and for their determination to train themselves for the defence of the country. Those who know the high price of wages in the Dominion, the great demand for labour of all kinds in a new country, and the sacrifices such men often make in attending to their military duties, can best appreciate their patriotism; but it is too much to expect that such voluntary sacrifices can be long continued, or that the same men will cheerfully agree to leave their shops and fields year after year, for a certain number of days, to drill, whilst their fellow citizens, *who should equally contribute personal service*, remain at home to make money, or reap a harvest.

Although it is found difficult to maintain *existing Corps* of the Active Militia up to their proper strength by voluntary enrolment alone continuously, judging from past experience and present facts, however, there appears no deficiency in the number of men ready to enrol in *newly formed Corps*.

Since the commencement of the present year the following new Corps have offered their services, been accepted, and gazetted, viz :

- 4 Troops of Cavalry ;
- 1 Company of Engineers ;
- 2 Battalions of Infantry ;

and three Independent Companies. Offers to raise Companies or Corps of Active Militia are constantly being received from every district.

There is therefore every probability that the present actual strength of the Active Militia in the Dominion may be maintained by voluntary enrolment, and the District Camps of Exercise as numerously attended at the time of annual drill in the coming season as in the past, *although certain districts and existing corps may from time to time fail to maintain their full quota*.

In creating any system of Military Organization the conditions and necessities of modern warfare should be mainly considered ; in former days when nations went to

war, a certain limited number of trained soldiers (who might be regarded in the light of national champions,) were ranged against each other, (as it were for a great duel,) and the defeat of one side decided the war; the great mass of the people themselves were never engaged in war or withdrawn from civil pursuits. This system, however (with territorial powers at least), seems no longer observed; when fighting has to be done, and a country defended, judging from recent European events, it is evident it must be done by the whole nation, in one great harmoniously organized and disciplined mass, the services of every man and horse, as well as the whole material resources of the country being rendered for the time required, available for military purposes, turned as it were for the moment from the avocations of civil life into those of war, to return again to the pursuits of industry when the safety of the country is secured. Wars, moreover, in these days occur suddenly, it is a word and a blow, concentration is rapidly effected, and the nation that fails to organize and train for defence in time of peace, so as to be ready to take the Field if called on at short notice, lies at the mercy of any strong and unscrupulous neighbour who may be better prepared, and contemplate conquest. Experience has also shewn that nations do not go to war without counting the cost, and that to prevent attack upon any portion of Her Majesty's Dominions nothing has been found so deterrent or efficacious as the power, and the will to resist it; it is an oft-repeated truism, that for a nation to be really free, the strength to maintain such freedom, must exist. Union, organization, drill and discipline create strength.

At a time when Military Organisation forms one of the most important and difficult questions of the day, it is satisfactory to observe that the Militia System of the Dominion is evidently appreciated. Already there are indications that in the reorganization about to take place in the Reserves Forces of the Mother Country, a system in some respects very similar (although details may differ) will be adopted.

It would appear that the task of reorganising the Military Forces of Great Britain, has been confided to a committee of which Major-General Macdougall, formerly Adjutant-General of Militia in the Dominion was chairman—that accomplished officer's ability has therefore been fully acknowledged.

The Division or Brigade Camps of exercise established in the various military districts of Canada last year, which were in operation for sixteen days, provides much more effectually for the training of both officers and men of the Active Militia at the time of Annual Drill than the system previously in vogue; many other advantages result also therefrom. It was demonstrated last summer that the local force in each Military District could be concentrated in a few hours, mostly in tactical Brigades of the three arms of from 2,000 to 5,000 men; everywhere in sufficient strength to crush any such attempts at Fenian invasion as have of late years occurred. The assembly of these Brigades with such ease and rapidity in many instances on the immediate frontier, has not only given confidence to the force itself but to the community at large. The very same arrangements which were adopted to concentrate, supply, and maintain the various Brigades for sixteen days, at the time of Annual Drill would suffice to concentrate them to repel invasion, as rapidly and supply them as well. While it has been shewn conclusive

ly that this can be effected readily in every District, it is not too much to say that during the period of the year, field operations are practicable in Canada, should circumstances require it, by bringing Brigades together, a force of about 30,000 men with 32 Field Guns, could be concentrated almost anywhere on the Southern Frontier of Ontario or Quebec in a very few days, without withdrawing a single man or gun from the Provinces of New Brunswick or Nova Scotia. Among the many other advantages that result from the performance of the Annual Drill in Camps of Exercise, I may mention, (1st) Staff Officers are practised in, and regimental officers obtain some knowledge of the mode of moving troops (so as to ensure rapid concentration), transport, and supply duties, (2nd.) false musters (an evil, judging from History, common to all armies on first formation) can be entirely prevented, no pay being issued except to those officers and men who actually come to camp and are present at the muster parade (the public interests, in this respect, being thus protected), (3rd.) whilst every opportunity is afforded in the morning and forenoon for Regimental Drill, at the afternoon Parades the different Corps may be trained to co-operate in tactical Brigades of the three arms, (4th) a prescribed course of target practice for the Artillery and Infantry can be carried out by corps in rotation under proper supervision, (5th) the officers and men by being brought away from home, and entirely removed from the influences of civil life at the time of Annual Drill, acquire a better knowledge of discipline and a more soldierlike tone, and the various Corps are accustomed to work together under the Commanding Officer of the District, (6th) friendly emulation in Drill, discipline, and appearance, between Corps, is created by their being brought together, (7th) officers, non-commissioned officers and men, being paid according to rank, and rationed as if on active service, all just grounds for complaint on this point are removed, and lastly by making the annual drill for both officers and men of the militia in time of peace, as far as circumstances will admit, a rehearsal of the duties that would devolve upon them in the event of war, it is obvious that the Active Militia thus trained would be better prepared when called on to defend the country.

Whilst very general satisfaction was expressed with regard to the special Camps of Exercise which were in operation for sixteen days, such was not the case with those for only 8 days, the rates of pay and allowances being different, and the time allowed altogether insufficient. Seeing therefore, the advantages, and that much more drill can be carried out and more practice afforded in sixteen days as compared with eight, I beg to recommend that the system of eight day camps be entirely abolished, and that for the performance of the annual drill for 1872-73, the whole of the Cavalry, Infantry and Field Artillery Corps, be assembled in Divisional or Brigade Camps of Exercise for 16 days continuous drill, under the command of the officers appointed to command the Militia, in the respective Military Districts; that the various batteries of Garrison Artillery should perform sixteen days Artillery drill consecutively either at their own local Head Quarters, or at such Forts and Batteries as may be convenient, under the instruction and orders of the Inspectors of Artillery. It is further recommended that the same daily rates of pay, rations and allowances authorized for

actual service be allowed to the officers, non-commissioned officers, and men, of the Active Militia present at "Camps of Exercise" for the performance of the Annual Drill.

The additional expense of the Brigade Camps which were in operation for sixteen days was trifling, when the increased amount of efficiency attainable is considered. In the eight-day camps of last year, the cost to Government for pay, which included subsistence, was \$2 per officer and \$1 per non-commissioned officer and man per day,—the commanding officer making his own local arrangements for rations for his corps; or, taking the average sized battalion, say seven companies, having a strength of fifty-six non-commissioned officers and men per company, as an illustration the total cost for pay and subsistence would be as under for the battalion, viz.:

29 Battalion officers, at \$2 per day for 8 days	\$464 00
392 Non-com. officers and men, at \$1 per day for 8 days	3,156 00
Total	\$3,600 00

Under the system carried out in the sixteen days' Brigade Camp, where the officers, non-commissioned officers, and men received the pay of their respective ranks, as if on actual service, with free rations, issued under government control, the cost of the rations, consisting of 1½ lb. of bread, 1 lb. of meat, 1 lb. of potatoes, ⅓ oz. of coffee, ⅓ oz. of tea, 2 oz. of sugar, ½ oz. of salt, and ⅓ oz. of pepper per officer and man per day, and forage for horses, including hay, oats, and straw, was in—

	Rations for Men.	Forage for Horses.
	cts.	cts.
Military District No. 1, Camp at Goderich.....	20	36
do No. 2, do Niagara.....	17½	38
do No. 3, do Kingston.....	15	32½
do No. 4, do Prescott.....	14½	35
do No. 5 & 6, do Laprairie.....	15½	24
do No. 7, do Levis.....	13	34
do No. 8, do Fredericton.....	17	48
do No. 9, do Aylesford Plains.....	21½	30

Or say an average for all the Districts of 17 cents per officer and man per day, and of 34½ cents per horse per day. The average cost for pay and subsistence of the same sized Battalion, consisting of seven companies of 56 non commissioned officers and men, each may be therefore stated as follows:—

	Per Day.	Total.
1 Lieutenant-Colonel.....	\$4 87	\$4 87
2 Majors.....	3 90	7 80
7 Captains.....	2 82	19 74
7 Lieutenants.....	1 58	11 06
7 Ensigns.....	1 28	8 96
1 Adjutant.....	2 44	2 44
1 Paymaster.....	3 05	3 05
1 Surgeon.....	3 65	3 65
1 Assistant-Surgeon.....	2 43	2 43
1 Quarter-Master.....	1 94	1 94
29 Total for Officers.....		65 94*

REPORT OF LIEUT.-COL. POWELL, DEPUTY-ADJUTANT-GENERAL, ON
HIS SELECTION AND PURCHASE OF EQUIPMENT.

ADJUTANT-GENERAL'S OFFICE,

OTTAWA, November , 1871.

SIR,—

In accordance with your instructions, I proceeded to England, leaving Quebec on the 12th August last, for the purpose of making selection and purchase of articles of equipment for use by the Militia of the Dominion of Canada, as enumerated hereunder, viz. :—

1. Uniform clothing to extent of appropriation available from current year's estimate.
2. 500 circular linen tents.
3. 50 mess marquees.
4. 10,000 havresacks.
5. 1,000 nose bags.
6. 1,000 pairs hunting spurs.
7. 500 sets of saddlery.
8. 500 cavalry swords, with belts and knots.
9. 2,500 carbines.
10. 150,000 rounds of ball, and 75,000 rounds of blank ammunition for same.
11. 1 battery consisting of 4 9-pounder muzzle-loading field guns, with carriages and waggons complete.
12. 10 9-pounder muzzle-loading rifled guns, same as above, but without carriages and waggons.
13. A supply of ammunition for the above.
14. To make enquiry respecting the Martini-Henry breech-loading rifle.

Prior to leaving Canada, I submitted the accompanying memorandum marked A, and was made the bearer of a despatch from His Excellency the Governor General to the Right Honorable the Secretary of State for the Colonies, asking that the facilities required might be extended to me by the Imperial Government, which despatch I presented on arrival in London, made a formal statement of my wants, as shewn in copies marked B and C, and received in reply the letter marked D. With this reply in possession, I proceeded to the War Office, had personal interviews with Sir Henry Storks and General Adye, and obtained consent and their direction for the manufacture and delivery of the guns, saddlery, stores and ammunition required to be supplied by the War Department for shipment to Canada as detailed in my letters B and C.

As the Imperial Government works were for the present busily and fully engaged in providing the new description of guns for equipment of its own army, and as Sir William Armstrong's establishment had been closed for some time, in consequence of a strike amongst his men, I considered it a compliment to receive assurances that the Government would undertake, with the least possible delay, to supply the number of guns required for Canada. As, however, the season was then too far advanced to enable the shipment during the autumn *via* Quebec, and as there might be a difficulty in passing them through the United States, I decided to delay shipment until opening of St. Lawrence navigation in spring, and then, in order to save expense, to have shipment made direct to Quebec.

The Imperial authorities, wishing to take no responsibility regarding the several articles after delivery from their own stores, desired me to name an agent who would receive over the several articles at the Tower or Woolwich, and make necessary contracts for freight. I therefore named Messrs. Montgomerie and Greenhorn, of Gracechurch-street, as agents, to receive these articles from the Imperial Government, and desired them to make the most economical contracts for freight and insurance by sailing ship

29 Officers
5 Staff-Serj
7 Pay-Serj
14 Sergeant
21 Corporal
345 Rank and
421 Rations.

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Ottawa, 15th

from Woolwich to Quebec, about the first of May, 1872, at which time it was hoped the whole would be ready for delivery.

The 500 sets of saddlery are to be complete in all details except sheep skins, not issued to cavalry in Canada, but including carbine buckets suitable for the Snider carbine. The saddles are to be of the new pattern, having iron arches, and seem serviceable and well made.

Regarding the guns, I did not think it necessary to have them packed in cases, as a covering of matting seemed sufficient for all practical purposes, and considerable expense would be saved in the item of packages, I therefore directed that a covering of matting should be used.

There will be 300 rounds of ammunition for each gun, part of the cartridges to be filled, remainder in bulk. There will also be spare wheels and a few extra articles available as patterns or to be used when repairs become necessary.

Regarding the 2,500 cavalry carbines, it was understood before my leaving Canada, that the Imperial Government had adopted carbines of the Martini-Henri pattern for use by the cavalry and artillery, my instructions were therefore to procure 2,500 of that description of arm. On arrival in London, I found that no decision had been arrived at regarding such supply to Imperial troops, and also learned that carbines of the Snider pattern were the only ones issued out for such use. In this view, I did not like to take the responsibility of buying carbines not of Martini-Henri pattern until after communicating with the authorities in Canada. I therefore did not at that time ask the Imperial authorities to supply carbines, but waited until my return to Canada; and then having received orders to substitute Snider carbines for those of the Martini pattern, I made the application from Ottawa, and had 2,500 Snider cavalry carbines added to the list of articles to be supplied by the Imperial Government, 1,000 of which to be shipped as soon as ready, *via* Portland, and the remainder to wait over until spring.

MESS MARQUEES AND TENTS.

As soon as negotiations were initiated with the War Office regarding stores to be supplied by the Imperial Government, I made enquiries respecting manufacture of marquees and tents, and in order to facilitate my operations, had a pattern marquee made in London, similar in size to one imported and used by the officers of the 7th Battalion at the camp at Goderich last year. The size of this marquee, 17 by 35 feet, appeared abundantly large for all practical purposes, and quite as well suited for an officers' mess as the one known in the Imperial service as the hospital marquee, and in size 20 by 40 feet. The marquee thus adopted for use by the militia in Canada having only a space of 17 feet at the ridge, it was considered that two upright poles would be sufficient for the centre support, and thus give more room for moving about than those requiring three centre poles. The price of the pattern marquee with poles, pins, mallets, valise and pin bag complete was £22 12s.; but as it occurred to me that the wood work if purchased in England would form a heavy item in the charges for packing and freight, I arranged to procure the marquees complete without woodwork, but including valises and pin bags, and entered into contract with Messrs. Cary and Prior, of London, to supply 50 completed as above at £18 16s. 6d. each, part of which was to be forwarded direct to Halifax, and the remainder *via* Portland for distribution from Montreal to the several district stores. I also contracted with the same firm for the supply of 500 circular linen tents, same in all respects as those having two feet walls which were imported from England in 1869, with tent and pin bags complete for £3 16s. 3d. each, the woodwork for which can be supplied in Canada for about 98 cents each.

In order to provide a means for the repair of tents which from use at the annual drills may become unserviceable, I contracted with Messrs. Cary and Prior to supply the following material, same in quality as used in the original manufacture of the tents, *viz.* :—

8 pieces	27 inch tent duck,	at 10 $\frac{1}{2}$ d. per yard.
2 do	40 do Hessian for skirting,	at 7 $\frac{1}{2}$ d. per yard.
20 coils	(560 lbs) tent line, 20 yards to the pound,	at 11d. per lb.
5 gross	brown webbing,	at 1s. 2d. per dozen.
18 do	large hooks and eyes,	at 18s. per gross.
10 do	small do do	8s. do
10 do	wood runners or slides	at 4s. do
40 do	do tent buttons	at 2s. do

These articles will form a small reserve which can be drawn from as occasion may require from time to time.

HAVRESACKS AND NOSE BAGS.

I purchased 10,000 havresacks of a superior quality at 1s. 4d. each, and 1,000 nose bags of an improved description, for cavalry and artillery horses, at 2s. 6d. each; the nose-bags are made of good sound material, and have leather straps for the head instead of the webbing heretofore in use. The webbing after being worn a short time becomes like a cord, and does not give satisfaction or reasonable service; by substituting leather straps for the head the cost is slightly increased, but the additional wear they will sustain will more than compensate for this outlay. These nose bags have also ventilators at the bottom, so that the horse may have plenty of air while feeding.

CLOTHING AND GREAT COATS.

On enquiry, I found the market for all articles required in the manufacture of clothing, shewed a considerable increase in prices over those current during last year, some of the causes of which may be described as under:—

1st. The war between France and Prussia, which called such a large force into the field in excess of the usual peace establishment in those countries, and necessitating such an increase in the supply of military outfits, had produced a temporary derangement, in the same manner as was experienced in America, after the close of the late war in the United States, *viz.*, by reducing the reserve supply of raw material required in the production of manufactured articles; but 2nd, I found in addition, other causes exceptional in their nature—for instance, both France and Prussia as well as other European nations, England included, were hurriedly contracting for quantities of cloth to make up reserves of clothing to an extent considerably in excess of usual annual supplies, while the demand for all kinds of manufactured goods in England, as well as on both continents, to supply local trade, had been so stimulated as to increase the price of labour, and add very considerably to the value of raw material; and as regards France, so great was the desire to secure supplies of wool for import into that country before the new war duties were levied, that a considerable proportion of the wool sold in England prior to September was purchased for that market in order to create a reserve and enable manufactures there to compete with other countries in the supply of such articles as are required for local trade. I, therefore, found it impossible to contract for articles of clothing for Canada on the basis of last year's prices; but under all the adverse circumstances, I was of opinion that the arrangements made were quite as favorable as could be expected. For great coats I was obliged to pay 1s., for tunics, 9d., and for trowsers 6d., in addition to last year's prices, while the quality of the material and making up was agreed to be fully equal to last year's supplies. This will raise the cost of each suit of infantry clothing, including tunic, trowsers, and forage cap, to \$7.91, each rifle suit to \$8.09, and each artillery suit to \$8.21; but I hope the crop of wool for the coming year will so far meet the requirements of trade as to cause the supply to be in excess of the demand, in which case the price of all articles will be reduced to or below last year's quotations. The question of labor, however, is a difficult one to solve, and the feeling prevails to a large

extent, that a permanent increase to the current rates hitherto existing will require to be paid to those who are engaged in manufacturing establishments, or in producing articles necessary for the purposes of trade.

The contract for clothing to be supplied this year provides for the manufacture of—

- 13,000 tunics,
- 10,500 trousers,
- 7,000 forage caps,
- 7,500 great coats,

the whole of which are to be completed for immediate shipment.

In order to save additional risk, the shipments are to be made from week to week, insured, but the whole will be received during the winter, and be available for issue as required next spring. About one-third in value of all the clothing contracted for has already been received, and is now in store at Ottawa.

The sealed patterns for all clothing, except as regards tunics for cavalry, remain same as last year. In respect of the cavalry, the pattern as worn by the 6th Dragoon Guards (Carabineers) has been adopted in place of that heretofore worn in imitation of the 13th Hussars; the difference consists in abandoning the yellow braiding up the front and back of the tunics, and in placing pocket slashes on the skirt at the back. The new pattern tunic looks well, and while the great objection in keeping the yellow cord on the old tunics clean will be done away with in the new, the cost of the extra braiding, which amounted to about 6s. 6d. on each tunic, will be saved, and the value of the new pattern cavalry tunic will thus be reduced to the same as paid for tunics for artillery. The same economical reasons which present themselves as regards clothing for the men, will, without doubt, commend them to the officers, as, in their cases, the expensive gold lace at the back and front of the tunic will not now be required, the cost of an outfit will be very much diminished; meantime, as in many instances the officers of existing troops have incurred a considerable outlay for uniforms of the hussar pattern, a choice might be allowed at the next periodical issue to their troops as to which pattern should be so issued, but on the distinct understanding that thereafter all troops would be brought under one head as regards uniform of the new pattern.

If the practice of drilling the militia in camp during the month of June in each year is continued, the issue of clothing to replace that which has been in use for the regulated period should be made early enough in the spring to enable the same to be properly fitted to the men, and taken into camp, of the year in which the new issues are required to be made. In order to do this economically and well, the various supplies should be procured a sufficient time in advance of actual requirements for issue, so that no disappointment may be felt by corps entitled to new clothing, and undue haste in completion and delivery of the articles be prevented.

In the ordinary course of trade time must be given to manufacture the several articles from raw material after contract for equipment is made; it follows, therefore, that if orders are given out in England in autumn for annual supplies, the several articles cannot reach Canada earlier than winter—a season during which the highest rates of ocean freights prevail, and a period of the year when the only available ships *via* Port land are under one control. In this view, it would appear desirable to enter into contract for current annual supplies which may require to be purchased in England, as early in each year as the passing of the Estimates will admit, so as to enable the Department to avail itself of the best season for buying, of summer rates for freight, and a competition amongst shippers, *via* the St. Lawrence, for the most economical and safe mode of conveying the supplies to their several destinations.

As a matter of fact, if this course were pursued, the Government would lose the value of the interest for, say four months, on payments in advance of possible actual requirements for issue, but this would be counterbalanced by saving in cost of purchases insurance and transport, to say nothing of the very great advantage which would result from having a reserve store available, from which supplies could be drawn at any moment after the opening of spring.

TARGETS.

Although I had no orders to purchase targets, I thought it right, and in the way of my duty, to make inquiry regarding the manufacture and costs of targets in England, so that the information might be available for next year's purchases. It now appears that the best hematite iron regulation targets, weight 5 cwt., and size 6 feet by 2 feet (each slab), every target warranted, and made by experts in that branch, can be purchased at £3 each, including wrought iron staves, fastenings and painting, and, I believe, free transport to port of shipment would also be conceded; and if purchases were made in the summer, so that outward freight to Canada could be secured by sailing ship, the cost of such freight would be at the minimum.

For targets duly advertised for and made in Canada last year, the Department paid about \$25.50 each, and for those tendered for by a Montreal firm, but made in England, and supplied this year, \$22.50, delivered in Montreal. I therefore estimate as follows for cost at which the Department can import targets made by experienced workmen in that branch from best iron, as stated, viz., £3, say equal to \$14.62½ each, freight at 20s. per ton, and allowing 4 pieces to the ton 5s, or \$1.22 each, insurance and other charges 56½ cents, Customs' duty at 15 per cent \$2.19, or in all \$18.60 for each target delivered in Montreal. It thus appears that if the 250 targets which will be required for next year's issue, are imported direct by the Department, a saving of \$3.90 each, or a total of \$975, besides Customs' duties, on the lot would be effected over the lowest tender we have been able to get in Canada from an importer, and \$6.90 each less than the lowest tender from a Canadian manufacturer, for English iron and Canadian workmanship.

All articles procured from contractors in England are to be paid for only after arrival and inspection in Canada, and it affords me pleasure to remark that owing to the promptness with which all payments had been made for supplies procured for the Government of Canada in England, and the general knowledge as regards the country which prevails, that no further reference beyond my written instructions were required to secure me quotations of prices from the best commercial houses, and in placing Canada on the basis of a first-class buyer in the market.

MARTINI-HENRY RIFLES.

In accordance with the desire of the Minister of Militia and Defence, I made enquiry respecting the new Martini-Henry breech-loading rifle, which it was said had been decided on for use by the regular army, and found that a number of these rifles had been manufactured by hand, and issued out to corps for trial—this trial had been made, and resulted in suggestions for improvement in both rifle and the shape of ammunition. These suggestions having been adopted by the authorities at the War Office, a sealed pattern of the new arm was shewn to me by General Abye, Director of Artillery and Stores, and I thereupon made requisition, asking that two of the rifles be issued to me for shipment to Canada. My requisition having been approved, General Abye informed me that so soon as the necessary machinery was perfected for the manufacture of the Martini-Henry rifle, two stand complete, with 300 rounds of ammunition for each, would be issued out from store, and handed over for shipment as requested—say, probably, about the 1st January, 1872.

The pattern rifle which was shewn to me appeared well made in every respect, but a doubt existed as to the description of bayonet which would finally be adopted. I, however, append for your information particulars of the Martini-Henry rifle, sword-bayonet, and Boxer-Henry ammunition, which were shewn to me, and the same as compared with the long Snider rifle now in use by the militia in Canada.

	Martini-Henry Rifle, Sword-Bayonet, and Ammunition.	Snider Rifle, long, Pattern 1853, Bayonet and Ammunition.
Rifle*		
Length	without bayonet..... 4 feet 1 inch. with bayonet fixed..... 5 feet 8 inches. of barrel..... 2 feet 9 ²² / ₁₀₀ inches.	4 feet 7 inches. 6 feet 0 ¹ / ₂ inch. 3 feet 3 inches.
Calibre	0.451 inch.	0.577 inch.
Rifling	grooves..... 7 twist, one turn in..... 22 inches.	3 78 inches.
Weight	without bayonet..... 8 lbs. 12 oz. with bayonet..... 10 lbs. 4 oz.	9 lbs 0 ⁸ / ₁₀₀ oz. 9 lbs. 14 ¹ / ₂ oz.
Sighted to.....	1,400 yards.	950 yards.
Cost.....	Not more than that of Snider when made in large num- bers.	£2 10s. 10d.
Bayonet.		
Length.....	2 feet 1 ¹ / ₂ inch.	1 foot 8 ⁸ / ₁₀₀ inches.
Weight, without scabbard.....	1 lb. 8 oz.	13 ³ / ₄ ozs.
Cost, with scabbard.....	14s. 6d.	3s. 11 ¹ / ₂ d.
Ammunition.—The cartridge for the Martini-Henry is bottle-shaped, metal foil, and central fire.		
Charge of powder.....	85 grains.	2 ¹ / ₂ drams or 68 to 72 grains.
Weight of		
bullet.....	480 "	480 "
one cartridge.....	765 "	718 "
a packet of 10 cartridges.....	1 lb. 2 oz.	1 lb. 0 ¹ / ₂ oz.
Length of cartridge.....	3'1 inch.	2'435 inches.

* The particulars given relate to the "long butt" rifles; the "short butts" are 1 inch shorter in the butt, and about 2 oz. lighter.

The breech-action of the Martini-Henry rifle is not unlike the Peabody, of which the Government of Canada has a small supply in store. This action is based on the block system. The block closing the breech is hinged at the rear, and descending in front by means of the trigger-guard action, to admit the insertion of the cartridge. The breech-block has the lock action and striker contained within it, and the hammer such as is used in the snider is dispensed with. The depression of the lever by the hand lowers the breech block, ejects the cartridge case, and compresses the main spring ready for firing. A new cartridge can then be put in, the lever brought up to its place, which raises the breech-block, and it only remains to pull the trigger to complete the fire.

The motions are exceedingly simple, and I observed that when the rifle was loaded, but immediate fire not intended, the discharge could be prevented by pushing back a small bolt at the side, which prevents the release of the mainspring or movement of the trigger.

You will see by the above description that although the bullet for the Martini-Henry rifle is of the same weight as that used for the Snider, it is less in diameter and considerably longer than the latter, and that if this rifle be adopted, the objectionable feature of having arms in possession of the militia requiring different descriptions of ammunition would exist. It was not known how soon Martini-Henry rifles would be furnished to the Imperial troops, but there seemed no reason to doubt that with present, or even considerable increased facilities, it would not be possible for the War Office authorities to produce a sufficient number of these arms to complete the equipment of the regular army, and provide a reserve for sale to Canada, at any time within the limits of the time over which the Parliamentary estimates of this or the next financial year would extend. It, therefore, seems evident that if the Government of the Dominion desire to procure immediately a reserve of such arms, it will be necessary to do so through the ordinary channels of trade, and in this event if rifles were procured in England, the Imperial authorities kindly proffered the services of experts for any test or inspection that might be required on the part of Canada.

I raised the question as to whether, in the event of Canada requiring the manufacture of Martini-Henry rifles for use by Dominion troops, any payment or royalty to inventors beyond such a bulk sum as the Imperial Government may have decided to pay for those manufactured for equipment of its own army, would be required,—and was told that it was thought not, but that a satisfactory answer could only be received after making direct application on that point to the Secretary of State for the Colonies. In this view it occurred to me that such communication, if thought necessary, should be made by the Dominion Government at such time as might suit its convenience hereafter. I have, therefore, no definite information to convey on this point.

As regards the particular objects of my mission, it has been my special desire to secure the best and most serviceable articles for use by the militia, to give the several corps all the advantages of having the latest improvement in pattern, and at the same time to obtain for the Dominion the most favorable quotations of prices, and terms of payment. In all of which, I hope to have merited your approval.

Having reference to my movements generally, I have to acquaint you that I went to Aldershot in September, and saw the troops then engaged in the autumnal manoeuvres, together with all the necessary equipment for the supply of food, shelter, and transport for that army in the field. And after I had taken all the necessary preliminary steps to procure information, and secure the manufacture and submission of patterns connected with the particular object of my mission, I availed myself of the kind permission conveyed by you to visit Paris and take a survey of some of the results of the late war. This, of course, was not in any way connected with my mission to England, and the expense of that trip does not form any part of the sum to be repaid me by Government; but I took advantage of my presence in Paris to visit several of the manufactories engaged in supplying equipment for the French Government, and thus was enabled to add to the fund of information so necessary to the satisfactory discharge of the several duties required of me by the Government of Canada.

My personal and travelling expenses to be repaid by the Government on account of my mission to England, amount to the sum of \$300, in addition to \$160 paid the Allan line for ocean passages out and home, or in all \$460.

I have the honor to be, sir,

Your most obedient servant.

W. POWELL, Lieut.-Colonel,

Deputy Adjutant General of Militia.

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

[A]

ADJUTANT GENERAL'S OFFICE,

OTTAWA, August 9th, 1871.

MEMORANDUM.

With reference to the direction of the Hon. the Minister of Militia for the undersigned to proceed to England to purchase uniform clothing, accoutrements, saddlery, field guns, carbines, ammunition, &c., it would afford very great advantages in carrying out instructions, if His Excellency the Governor General would kindly send a communication to the Secretary of State for the Colonies, asking that he, the undersigned, might be afforded facilities, patterns and information from the War Office and manufacturing establishments of the Imperial Government, relating to the several supplies required by the Dominion Government; and, if possible, for the Imperial Government to supply on payment such field guns, carbines, saddlery, &c., as the undersigned is authorized to purchase; that the Secretary of State for War may be informed that money has been provided by a vote of the Parliament of Canada for payment of the value of the same;

and that the undersigned may have the services of an expert placed at his disposal for the inspection of such guns and stores as he may be required to procure under contract, should it not be possible for the Imperial Government to supply from its own store any of the articles proposed to be purchased, the value of such services being made good by the Dominion Government.

Respectfully submitted.

W. POWELL, Lieut.-Colonel,
Deputy Adjutant General of Militia.

The Honorable the Minister of
Militia and Defence, &c., &c.,
Ottawa.

[B]

GROSVENOR HOTEL, VICTORIA STATION,
LONDON, S.W.,
August 30th 1871.

MEMORANDUM.

Having reference to the accompanying despatch from His Excellency the Governor General of Canada, the undersigned, acting under instructions from the Government of the Dominion of Canada, has the honor to request that the Right Honorable the Secretary of State for War may be so good as to permit the sale from existing stores of the saddlery, field guns, and ammunition, enumerated in the margin, for immediate shipment to Canada.

1.—500 sets of saddlery,
universal pattern.

2.—1 battery consisting of
4 9-pounder muzzle-loading
rifled guns, with carriages
and waggons complete.

3.—10 9-pounder muzzle-
loading rifled guns, same as
above, but without car-
riages and waggons.

4.—A supply of ammu-
nition for the above guns.

Payment will be made by the Government of Canada from
moneys voted in the estimates for service of the current year.

W. POWELL, Lieut.-Col.
Deputy Adjutant General of Militia, Canada.

The Right Honorable
The Secretary of State for the Colonies,
Downing Street.

[C]

GROSVENOR HOTEL, VICTORIA STATION,
LONDON, S.W.
August 30th, 1871.

MEMORANDUM.

Having reference to the accompanying despatch from His Excellency the Governor General of Canada, the undersigned has the honor to request that he may be supplied with two Martini-Henry breech-loading rifles, with bayonets and scabbards complete, similar to those adopted for issue to the Imperial troops, and that he may be placed in communication with the superintendent of the Royal Arms Factory at Enfield, or wherever the factory may be, with a view to receiving information relating to the manufacture and value of these arms.

W. POWELL, Lieut.-Colonel,
Deputy Adjutant General of Militia, Canada.

The Right Honorable
The Secretary of State for the Colonies,
Downing Street.

[D]

DOWNING STREET,
31st August, 1871.

SIR,—I am directed by the Earl of Kimberley to acknowledge the receipt of your two letters of the 30th instant, respecting your mission to this country for the purpose of purchasing military stores required by the Government of Canada, His Lordship has communicated copies of your letters to the War Office, with a request that Mr. Secretary Cardwell will, if he is able to do so, afford you facilities in furtherance of the object of your mission.

I am, sir,
Your obedient servant,
ROBERT G. W. HERBERT,

[E]

OTTAWA, CANADA, November, 1871.

SIR,—I have the honor to acquaint you that, in accordance with the terms of your letter under date of 31st August, the authorities of the War Office have expressed their willingness to supply the carbines, saddlery, field guns, two Martini-Henry rifles and ammunition for same required by me for shipment to Canada; and I have now to request that you will kindly convey my thanks for the readiness evinced by the authorities to meet my wishes in regard to these stores, and for the good feeling manifested towards me in the negotiation as agent of the Government of Canada.

To Sir Henry Storks, General Adye, and Capt. Gordon, C.B., in whose departments the negotiations belonged, I am specially indebted for information conveyed, and for prompt attention to my several wants in the premises.

I have the honor to be, sir,
Your most obedient servant,
W. POWELL, Lieut.-Colonel,
Deputy Adjutant General of Militia, Canada.

ROBERT G. W. HERBERT, Esq.,
Colonial Office, Downing Street,
London.

MILITARY DISTRICT No. 10.

WINNIPEG, December 25th, 1871.

SIR,—I have the honor to report to you that, in accordance with your instructions furnished to me in October last, when detached on special service to this Province, I have among the other duties detailed, been engaged in forwarding the organization of the Active Militia of the District, constituted as Military District No. 10.

The force as at present authorized by *Gazette* consists as follows:—

Two troops of Cavalry.
One Half Battery of Field Artillery.
Nine Companies of Infantry.

Of these the Cavalry corps are not as yet organized; they will, however, probably succeed in their organization as Mounted Rifles, in accordance with your permission, and by an arrangement with the respective commanding officers.

The Half Battery of Artillery, the armament of which consists of two bronze mountain howitzers, is organized, and will prove a useful and efficient corps.

Of the nine companies of Infantry, four are fully organized, and about to commence

their preliminary drills. The organization of the remaining five companies is progressing. The men are at present ununiformed, but the clothing has just arrived, and will be at once distributed to the organized corps, and to the others when complete.

In addition to the force above enumerated, I have received your permission to organize two Mounted Rifle Corps; this duty will engage my active attention.

The population from which the force has to be drawn, exclusive of Indians and scattered settlers may be estimated at ten thousand (10,000).

The settled country is well situated, geographically, in a strategical point of view, for the formation of companies.

From the parallel of forty-nine, (the boundary line of the U.S.), the chief settlements extend due north, along the Red River for about ninety miles; this line of settlement is crossed by another running nearly east and west, from Point de Chêne on the River Seine to the eastward, to Prairie Portage to the westward, on the Assiniboine River; both these rivers converge at Winnipeg (Fort Garry) falling into the Red River. The settled country thus forms a cross, of which Fort Garry may be considered the centre, sixty miles north of the boundary line at Pembina, with Point de Chêne, and Prairie Portage distance thirty and seventy miles, respectively, to the east and west. The force best adapted to the physical geography of the country, and to the habits of the population, is that of Mounted Rifles.

At an early date I shall have the honor of submitting to you, in detail, for your consideration, suggestions concerning the equipment and clothing of a force of this nature, which, in addition to its great economy, compared with cavalry as ordinarily constituted, possesses advantages of mobility over infantry, which is of the highest importance in so large a territory as this, which is at the present so sparsely populated.

I would respectfully request that, at as early a date as possible, a thoroughly competent non-commissioned officer should be attached to this District, as Artillery Instructor and caretaker of munitions.

The severity of the climate at this period of the year has, of course, precluded all Rifle practice; I have, however, ordered "preliminary drill" to be carried on at the company headquarters, as a part of the annual course.

In some of the companies, there are officers competent to instruct; to others I will, as occasion requires, furnish drill instructors from the embodied militia at this station.

The military spirit which appears to actuate all classes of the population is excellent, and the physique is not easily surpassed.

My ordinary returns obviate the necessity of reporting on the Provisional Battalion of Rifles here on special service.

I have the honour to be, Sir,

Your obedient servant,

W. OSBORNE SMITH,

Lieut.-Col., D. A. G. Militia,

Commanding Dominion Troops in Manitoba.

The Adjutant General of Militia, &c., &c., &c.,

REPORT OF MAJOR IRVINE.

FORT GARRY, 23rd October, 1871.

SIR,—I have the honor to report that for some time back there have been rumors of Fenians collecting on the Frontier, in the neighborhood of Pembina—which rumors, on reliable information obtained by the Lieutenant Governor, proved to be true. His Honor the Lieutenant Governor issued a Proclamation on the 3rd inst., calling on all loyal subjects to enrol.

At the request of the Lieutenant Governor, I called out the Winnipeg Volunteer Company (Captain Kennedy's) and quartered them in the Fort, and notified the remainder of the Volunteer Active Militia in the Province to hold themselves in readiness for active service.

As I understood the Fenians contemplated a raid on Fort Garry, I took every precaution by throwing up earthworks, increasing sentries, &c. On the 4th inst. I called out the remainder of the Active Militia, and ordered them to report at Fort Garry. The officials and employes of the Honorable H. B. Company at Fort Garry, enrolled themselves under the command of Donald A. Smith, Esq., and the citizens of the town of Winnipeg also enrolled themselves one company about 100 strong, under Capt. Stewart Mulvey, late of the 1st or Ontario Rifles, composed almost entirely of discharged men from the Ontario and Quebec Battalions, and a Home Guard under Captain the Honorable Thomas Howard, composed of the merchants and citizens of Winnipeg. Capt. Howard, however, resigned the command in favor of Capt. Bain. These companies, with the Mapleton Volunteer Company (Capt. Piton's), were inspected by the Lieutenant Governor at 4:30 p.m. on the 4th, in front of the Fort. Companies were being formed, and rolls sent in (copies of which I have forwarded) from all parts of the Province.

On the 6th inst., about 11:30 a.m., the Lieutenant Governor sent for me and informed me that the Fort at Pembina had been taken, and that the Fenians were some twelve or fifteen miles within the Province, and wished me at once to despatch a force to meet them. I immediately sent orders to Capt. Mulvey to parade his company at Fort Garry for active service. In less than an hour, Capt. Mulvey reported himself with seventy-one men. These men were served out with rifles and eighty rounds of ammunition per man. As we had no military great coats in store, I had blue capots from the H. B. stores issued to them.

The Honorable H. B. Company's Corps enrolled under the Lieutenant Governor's Proclamation, and the remainder of the companies of the Active Militia I formed into a Provisional Battalion, and left them to garrison Fort Garry, under the command of Capt. Allan McDonald. A company was enrolled, under the Proclamation, by Capt. Bedson, at the Stone Fort. This company was served out with rifles, and remained to garrison that Fort.

I left Fort Garry at 4:30 p.m. on the 6th, with the two service companies. The Winnipeg Volunteer Company (Capt. Kennedy's) with a 7-pounder mountain gun, and Capt. Stewart Mulvey's Company, enrolled under the Lieutenant Governor's Proclamation, (marching-out state annexed). I took with me ten days' provisions, and all necessary camp equipment, intrenching tools, &c.; I also took a reserve of 20,000 rounds of ammunition, the transport being supplied by the Control Officer, Major Peebles.

A drizzling rain fell all the afternoon, but soon after crossing the Assiniboine River night set in and a heavy rain fell, making the roads very heavy, the mud being almost knee deep, and the night intensely dark, we marched about four miles where we camped for the night. The following day I marched as far as St. Norbert, or about one and a half miles beyond Stinking River, where we camped for the night. The rain had stopped, and the weather was clear and cold, and the roads good. On the 8th I was joined by Capt. de Plainval with two officers and thirty men, twelve of whom were mounted. I marched as far as the house of Mr. Leroque's (twenty-two miles from Fort Garry).

Hearing that the American troops had turned the Fenians out of the Province, and that there was no chance of my being able to capture the leaders, and that if another raid were to be attempted it would be likely to be from the neighborhood of St. Joe, I returned to Fort Garry, leaving Leroque's at 2 p.m. on the 9th, and arriving at Fort Garry at 1:30 p.m. on the 10th.

When the force under my command arrived within the Fort they were addressed by the Lieutenant Governor, who thanked them for the manner in which they had turned out. I then relieved the Provincial Militia Corps from active service; and the rifles, accoutrements and capots were returned into store. I, however, retained the services of Capt. Kennedy's Company, which I thought advisable to keep on duty a short time longer to assist the Service Companies in garrisoning Fort Garry.

I cannot speak too highly of the behavior of the men throughout. The greatest credit is due to Capt. Mulvey and his officers, Lieut. Hyman and Ensign Cooper for the wonderfully short time in which they enrolled their men, and reported to me after receiving the order.

I enclose statement shewing strength of all companies enrolled under the Lieutenant Governor's Proclamation, as well as the companies of the Volunteer Active Militia. Scouting parties were formed under the Proclamation; the whole of these were under the command of Capt. Villiers, who kept all the roads well guarded; they were very useful in keeping us informed of what was going on. On the 8th some 200 French half breeds met at St. Boniface and tendered their services. The Lieutenant Governor accepted the services of about fifty of them, who acted as scouts. On the 17th I received a report (which I enclose) from Capt. Royal who accompanied these men.

I must mention that several of the H. B. officials, from their different posts in the North West, happened to be at Fort Garry at this time attending their Annual Council. These gentlemen were amongst the first who tendered their services as mounted scouts, and placed themselves under the command of Capt. Villiers. They went at once to the front at their own expense, and refused to accept any remuneration for their services.

The Lieutenant Governor was kind enough to place his A. D. C. and Private Secretary, Mr. Bouthillier, at my service. He accompanied me throughout, and was of great assistance to me.

I beg to record the prompt and efficient manner in which Major Peebles, the Control Officer, discharged the arduous and important duties of his department; and it is due to his energy and efficiency that I was enabled to proceed in so short a notice to the front.

I have the honor to be, Sir,

Your obedient servant,

A. G. IRVINE, Major,
Commander Dominion Troops,
Manitoba.

The Adjutant General of Militia,
Ottawa.

PROVISIONAL BATTALION.

STATEMENT shewing strength of Troops stationed at Fort Garry, under command of Captain A. McDonald, October 9th, 1871.

Distribution.	Captains.	Lieutenants.	Staff Sergeants.	Sergeants.	Corporals.	Buglars.	Privates.
Hudson Bay Company, Present and Effective	1	2	4	4	4	4	42
On Detachment (Frontier)							8
Mapleton Company, Present and Effective	1	2	1	4	2	1	45
On Command (Frontier)					1		
South St. Andrew's Company, Present and Effective	1	2	1	4	3	1	45
Poplar Point Company, Present and Effective		2		4	4		47
Captain Bedson's Company, Present and Effective	1	1					8
Captain Cunningham's Company, Present and Effective	1	2					12
Grand Total Present	5	10	1	16	14	1	196
Absent on Duty					1		8
Total Strength	5	10	1	16	15	1	204

(Signed)

A. McDONALD, Capt.,
Commanding Provisional Battalion.

SERVICE COMPANIES.

Marching-Out State of Troops leaving Fort Garry for the Frontier, 6th October, 1871.

Corps.	Field Officers.	Staff.	Captains.	Lieutenants.	Ensigns.	Sergeants.	Corporals.	Buglars.	Privates.	Hour of Departure.	Remarks.
Ontario Service Company	1	3				4	4	2	28	4.50 p.m.	Capt. de Plainval, with 2 Subalterns and 12 Mounted Scouts and 18 on foot, afterwards joined. Total (all ranks) 33.
Quebec do			1			3	3		31		
Winnipeg, or Capt. Kennedy's Volunteer Company			1	1		4	3	1	30		
Winnipeg, or Capt. Mulvey's Volunteer Company			1	1	1				71		
Total (all ranks)	195	1	3	3	3	11	10	3	160		

FORT GARRY,
23rd October, 1871.

A. G. IRVINE, Major,
Commanding Dominion Forces in Manitoba.

CAPTAIN ROYAL'S REPORT.

ST. BONIFACE, 17th October, 1871.

Major Irvine, Commanding Dominion Troops
in Manitoba, &c.

SIR,—I beg to report that having succeeded to organize a troop of thirty mounted scouts among the natives, leaving to them their own mode of division by sections of ten men, under the command of a captain or chief, we were instructed, on Sunday, the 8th instant, to join another corps of twenty men under the command of Mr. P. Brelau and Mr. Birston respectively, and proceed with them, with as little delay as possible, in the direction of River aux Islet de Bois to scout the country west as far as the Pembina range, and south as far as St. Joe.

Mr. P. Brelau was the chief or guide of the expedition.

Two carts were allowed to transport the provisions of each section of ten men.

The number of the men mounted were fifty.

One man was allowed for each cart, so that the whole force amounted to sixty or thereabout, officers and men.

Having received the necessary rations for 8 days' service, together with a few articles of equipment, &c., we proceeded to White Horse Plains, and camped at the crossing of the Assiniboine on Tuesday evening, the 10th.

The next day we crossed the upper branches of Stinking River and camped about 5 miles further west.

On the 12th, we arrived in the evening at Rivière Aux Ilets de Bois, after a ride through a burnt prairie of about 35 miles.

There, according to the usage of war amongst the half-breeds when getting near the enemy, the men were administered the oath of allegiance, and duly warned to obey strictly the orders of their chief. On striking tents, an indian was seen arriving from Pembina, and from whom we tried to elicit some information. His news was several days prior to our departure from the fort.

In the morning scouts were sent towards the mountain, and instructed to go as far as the line; another party was detached towards the Pembina river, forty miles distant, and two others to see where the force could find water and pasture for the horses on our way back.

We remained encamped the whole day.

On the 14th, the main body proceeded to the Tobacco River, some 12 miles from the River aux Ilets de Bois, where we waited for the return of our scouts. They returned in the evening and reported everything quiet along the frontier, and in the different places where some danger could be apprehended.

Having so far discharged the object of the expedition, the force moved back on the 15th, and after a ride of more than 46 miles, came to camp on the Stinking River at a point some 20 miles below our former crossing of the same river.

Yesterday morning we made in a direct line for the Red River, which we struck about noon near the Hon. Hamelin's residence, and after a little rest the whole body returned to the fort early in the afternoon.

The men have behaved very well, and were rather eager to get a sight of the Fenians; but none were to be seen.

The different articles of equipment, &c., have been duly returned yesterday afternoon.

Believe me, Sir, with much respect,

Your obedient servant,

JOSEPH ROYAL,

Captain.

LIEUT.-COLONEL W. O. SMITH'S REPORT ON THE MANITOBA EXPEDITION
OF 1871.

WINNIPEG, MANITOBA, November 23rd, 1871.

SIR,—I have the honor to report to you, that subsequent to my interview with you in Ottawa, relative to the Manitoba Expedition, and in accordance with your instructions, I left Montreal on the 16th of October, and *via* St. Pauls, Minnesota, proceeded across the plains to Fort Garry, where I arrived on the 27th of the same month.

Here I informed His Honor the Lieutenant Governor, that the Dominion Militia on service in this Province was to be reinforced by the troops of the Expedition then *en route via* Thunder Bay.

Following your orders, I made such arrangements as were requisite for the transport and provisioning of the Expeditionary Force from the North West Angle of the Lake of the Woods to Fort Garry, also such provision as seemed necessary for barrack accommodation for the increased force here, and at the Stone Fort on the Red River.

As the winter season appeared to be setting in at an unprecedentedly early period, and as great danger of delay to the Expedition from ice appeared probable, I determined on reinforcing the corps of voyageurs, that might be accompanying the Expedition, by twenty experienced men who were engaged for the purpose, through the kind offices of Mr. Donald Smith, of the Hon. Hudson Bay Company, this reinforcement was subsequently found of much service.

After consultation with His Honor the Lieut. Governor, and appreciating the necessity of using every effort to bring forward the troops at the earliest possible date, I considered it most expedient that I should proceed myself to meet the Expedition, and to superintend personally the arrangements for the preparation of camps, fuel, &c., for the troops on the way.

As the boats which I had been led to expect as available at the North West Angle, had been taken away by parties belonging to the Canadian Pacific Railway Survey, I had much difficulty in proceeding from that point.

I was, however, fortunate enough to find in the creek, a boat used in the Expedition of 1870 which, by temporary repairs, was made tolerably seaworthy. I also, at the North West Angle, met Mr. Graham, of the Public Works Department, who had been ordered by Mr. Dawson, on his receipt of information at Thunder Bay of the despatch of troops, to proceed to Fort Garry to make those arrangements for their transport from the North West Angle, which my earlier arrival *via* the U. S. had anticipated.

In proceeding to meet the Expedition, we met with much delay and difficulty from the ice which seriously damaged our boat and canoe, and from gales of wind which prevailed on the Lake of the Woods.

Early on the morning of the 11th instant, after having been wind-bound on an island for two days, we were enabled to cross the Grand Traverse, and at the mouth of Rainy River met the Expedition, which had been delayed there, sheltering from the storm.

Returning with the force, and favored by a fair wind, we arrived on the same evening, at a point on the Lake about eighteen miles from the North West Angle—here, the ice, which on our outward trip we had been enabled with some difficulty to cut through, had formed so fast, that we were compelled to land on an islet and camp.

A furious gale which arose during the night, occasioning some small damage to the flotilla and one of the tugs, did us service in partially breaking up the ice, through which, though with much difficulty, we proceeded six miles further with the boats on the 12th instant, as far as the narrows, about twelve miles from the North West Angle. Here, from the ice being fast taken and the severity of the weather increasing, it seemed evident to me, after consulting with Mr. Dawson, that our boat service must cease. The troops were landed on an island, and the flotilla of boats and tug steamers drawn on land for winter quarters.

On the following day, having constructed hand-sleds, and leaving a small rear-guard with some voyageurs in charge of the boats and heavier stores, we proceeded on the ice to the North West Angle. Here, the provisions and transport were waiting. This march, over newly formed ice, and in the teeth of a northern gale, with the thermometer low, was of a most trying character.

From the North West Angle, where we found the transport and provisions in readiness, the troops started on the 14th for Fort Garry, which place, after a march rendered severe from the cold, they reached at midday on the 18th instant.

I enclose to you, herewith, Captain Scott's report and diary, showing the daily progress of the Expedition.

Not only from the statements of that officer, but from my personal observation, during the few days I was with them on the march, I am enabled to report on the conduct of the troops as being worthy of the highest admiration. Officers and men seemed actuated by the same enthusiastic spirit of determination to push forward the Expedition to a speedy and successful issue.

From first to last the weather was of the most unfavourable nature; rain, snow, intense cold, and violent gales alternating in rapid succession, presented all obstacles that the commencement of a winter season in these high latitudes offers to the progress of troops.

It is a satisfaction to reflect that scarcely a month has elapsed between the issue of your orders for the organization of the force and its arrival at Fort Garry; especially when bearing in mind that a distinguished officer of H. M. Regular Forces, pronounced the route as being, in his opinion, impracticable to troops, after the middle of September, and that high encomiums have been passed on an expedition for accomplishing a march during the long and pleasant days of summer over the same ground which H. M. Dominion troops have now traversed during the brief daylight of an almost Arctic winter.

I feel I am conveying to you the sentiments of every officer and man in expressing the obligations due to Mr. Dawson—his great experience and the indefatigable exertions used by himself and his staff, among whom I take the liberty of mentioning Messrs. Graham, Towers, Sinclair, Burton, Arnoldi, and Whitcher, have contributed in the highest degree to the success of the Expedition.

I have the honor to be, Sir,

Your obedt. servt.,

W. OSBORNE SMITH, Lt.-Col.,

D. A. G. Militia,

Commanding Military District No. 10.

CAPTAIN SCOTT'S REPORT AND DIARY.

FORT GARRY, November 23rd, 1871.

SIR,—I have the honor to report that the Manitoban Expeditionary Force under my command, composed of nine officers and 203 non-commissioned officers and men, embarked on board the steamer Chicora at Collingwood, on the 21st of October, and arrived at Fort Garry on the 18th of November, thus making the whole march in twenty-eight days. According to instructions I herewith transmit a memorandum of each day's progress and proceedings.

October 22nd.—We arrived at Sault Ste. Marie at 11-30 p.m., after crossing Lake Huron, without meeting with any difficulties.

October 24th.—We safely performed the voyage on Lake Superior, and arrived at Prince Arthur's Landing at 1 o'clock p.m. to-day. On entering the bay one of the paddle-wheels of the boat was damaged, the repairing of which detained us an hour. At 2 o'clock p.m. the troops disembarked, but we experienced considerable difficulty in removing the stores, as there was a heavy storm, and the scow could not reach the shore in safety. The

steamer Manitoba, with fifteen span of horses, eight head of cattle and a large quantity of supplies for the use of the troops, arrived at Thunder Bay at 4 p.m. As there were a sufficient number of voyageurs in the employ of Mr. Dawson who were thoroughly acquainted with the route, it was deemed advisable to send back those who accompanied the expedition to Thunder Bay, thus saving a considerable addition to the expenses.

October 25th.—Sent off fifty men this morning under command of Captain Fletcher, and another fifty under Lieut. Simard this afternoon, with orders to make Shebendowan Lake in two days. Completed the disembarkation of stores from the steamer Manitoba, to-day, and caused the cattle to be driven to Shebendowan Lake, there to be slaughtered, and the meat put in bags for the use of the troops.

October 26th.—It has rained incessantly since landing. At six o'clock this morning consisting of six officers and 103 men, (less two men discharged—one medically unfit for duty and the other for bad conduct), marched off for Shebendowan Lake. There was a heavy hailstorm this morning, which turned to snow in the afternoon. This, coupled with the bad state of the roads after three day's rain, made it very difficult marching.

October 27th.—First Brigade arrived at the Shebendowan last night; the second at 11 a.m. to-day, and the 3rd at 4 p.m. One hundred men in four large boats in tow of the tug, left for Kashaboine Portage at 1-30 p.m., the remainder of the force camped at the Shebendowan overnight. Weather very cold last night and to-day. Twenty teams of horses and waggons were employed in transporting the stores from Thunder Bay to Shebendowan. The march of forty-five miles to Shebendowan was made in less than thirty-four hours from starting.

October 28th.—The tug, which was to have returned at 9 a.m., did not arrive till 4 p.m. owing to an accident to her engine. The remainder of the force embarked at 4-30 in tow of the tug, arriving at Kashaboine Portage at 10 p.m. All the stores were transferred over the portage to-night, a team of horses being used for the purpose.

October 29th.—We portaged six boats this morning, and started off for the Height of Land Portage at 11-30 a.m. The tug was unserviceable owing to the cold weather. While crossing Kashaboine Lake a heavy snow-storm came on, and two of the boats were lost for several hours. Arrived at Height of Land at 2 p.m., and completed portaging boats and stores across at 11 p.m. At this hour there were about eight inches of snow in the level, and the Bay was slightly frozen for a distance of 100 yards. The tug of Lacs des Mille Lacs, we ascertained, was useless, pipes being frozen.

October 30th.—Owing to a strong headwind and high sea, we could not make a start until 11 o'clock a.m.; arrived at Baril Portage at six p.m. The entrance to the portage was frozen and we were compelled to cut through a half mile of ice three quarters of an inch thick. Completed moving our boats and stores across at 12-30 this night.

October 31st.—Reached Bruile Portage at 9 o'clock a.m. and left for French Portage at noon, arriving at the latter at 4-10 p.m. Completed the transfer of boats and stores over French Portage at midnight.

November 1st.—Loaded boats at 5 o'clock this morning and placed three soldiers and one voyageur in each to take them down French Creek. The remainder of the force marched over the two mile Portage to French Lake. Boats arrived at noon, having taken six hours to run down the Creek. We reached Pine Portage at 5 o'clock p.m.; moved the boats and stores across during a tremendous snow-storm; rowed over the Little Lake to Dieux Riviere and camped there for the night.

November 2nd.—Left Dieux Riviere Portage this morning at 10 o'clock. Owing to the shallowness of the water in the creek leading out from the portage the men were compelled to jump into the water and haul the boats along, although the creek was partly frozen. When we reached Maline River we found the water so shallow that several new portages had to be made. Camped on west side of third portage for the night.

November 3rd.—Arrived at Island Portage this afternoon at 3 o'clock. Transferred boats and stores across, and started over Lac La Croix preceded by the tug at 5 p.m., arriving at Loon Portage at 11 p.m. The weather during the past few days has been

very cold and disagreeable, notwithstanding which the men are in good health and spirits.

November 4th.—The boats and stores being portaged at 11 a.m., we started for Loon Lake, before reaching which we had to cut through ice half an inch thick, for a distance of 200 yards. Loon Creek (length six miles) was so shallow that it took some of the boats thirty hours to get through, and the men were compelled to be in the water the greater portion of the time. In many places the water was only three inches deep and the boats, therefore, had to be unloaded and the stores carried along the shore, while it required not less than twenty men to pull the empty boats through the mud.

November 5th.—The whole of the 1st Brigade and three boats of the third arrived at Kettle falls to-day. The tug did not arrive from Fort Francis until this afternoon, but the wind being favorable the eight boats set sail across Rainy Lake for Fort Francis, with orders to remain there until the arrival of the whole force.

November 6th.—Four boats which had been brought across Kettle Falls Portage this afternoon were towed a distance of ten miles down Rainy Lake by the tug. The tug was ordered back to Kettle Falls to bring the remaining three boats which were expected to arrive there to-night, and the boats dropped by the tug proceeded on their way to Fort Francis, rowing against a head wind.

November 7th.—The tug left Kettle Falls this morning with the last boats in tow. At eight o'clock p.m. to-day the whole of the expeditionary force were under canvas at Fort Francis. The men had endured great hardships so far, but fortunately there was only one case of sickness, caused by an accident in carrying a load across the third Loon Portage.

November 8th.—The Rainy Lake tug was moved across the portage into Rainy River, where the Lake of the Woods and Rainy River tugs were in waiting, and in tow of the three tugs the whole of the expedition moved down Rainy River at 1 p.m. After running twenty-five miles we camped for the night.

November 9th.—Started at 7 a.m. Run the Maniton and Long Rapids, but at the latter, owing to low water, the men marched along the shore for a distance of two miles, leaving four in each of the boats to run them down. Reached Hungry Hall, near the mouth of Rainy River, at 7 p.m. this day.

November 10th.—Started at 2 o'clock a.m. but were compelled to camp at the mouth of the river, owing to a heavy storm on the lake. At 6 p.m. we attempted to cross the traverse but were unsuccessful, and had to run to an island to remain there over-night.

November 11th.—This morning the boats were ordered to set sail independent of the tugs, the wind being favorable. Shortly after starting we were glad to meet Lieut.-Col. Smith, who was on his way to meet us. The majority of the boats sailed to within fifteen miles of the North West Angle, and the remainder were towed by the tugs. Camped there for the night on an island. From thence as far as the eye could reach in the direction of the Angle was one sheet of ice.

November 12th.—A storm last night fortunately broke up some four miles of ice, and we started in the morning passing through the broken ice, and then cut through solid ice for a distance of three-quarters of a mile, a Hudson Bay Co's boat leading. (We brought three of them from Fort Francis.) The ice gradually increased in thickness, and finding it impossible to take the boats farther, we landed on an island, some eight miles from the Angle. One of the tugs, which had been previously sheeted with iron, made an attempt to cut through the ice, but was unsuccessful, getting completely wedged in.

November 13th.—At 1 p.m. to-day the troops started to march on the ice towards the Angle. Having to keep close to shore round the bay, increased the march to ten miles. Capt. Armstrong with a rear-guard of twelve men was left on the island in charge of baggage, stores, etc., and the voyageurs also remained to erect huts over the tugs and boats. Each soldier on the march carried his rifle, accoutrements, knapsack and blankets. On arrival at the North West Angle, the men were very tired after the march over smooth ice. Several of the men were exhausted when within three miles of the Angle, but they were carried on hand sleighs; piercing cold weather all day.

November 14.—We were up at 5 o'clock this a.m. Loaded carts, one to each squad of thirteen men, and with thirteen waggons to carry half the men, started for Fort Garry at 7 o'clock a.m. The waggons relieved the marching men every hour. Arrived at Birch River (thirty miles) shortly after dark. Tents were already pitched for us by order of Lieut.-Col. O. Smith. One man attacked by inflammation of the bowels was left at the Angle in charge of Dr. Codd.

November 15th.—Reveille at 3-30 this morning. Started at five, and reached our camping ground for the night (23 miles from Birch River) at 3 p.m. The day was intensely cold, but the men, although weary and footsore were in good spirits. Tents were pitched here also awaiting our arrival.

November 16th.—Reveille at 3-30 a.m. Started at 5 and reached Prairie du Chene at 5 p.m. Snow fell steadily during the day. Doctor Codd arrived at this place this evening, bringing with him the sick men left at the Angle, and another (one of the rear-guard) who was taken ill with inflammation of the lungs.

November 17th.—Snow continued falling all last night, succeeded this morning by a piercing cold wind. We intended reaching Fort Garry this evening, but owing to extreme cold were compelled to camp in the woods when within thirteen miles of the Fort. A number of the men became exhausted from cold, we took them into a shanty, and under proper treatment speedily recovered.

November 18th.—The weather last night and during the whole of the day was intensely cold. We arrived within a mile of Fort Garry at twelve noon. Here the force was ordered to fall in with arms and accoutrements, and we marched across the Red River and Assinaboine on the ice to the Fort, Lieut.-Col. Smith, the officers and men of the garrison and a large number of the inhabitants of Winnipeg, were assembled at the Fort to welcome us. With the exception of the two already mentioned the men were in tolerably good health, considering the great hardships and fatigue which they had undergone.

The conduct of both officers and men during the whole route was highly commendable, all having worked diligently and cheerfully, and manifesting a desire to make the expedition a complete success, by endeavouring to reach Fort Garry in the shortest possible time, thus showing that Canadian soldiers are capable of enduring any amount of fatigue, and overcoming all obstacles.

I cannot close this report without speaking highly of the valuable aid rendered by Mr. Dawson in every possible way throughout the whole route. He worked most energetically in sending supplies ahead, and by his personal exertions in this respect contributed much to the success of the expedition.

I have the honor to be, Sir,

Your most obedient servant,
THOS. SCOTT, Captain,
Commanding Manitoba Expedition.

To COL. ROBERTSON-ROSS,
Adjutant Gen. Canada, Ottawa.

REPORT OF THE INSPECTOR OF ARTILLERY AND WARLIKE
STORES.

KINGSTON, ONTARIO,
10th January, 1872.

SIR,—In submitting my annual report for your information, I have deemed it advisable to divide the matters treated of into the following general heads, viz. :—

Field Artillery.
Garrison Artillery.
Engineers.
Gunnery Schools.

FIELD ARTILLERY.

This force comprises ten batteries, each armed with three 9 pounder guns, and one 24 pounder howitzer (including the Wellington Battery, for which only two guns are as yet available), distributed as follows, viz. :—

Ontario, 7 batteries.
Quebec, 2 do
New Brunswick, 1 battery.

All these performed their annual drill in camp, and with the exception of the New Brunswick Battery, were inspected by me during their annual training. The Halifax Battery, equipped with six 6-pounder Armstrong guns, drawn by hand, is not included in the above. I believe it would make an efficient field battery if horsed and equipped like the other batteries. A demi-battery is also about being raised in Manitoba.

As remarks on the various batteries would occupy too much space in the body of the Report, I have drawn up in a condensed form my remarks on the state of the whole force of artillery which is submitted herewith.

Gunners.

Generally speaking, the gunners of the field batteries are well acquainted with their duties. The Toronto, Hamilton, Welland and Kingston Batteries carried on practice with shot and shell under my supervision. The guns were well laid and served, and, with the exception of slight delays in loading shells and fixing fuzes, the whole practice was highly satisfactory.

Drivers.

The drivers are tolerably well acquainted with their duties; they are, for the most part farmers and farm labourers, accustomed to horses, and with a moderate amount of instruction, they would, I believe, be able to perform all ordinary duties required of them in a satisfactory manner. Their intelligence and skill in making rough repairs and overcoming difficulties, would probably, on actual service, more than compensate for any deficiencies in riding or driving.

In many batteries it is customary for the non-commissioned officers and gunners to meet once a week for gun drill, but the drivers receive no instruction between the periods of annual drill. The reason is obvious, the gunners give their own time gratuitously, but the drivers would have, in addition, to give the time of their horses. This cannot be expected of them, and unless pay for mounted drills (between the periods of annual drills) is provided by Parliament, I fear the country will have to rest content with mediocrity in this branch.

Prizes are given to all classes except drivers. I would strongly advise the issue of a prize and badge of cross whips to the best driver of each field battery.

Non-Commissioned Officers.

There are many good non-commissioned officers in the field artillery, but many others, I find, have very little idea of their duties. In field manoeuvres, each sergeant having to give the word of command to his sub-division, it is essential that these non-commissioned officers at least should be well acquainted with their drill. I would advise that some restriction be placed on the promotion of non-commissioned officers to this rank.

The issue of a General Order to the effect, that members of existing batteries would be permitted to join the schools of gunnery for any periods over two months, and at any time at which it may be most convenient for them, during which period they would be paid, clothed, lodged, &c., at the public expense, would afford every opportunity to men of all ranks wishing to improve themselves in the knowledge of their duties; and captains of batteries need not then promote non-commissioned officers who had neglected to qualify.

Officers.

Generally speaking, the officers commanding are well able to handle their batteries when performing ordinary manoeuvres. Some of them have passed through the Gunnery Schools, and can instruct in gun drill, mounting and dismounting guns, filling shells, boring and fixing fuzes, &c., &c.

The subalterns as a rule not being as well acquainted with their duties as one could wish, restrictions should I think be placed on their appointment and promotions.

In view of the facilities now afforded to all ranks of field and garrison artillery desirous of obtaining instruction, I would submit the following suggestions, which, if carried out, would, I believe, tend to greatly increased efficiency in those very important branches of the service :—

1st. That after the 1st January, 1873, no officer shall be promoted to the rank of captain, who does not possess a first or second class certificate from a School of Gunnery.

2nd. That after the 1st January, 1873, no non-commissioned officer shall be promoted to the rank of sergeant who does not possess a first or second-class certificate from a school of gunnery, or a certificate shewing that he is competent to fulfil the duties of that rank, signed by a commandant of a gunnery school, or by a Board nominated for the purpose by the commandant of a gunnery school.

3rd. That no person be appointed to a commission in the artillery till his educational qualifications are reported as satisfactory by the inspector of artillery.

Horses.

The difficulty of horsing the batteries appears unabated. Some district staff officers having pointed out that batteries in their districts would not be able to turn out for want of horses, an extra allowance of 25 cents per horse per day was authorized for the artillery. By this means a sufficient number of horses was secured, except for the Montreal Battery. I consider such an arrangement unsatisfactory, for the following reasons :—

1st. It is invidious to pay the artillery horses at a higher rate than the cavalry.

2nd. Some of the horses are inferior, unfit for work, and occasionally die of disease while on service, and have to be paid for by the public.

The drivers of such teams having no connection with the battery, but just clothed for the occasion (and frequently not even sworn in) are a drag on the battery during the whole training.

3rd. That in the event of a sudden turn-out of a battery no horses are available, as was the case last year when the Montreal Battery was ordered out to repel a Fenian raid. This battery, it will be remembered, kept a regiment waiting for several hours, and was eventually a day too late for the affair at Trout River.

The same battery could only turn out for four days at Laprairie this year, the officer commanding having to promise the people who supplied him with horses that they were to be returned within that time. Such a state of affairs is highly objectionable, and I would again urgently recommend the enrolment of draught horses for field batteries.

Enrolling Horses.

I have studied this subject attentively during the past year, and having taken the opinions of a great number of persons in various parts of the Dominion on the matter, have come to the conclusion that the object can be attained without increasing the estimates by giving enrolment gratuities, viz., by the insertion of a clause in the Militia Act, exempting from all statute labor, tolls on roads, water-taxes, &c., teams of horses duly certified as having been enrolled in a local battery, and marked with the initial letter of the battery.

There are certain details connected with this proposal which need not be gone into in a Report of this nature. They are mainly intended to guard against imposition, and to induce owners of enrolled horses to drive them together in pairs (viz., by non-exemption from tolls on roads if driven singly, &c., &c.) I can see no difficulty in carrying out this measure, and if it is approved of I believe that the difficulty of horsing field batteries will be ended, that the batteries will have the pick of all the horses in their vicinity, and that the horses having been constantly driven in pairs will work kindly together in the gun and waggon teams.

Besides these advantages, the extra pay would be saved equal to 25 cents per day for 16 days—\$4 per horse, \$224 per battery, \$2,240 for ten batteries.

Should this idea not be approved of, I would respectfully advise the insertion in the next estimates of a sufficient sum to provide gratuities for the enrolment of the draught horses of the batteries.

Ten batteries, 22 pairs each, 220 pairs—say \$20 per pair for 220 pairs, \$4,400; against this there would be the saving of the extra pay for all horses of the batteries as issued at the last annual training, viz., \$2,240.

The riding horses of the batteries can be provided by those using them as in cavalry corps.

Before concluding the subject of field artillery, I would call attention to the fact that to learn the drill for a four gun battery from a book treating of drill for a six gun battery is rather confusing. As several batteries will be armed during this year with rifled guns having axletree seats, necessitating a revision of the drill, it would be advisable to have printed and issued at cost price, a manual of field artillery exercises more suitable for Canadian batteries, and which would abolish the manœuvring with waggons and guns together—a system of drill intricate and complicated, and which it is now admitted would be impossible to carry out in the presence of an enemy.

GARRISON ARTILLERY.

This force consists of 70 batteries, including A and B Batteries (forming the Schools of Gunnery at Kingston and Quebec respectively.)

Ontario,	20	batteries.
Quebec,	13	do
New Brunswick,	10	do
Nova Scotia,	15	do
G. T. Brigade, Montreal,	6	do
do Toronto,	6	do

With the exception of the New Brunswick Artillery, I believe few batteries in the Dominion have made gunnery their main object. Some batteries never performed any gun drill, a large number never practised with shot or shell and very few batteries have been in the habit of carrying on practice annually. Rifle shooting and infantry

manœuvres appear to have absorbed their attention, and the principle of attaching batteries to infantry regiments for administrative purposes has not fostered an artillery spirit. The practical working of such a system was evidenced at the Goderich Camp, where I had the mortification of seeing two garrison batteries skirmishing with the 30th and 33rd Battalions, notwithstanding the paragraph of General Order (12) of 5th May, 1871, which directed that under no circumstances were garrison batteries to go into camp with the regiments to which they were attached.

A great advance in the right direction has been made by allowing a fixed amount of ammunition annually for practice. Firing with shot and shell awakens the interest of all, and stimulates *esprit de corps*, which is much wanted in this branch of the service.

The experiment of bringing garrison batteries into the nearest forts for their annual drill was tried this year, and the results have been so satisfactory that I would strongly recommend the extension of this system to all parts of the Dominion.

At Kingston, 13 garrison batteries were quartered in Forts Henry and Frederick during the month of September, and kept almost entirely at drill and practice with guns and mortars. The advance made in their duties during such a short period could only be accounted for by the interest evinced by all ranks in learning their legitimate work.

His Excellency the Governor General being in Kingston, while some of the batteries were quartered in Fort Henry, the works there were manned and practice with shot and shell from guns and mortars carried on for his inspection. He was pleased to express his very great satisfaction at the rapidity with which the guns were served, and the general accuracy of the practice, and in a few kindly words addressed to nine batteries assembled in the square of the fort, he gave them to understand that as the representative of Her Most Gracious Majesty, he fully appreciated the sacrifices which most of them were making in voluntarily leaving lucrative employments to fulfil their duties as citizen soldiers.

The very great difficulty (prominently brought to notice this year) of filling the ranks of the infantry by volunteering does not apply generally to the artillery, with the exception of the Quebec Garrison Artillery. The state of affairs in this corps is lamentable; the officers are equal to any in the Dominion, but I am unable to say anything further in favor of this brigade.

The four batteries could only muster about one-half of their quota, and it would have been impossible to have selected 50 able-bodied gunners out of the whole brigade. Several of those in the ranks were over 60 years of age by their own admission, and consequently not belonging to any class of Militia; and the number of little boys in every battery was so considerable that I requested the surgeon to measure some of them, when many were found to be only 30 to 32 inches round the chest.

The smallest sized tunics hung on these lads like great coats, and their uselessness as "heavy artillery men" can readily be imagined. (I would recommend that the standard of height in force in A and B Batteries be adopted for all garrison batteries.)

On enquiring into the subject, I was informed that it was scarcely possible to keep up the brigade by volunteering, that employers threw difficulties in the way of those belonging to the batteries turning out, that men earned very high wages in the summer, and that volunteers were jeered at by many of the lower orders in Quebec. The officers also stated that in order to bring into camp the small force which I saw, it was necessary to promise many of the men two or three day's leave out of the eight day's drill, such a state of affairs speaks for itself. The Montreal Garrison Artillery performed their drill and practice on St. Helen's Island. This is a very fine corps, the men are of a respectable class, and turn out very clean and soldier-like. I was not able to inspect them at gun drill, owing to the press of other duties.

Isle-aux-Noix would be a more suitable place than St. Helen's Island, for the annual training of this corps.

I saw the Grand Trunk Brigade of Artillery on a divisional parade at Montreal they are, physically, a splendid lot of men. I have not been afforded any opportunity of inspecting either of the Grand Trunk Brigades at gun drill.

Establishment of Batteries.

By the regulations for the Active Militia, 4 bombardiers are on the strength of each field battery. I cannot find any regulation regarding the pay of this rank.

In the establishment of garrison batteries, bombardiers and battery sergeant-majors are omitted. I would suggest instead of 3 sergeants and 3 corporals, that 1 battery sergeant-major, 2 sergeants, 2 corporals and 2 bombardiers be posted to each garrison battery.

Captains commanding field batteries complain that they have not enough men to man their guns when the ordinary details for duty are deducted. In your Report last year, you recommended an increased establishment for field batteries :—

- 1 major.
- 1 captain.
- 3 lieutenants.
- 1 sergeant-major.
- 4 sergeants.
- 4 corporals.
- 4 bombardiers.
- 1 trumpeter.
- 1 farrier.
- 80 gunners and drivers.

Total 100

and from what I have seen during the past summer, I can fully endorse the above recommendation, and trust that it may be soon carried into effect.

ENGINEERS.

This force consists of—

- 1 company at Montreal.
- 1 do St. John, New Brunswick.
- 1 do Grand Trunk Railway Brigade.

I inspected the first-named company at Laprairie Camp, where the men did good service in making repairs of all sorts about the camp and barracks. During the three days I was there, I had them employed in making a two-gun battery—a work they took great interest in, and which I believe was the first real engineer duty they had ever attempted to carry out.

They also made a few gabions, but for want of a proper sergeant instructor, and the necessary tools, little else could be done.

There is I believe a 2nd Company of Engineers at Montreal, but it did not turn out for drill at Laprairie. I understand it is virtually disbanded.

The St. John Company I inspected at St. John. It consists of a very fine lot of young men, mostly mechanics; but they have always been treated as infantry, and are engineers only in name and clothing.

The Grand Trunk Railway Company I have not been called upon to inspect. From the wide field of selection, I should imagine that this company would be very valuable for special services in connection with the repair or destruction of Railways, &c., &c.

There is little cause for congratulation when viewing the engineer branch of the Canadian Militia. It has a merely nominal existence, and to make it a reality will require time and money.

I think the following general principles ought to be kept in view in organizing an engineer force :—

- 1st. At least one company of engineers to be raised in each Military District.
- 2nd. The rank and file of this force to be composed mainly of skilled mechanics.

3rd. The officers to be selected from civil engineers, surveyors, or other competent persons, and to pass an examination previous to appointment.

4th. To raise at least one telegraph company in each Province, each of these companies to have a complete field telegraph equipment.

5th. To provide proper instructors and open one or more schools.

The equipment of the engineer companies will, of course, vary, but tools will be required for all. Some companies should be equipped with pontoons or bateaux, but these are details which can be gone into hereafter. While on this subject, I may state that if any force of the Canadian Militia had to cross a river (the bridges over which had been destroyed) they would have no means of doing so unless they could be found on the spot.

A small pontoon train in each Province appears to me to be necessary,

GUNNERY SCHOOLS:

At the commencement of the past year the gunnery schools were carried on in a manner somewhat similar to the infantry schools; the cadets living anywhere in the vicinity, drilling so many hours per diem, and receiving the gratuity of \$50 on their obtaining a first or second-class certificate.

This system is now, I am glad to say, at an end; the most that could be expected of it was to teach those who went there a *gunner's* duty, and not all that. Instruction for officers there could be but little, except mere gun drill, and no means of instructing members of field batteries have been available since the departure of the Royal Artillery.

The present gunnery schools, established at Kingston and Quebec, were organized in accordance with General Orders, (24,) 20th October, 1871, which directed the formation of "two batteries of garrison artillery, in order to provide for the care and "protection of the forts, magazines, armaments and warlike stores recently or about to be "handed over to the Dominion Government in the Provinces of Ontario and Quebec." It further directed that "these batteries in addition to performing garrison duties shall "serve as *practical schools of gunnery* for the training of *all* ranks of the militia "artillery, viz., by instructing gunners and drivers, and affording officers and non-commissioned officers opportunities of joining long or short courses of instruction as "may best suit them individually."

The details of this system can be seen on reference to the General Order above quoted, but the principles on which it is being carried are as follows, viz. :—

1st. The appointment of two officers of the Royal Artillery who had qualified as first-class gunnery instructors at Shoeburyness to be commandants of the schools.

2nd. The enrolment in the batteries of the sergeant instructors of the old schools, as well as other approved non-commissioned officers late of the Royal Artillery.

3rd. The purchase of 8 horses for each battery, by means of which a tolerable amount of instruction in riding and driving may be afforded to field artillerymen.

4th. Providing a few skilled artificers and laboratory men in each Province for the sighting and venting of guns, repair, manufacture and alteration of gun carriages, laboratory operations, &c., &c.

The first and second principles have been successfully carried out, and the Dominion has been fortunate enough to secure the services of Capt. (now Lieut.-Col.) T. B. Strange, of the Royal Artillery, for the school of gunnery, Quebec, the third and fourth are about to be carried out. As the knowledge required by the above mentioned artificers are only to be obtained by a lengthened course of instruction in an arsenal, I feel that the Imperial authorities appreciating this fact, will, on proper application being made, place suitable men at the disposal of the Dominion Government. I trust the earliest opportunity will be taken to obtain the services of these men, as a large amount of practice has been carried on, and a gun may possibly burst from not having been examined or vented in time.

The instruction is based on the general principle that individuals joining the schools

of gunnery shall do duty in the same rank that they hold in their own batteries. Thus, a lieutenant in addition to being taught all ordinary drills, is posted to a district, made to inspect all the stores therein weekly, takes his turn as orderly officer, learns *practically* the interior economy of a battery organized for service in *Canada*, his main attention being directed to those matters which more particularly affect his own branch of the service. A sergeant similarly has charge of a room, goes on guard, takes his turn as orderly sergeant, &c.; in point of fact they are virtually for the time being component parts of A and B Batteries.

It was supposed when raising the two batteries which constitute the gunnery schools, that a few men would come from every militia battery, and that instruction would thus easily have been disseminated. This has not been the case, no men whatever coming from some batteries, but large numbers from others. Strange to say, the largest numbers come from some of the most efficient batteries. Thus, the Toronto Field Battery has sent 19 men, and 10 are coming from the Wellington Battery (on the 1st February); yet, from the whole of Military District, No. 4, containing ten batteries, only three men have been sent to the school of gunnery, its proportion being 52.

By the annexed Return, it will be seen that B Battery has nearly its full complement of men—138 out of 153; A Battery has only 98 out of 131. The men from Military District No. 1 do not join till the first week in February, and it will also nearly have its complement.

Considering that these two batteries are only *being* raised, it cannot be expected that much instruction could have been carried on; but from what I have seen, I feel assured that their formation marks a distinct era in the history of the Canadian Artillery. It is now within the reach of every officer, non-commissioned officer, gunner or driver, or even of a trumpeter to learn his duties in a thorough manner, by joining for a long or short period, and at whatever time of year may be most convenient for him, being lodged and paid at the Government expense. True, the Dominion Government receives *personal* services in return (as guards on magazines and warlike stores, caretakers of the fortifications and their armaments, &c.), which it did not receive under the old system; but the above services include some of the most important duties of artillerymen, and are apparently rendered gratuitously, if one merely compares the old system with the new; or, to put the matter in plain figures. The vote for military schools for the year 1871-72 was reduced by \$15,000, as no separate gunnery schools would be required in Ontario and Quebec on the formation of A and B Batteries.

I am glad to be able to report that the conduct of the men of A Battery has been generally most exemplary, and I have no doubt the same can be said of B Battery, and in concluding this subject I beg to state that I look forward with confidence to the good results which I fully believe will be attained by the working of the present system, and after a few years time one will assuredly find in the Provinces of Ontario and Quebec a large number of officers, non-commissioned officers and gunners, who will, in addition to being able to perform their own duties as artillerymen effectively, be also able to assist and instruct their less efficient comrades (provided always that these schools are reserved for the *Militia Artillery*, and that infantry officers are not posted thereto, to the exclusion of artillery officers.)

Hoping that the numerous matters I have had to make this my first report on, will be sufficient excuse for its length.

I have the honor to be, Sir,
G. A. FRENCH, Lieut.-Colonel,
Inspector of Artillery and Warlike Stores.

REPORT concerning "A" and "B" Batteries Garrison Artillery.

Corps.	Establishment.	Number of Men.	Long Course.	Short Course.	English Speaking.	French Speaking.	Average Height of Men. N. C. O. and Ft. In.	Average Chest Measurement. Inches.	Corps in which Enrolled.	Remarks.
"A" Battery, Kingston.. Officers.....	131	98	77	21 3	98	.....	5 8 1/2	37 1/2	61 Kingston Field Battery. 2 Ottawa Garrison Artillery. 1 Hamilton Field Battery. 1 St. Catharines Garr. Batt. 19 Toronto Field Battery. 4 Toronto Garrison Battery. 10 Wellington Field Battery.	7 long course, coming from the London Field Battery; the Garrison Batteries of Military District No. 1 not yet heard from. * All joining at headquarters had to be enrolled in this battery.
"B" Battery, Quebec.... Officers.....	153	138	132	6 5	86	52	5 8	37 1/2	47 Montreal Garrison Artillery. 30 Quebec Field Battery. 61 Quebec Garrison Artillery.	* 4 more recently joined.
Total Men.....	.....	236	209	27	184	52	.....	.....	.....	.....

G. A. FRENCH, Lieut.-Colonel,
Inspector of Artillery.