REPORT

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ON THE

STATE OF THE MILITIA

OF TH

DOMINION OF CANADA,

FOR THE YEAR 1879.

PRESENTED TO BOTH HOUSES OF PARLIAMENT BY COMMAND OF HIS EXCELLENCY THE GOVERNOR GENERAL.



OTTAWA:
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1880.

DEPARTMENT OF MILITIA AND DEFENCE,
OTTAWA, February, 1880.

The undersigned has the honor to forward to Your Excellency the accompanying Report from the General Officer Commanding, relating to the Militia of the Dominion of Canada for 1879, which is respectfully submitted for Your Excellency's consideration.

A. CAMPBELL,
Minister of Militia and Defence.

His Excellency

The Governor General,

Ottawa.

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ANNUAL REPORT

ON

THE STATE OF THE MILITIA

FOR

1879.

OTTAWA, 1st January, 1880.

To the Honorable

Minister of Militia and Defence,
&c., &c., &c.

SIR,—During the past year the active militia have been trained for twelve days proportionate with the Parliamentary vote. The total number of about 43,000 was reduced for training some few years ago to about 37,000, by substituting 42 men percompany for 54, in order to keep within the amount of money then voted. Subsequent reductions in the vote have deprived the militia, not only of the benefit of brigade camps of exercise, but have actually admitted of only a moiety of the establishment being trained for 12 days per annum with pay, instead of the period allowed bythe Act. Thus, last year only 19,780 men were exercised from want of sufficient means to call out the whole.

The only improvement to be noticed over the last three years arises from facilities having been afforded to assemble rural companies at the head quarters of their battalions instead of the isolated company drill, to which I and all who have examined the lions instead of the isolated company drill, to which I and all who have examined the result have so frequently offered objections. Twelve days' drill is, in itself, under any circumstances, too short for much good result, especially for rural battalions, which cannot like the city corps pursue unpaid drills at leisure times throughout the which cannot like the city corps pursue unpaid drills at leisure times throughout the year. Good drill instructors are greatly needed also, and the means of educating them, as I have so often brought to notice. Officers and sergeants require sound instruction to entitle them to undertake to teach others. Till a system is established therefore to provide such instruction, the militia will not maintain the standard which a national force should represent. Brigade camps of exercise should be reverted to for military emulation and general advance of attainments in managing bodies of armed men.

It is almost needless to repeat the organization of the militia, except on the principle that every report should for reference be complete in itself: shortly therefore, the Active Militia consists of about 43,000 officers and men, approximately, as follows:—

Field Artillery, 18 batteries	1,326
Garrison Artillery	
Engineers	
Cavalry	
Infantry	27,320

The Reserve Militia, about 655,000 men, liable by law, is in three classes, and between the ages of 18 and 60 years.

There are twelve military districts, each administered by a Deputy-Adjutant General, assisted, except in three, by a Brigade Major. There are two gunnery schools and the Royal Military College, numerous rifle associations and the Dominion Artillery Association.

The Minister of Militia and Defence is charged with and responsible for the civil administration of militia affairs, including all expenditure.

The Act states "there shall be appointed to command the militia of the Dominion of Canada, an officer holding the rank of Colonel, or superior thereto, in Her Majesty's Army, who shall be charged under the orders of Her Majesty, with the military command and discipline of the militia, and who while holding such appointment, shall have the rank of Major-General in the militia of Canada."

The General Officer can appoint an Aide-de-Camp, who by his letters of service, shall be selected by himself, and while so employed shall draw the regimental pay of his rank in the regular army.

"There shall be also an Adjutant-General of Militia at head quarters, who shall have the rank of Colonel in the militia."

Some of the suggestions in previous reports have been attended to, but others are perhaps too costly to entertain till a rebound occurs in the trade and commerce of the continent. Many obstacles which earlier seemed insurmountable have disappeared; the structure is rising and assuming more solidity, but provision is still wanting for elementary instruction, which retards the completion of the edifice.

In the course of the past year two significant military displays occurred in Montreal and Toronto. They were not intended for, and could not possibly be drill, exercises or instruction in evolutions, entangled in an assemblage of some 40,000 spectators; but they were loyal assemblages of troops in the presence of His Excellency the Governor General and Her Royal Highness the Princess Louise. The first occurred on the Queen's Birthday, at which about 3,200 troops were on parade; the second, on the 9th September, at Toronto, when nearly 3,000 troops passed in review. At the first the Brooklyn Battalion of New York National Guards fell into line,

and fired a feu de joie with our troops. They afterwards took part in and formed an important factor in the review and field day. This magnificent regiment, the first American battalion, as I informed them, that had been under the orders of a British general officer for full one hundred years, acquitted themselves with the credit their soldierlike appearance inspired. Their visit was in every respect a happy success, pleasantly stamped in the memory of all who participated. The Toronto review was, I believe, the largest that nad ever assembled in that city. At both, the troops of all arms presented a very soldierlike appearance, each corps vieing for distinction in neatness and military proficiency. His Excellency and Her Royal Highness were pleased to express their satisfaction in very gratifying terms, and I am assured these reviews were productive of good effect.

During the progress of the Governor General and the Princess through the Maritime Provinces, Quebec and Ontario, in the course of the summer, the militia spontaneously fell under arms at each point, and elicited His Excellency's approbation, recorded in General Orders.

Unfortunately, in August last, a riot occurred in the City of Quebec, between ship labourers of different denominations, which at one time threatened to require military interference; but happily though some lives were lost in party conflicts, the troops, which were kept under arms for several days, were not called upon to interpose. The city corps turned out with alacrity; they did good service in patrolling the roads approaching the city and inspiring confidence.

I must repeat, I think it unfair, and expecting too much self-abnegation, to call out militia who are denizens of the same city with those whom they may have to subdue, some perhaps friends, even relations and near of kin, and to require them to enter into hostile collision, with possibly some loss of life on both sides. The militia respond, and will do so again and again, but when loss of life occurs through their being called upon to fire, what must they expect among the roughs of that city when pursuing their vocations of civil life? Therefore, I am sure every thinking person will agree that, besides the two Battery Schools, a stronger force of embodied troops should be at hand in case of a repetition of disturbances in any of the large cities But it is as difficult to keep the necessity for military preparation before the eyes of a free and peaceful population, bent on energetically developing the vast resources that surround them, as it is to preserve from rust and from the deterioration of prolonged peace the military institutions themselves.

To you is due the conception of introducing an important ingredient in training the youth of the country and giving them an outline of mechanical drill. The cadet companies formed in the universities, high schools and colleges of the Dominion will have good effect. At present they are not to exceed 74 in Quebec, Ontario, the Maritime Provinces, Manitoba and British Columbia. They are to be instructed in military drill and training only, and on no account to be employed on active service. Rifles of the Snider pattern to

be furnished by the Government only when the company exceeds 40 lads over 14 years of age. The services of a drill instructor will be supplied and paid by the Government during one month in each year, or longer, if considered advisable, and the month may be divided, it desirable. The pattern and color of the uniform to be the month may be divided, it desirable. The pattern and color of the uniform to be approved by the Government, and may consist of tunics or Norfolk jackets, approved by the Government, and may consist of tunics or Norfolk jackets, of scarlet, blue, rifle-green or grey; blue black, rifle green or grey trousers, with forage cap or shako. Clothing of any pattern worn by eadets or soldiers in foreign countries is prohibited.

There can be no doubt that drill calls into exercise much of the powers of the human being, and hence, when judiciously applied, essentially promotes the health and physical growth of the frame. The School Board of London has for years past acknowledged its value, and has included it among the duties to be performed by their teachers. It is due to them that over much of London, and under great difficulties, they have been earnest and persevering in endeavouring to provide for the physical culture of youth. In giving them habits of obedience to command, precision of movement and manly, erect carriage of body, they have done that which tends to create self-respect, and improves a whole community. Such may be likewise, and probably will be, the result of the system now in its infancy in Canada. When this has been some years in use in all the chief collegiate establishments as a recreative means of promoting sound health and correct deportment, it may, though it never ought to be, deprecated by peaceful disbelievers in all military requirements, because it will surely be conducive to the growth and sustenation of the military spirit of the youth of Canada.

In order to provide immediate facilities for officers who have been appointed provisionally to companies of infantry to obtain second-class certificates of qualification, three schools for practical military instruction have been authorized to open in January at Toronto, Montreal and St. John, N.B., during a period of two months. In order to provide for such drill instruction, nine non-commissioned officers have been added to "A" and "B" Battery Gunnery Schools, and they will attend duty and drill with their batteries during the months their services are not required as instructors.

But it would be a mistake to suppose that a technical education, and much more study than the foregoing can provide are not required for even the ordinary drill, general management and interior economy of companies and battalions. For cavalry, artillery and engineers, particularly the two latter, special scientific attainments cannot be dispensed with. I therefore revert to the larger provision for instruction of regimental officers and sergeants of cavalry and infantry after the principle of or engrafted upon the two gunnery schools, which provide for artillery and somewhat for engineers. So long as Imperial regiments were in Canada they formed a basis and model providing means for instruction. Since they went, the study of books has been the chief instruction; and theory without practice does not provide the root from which the branches must spread and fructify. Schools should

therefore be provided for elementary drill and discipline in cavalry and infantry tactics, in interior economy of regiments, and in the management and command of armed men. I have referred to these in some detail in previous reports, and I venture again to repeat the mode upon which these permanent schools can apparently be best put in operation. They would afford an elevated standard of primary military education and practical instruction, with conditions of regularity, precision, discipline and respect for authority which are necessary for those who have to instruct and command obedience from others. They would give strength and solidity to the active force, and would secure confidence in the stability of the institutions of the country, providing a guarantee that the military force is in a condition to maintain law and order.

Does not the proper organization of a military force, including training for its officers and non-commissioned officers, devolve on a country as much as the means of administering the laws which are carried out under its protection? Should it not, therefore, follow that steps should be taken to provide for the efficiency of the military establishment, by supplying the want which the withdrawal of the regular troops has created? This want, every year, is being more and more felt, and I have often pressed that a remedy might be applied. As yet, some officers who have received instruction in the schools formed in connection with the regular regiments, and non-commissioned officers, who are old soldiers, are still available to instruct recruits in the rudiments of drill. These conditions are, however, rapidly changing. We have now no such schools, and, except the "A" and "B" Batteries, there is no body of men with professional training to ensure the advance of discipline and military science, and to profit by trained experience. Without some professionally trained force, the standard of efficiency will gradually become lower, and the form of military service will be maintained, while the spirit, though far from dead, will be crude and uneducated.

Canada should have men whose business it is to study the art of war as professionals, and not merely as amateurs. The very best irregular troops are only formidable when properly drilled and disciplined, and for this there is great need of the indispensable element of trained and experienced officers and non-commissioned staff. When troops are but partially trained, the only hope is from individual intelligence and strict discipline on the part of the commanders and their subordinates. It is preparation that ensures success when the unlooked-for day of trial suddenly arrives, and therefore a perfect organization, with skill and efficiency in every branch, with superior discipline, are necessary. But to compass this, permanent bodies of men, even if of small numbers, are indispensable. I have often suggested, as strongly as I could venture, the establishment of three training schools for cavalry and infantry on a similar basis to "A" and "B" Batteries, which have proved so useful for artillery. These schools would serve besides, as standards of comparison useful for artillery. These schools would serve besides, as standards of comparison for the real army of the country, viz.: the Active and Reserve militia. Canadian

officers can be found who have been disciplined by "A" and "B" Batteries, or some of the officers of those Batteries, fairly qualified to command these schools. The appointments should be for a limited term, with the power of renewal, conditional on the officers keeping themselves acquainted and conversant with the changes and improvements in the art of war, either by visiting Europe or otherwise. There should be a doctor and quartermaster, with three officers of subordinate rank who have evinced good capacity, are willing to embrace the military profession as a career, and would receive commissions to act as cavalry and infantry instructors in the schools. To these schools all gentlemen recommended for commissions in the militia would be required to come, for three months at least on first appointment. when their commissions would depend on the ability they displayed. Before promotion, officers should be required to attend for three months, passing through a course of training, and required to obtain a qualifying certificate. For non-commissioned officers and rank and file, men should be enlisted for three years, with inducement in case of efficiency to re-engage. From these the non-commissioned staff of paysergeants and drill instructors would be selected, but all would learn those duties though serving as private soldiers, and would on discharge be valuable as instructors. in the militia generally.

It is an axiom that in all men it is necessary to learn to obey before being qualified to command, and these schools would fulfil these objects.

My previous suggestions were to form three separate schools, composed of about one hundred men each, and to station them at Toronto for Western Canada, and because there is a good barrack there; at St. John's, P. Q., because it is an important strategical point in advance of Montreal, and because there is a good barrack there; at Quebec, because that city requires an additional drilled force, and because there is a barrack there.

The calculation I published last year for only eighty men and three officers per company amounted to the cost annually of about one hundred and thirteen thousand dollars for the three schools. The estimates will be found in detail in last year's report.

Should it not be convenient to establish these three separate schools immediately, I suggest the perhaps preferable alternative of increasing "A" and "B" Batteries at first by three officers and 100 hundred men each for cavalry and infantry, thus constituting them brigade schools for the three arms under the present commandants.

I suggest that the artillery artificers whom I have already submitted to be absolutely necessary for keeping the fortifications of Quebec and Kingston in repair, should be included in the 100 men, say 25 for each battery, leaving a balance of 75 men for each training school, independent of the students for "short" and "long" courses.

It may be surmised that 50 men in each would be sufficient for the latter purpose, and so they would in some measure, and faut de mieux; but when we deduct non-commissioned officers and men going on and coming off daily guard with two

sentries, always requiring 16 men per diem, besides cooks, orderlies, sick in hospital and their attendants, prisoners and men to attend them, &c., &c., there would not ever be more, and seldom so many of the 75 as 50 men daily available for drill and instruction, and squads for the long and short course officers and men.

Moreover, Quebec requires a large disposable force of drilled troops to steady the city militia in case of riots, and to guard the costly and valuable military stores and powder magazines in the arsenal on such occasions, which latterly have been of annual occurrence.

To complete this scheme, there should be an addition to each battery of 12 horses, to train in equitation the cavalry attending the schools, and to horse all four field guns instead of only two, as at present, with eight horses.

The addition of 12 provides for mounting the four Nos. 1 of each gun, without which the battery is not efficient.

At Kingston these horses would likewise serve for the equitation of the cadets of the Royal Military College. They have been frequently applied for by the commandant, and without them the college course is not considered complete.

At Quebec a saving would accrue by employing some of these horses to draw from the lower town forage, military stores for the magazines, &c., &c., which is an annual expense. After their purchase, their daily forage would be an insignificant amount compared with their general utility.

ESTIMATE of the probable expense of maintaining an addition to "A" Battery of three officers and 100 men for 12 months, of whom 25 to be employed as artificers and 75 to form the basis for an Infantry School. The estimate for "B" Battery is similar.

	\$ cts.	\$ cts.
	3 00	1,095 00
1 Captain	2 00	1,460 00
1 Captain	1 00	730 00
2 Lieutenants 2 Sergeants' Instructors	* 0 80	584 00
2 Sergeants' Instructors	0 70	1,022 00
2 Sergeants	0 45	15,111 00
4 Corporals	0 12	4,511 00
Rations for 105		3,500 00
Uniform, summer and winter, kits, ooots, stransport, fuel and		7,500 00
TIGHT CONTINUE CHOICE THE		* 005 00
Good-conduct pay i and diem for days actually		1,033 00
employed during eight	40	37,641 00
Total		1
		37,641 00
Similar for "B" Battery		

So far the active force has been maintained entirely by voluntary enlistment. Officers and men are alike engaged in industrial pursuits for their annual income; they can spare neither time nor means to embrace the military profession only, but they have expended both time and money in making themselves and their corps efficient as circumstances permitted. Experience has shown an armed force necessary; its usefulness has been often proved, and should therefore be efficiently maintained. This can only be secured by such primary instruction as permanent embodied schools would provide. The qualifications of an officer should be of a personal, practical and technical nature, as well as intellectual and theoretical.

It is quite possible to secure great natural talent, suitable for regimental work, without its possessor having also highly cultivated attainments. The success of a regimental officer depends less on the great superiority of intellectual powers than on his ability to command wisely, and a peculiar fitness for the work he undertakes. The officers of the active militia have civil occupations, and are chosen from various social ranks; they have not time to become exclusively military in their tastes and habits. Even when infantry schools are established, their occupations will not permit lengthened absence from their business at any period. They can only, therefore, obtain sufficient knowledge for regimental work, in the course lasting for three months. The instruction imparted would nevertheless result in great advantage to the country.

It is almost unnecessary to repeat the excellent effect apparent throughout the artillery of the Dominion from the training and example of "A" and "B" Batteries, Schools of Gunnery. The care and attention bestowed by the Inspectors of Artillery, Lieut... Colonels Strange and Irwin, and the officers of those batteries generally, are deserving of full commendation, The batteries are in a most efficient state, and emulate in favorable comparison with the Royal Artillery. The benefit of their instruction is felt throughout the artillery of the Dominion. Recently an addition of five non-commissioned officers has been made to B, and four to A Battery, to provide drill instruction for the cadet companies and the three provincial military schools. Parliament will probably sanction the addition of one hundred men and three officers to each battery. The twenty-five artillery artificers would relieve the Department of Public Works of considerable labour and expense. These artificers would be most usefully employed every working day in the year, and by at once giving attention to injuries in the masonry of the fortifications from the effects of the severe frost, by

repairing breaches, in which water lodges and bursts the walls when frozen, they would only be continuing the former constant work of the Royal Engineers, to protect the masonry from decay. The Department of Public Works can only supply workmen at stated times, and it happens that sometimes repairs are undertaken so late in the season that winter arrives before their completion. Year after year the effects of winter frost, in gaping fissures in the masonry, will be destructive. Even now, walking round that grand old Citadel of Quebec, one's eye is arrested at every few paces by delapidations which might be repaired on "the stitch in time" principle, but otherwise being overlooked, grow yearly worse. The country has a national pride in that fortress formed by nature's hands. The battles which decided the fate of Canada surged round that grim old rock in the past century. For the sake of maintaining a few artificers, the cost would be well repaid by preserving its formidable monuments of art. The extensive fortifications at Kingston stand equally in need of constant watchful care, and the splendid new forts on Point Lévis Heights cannot be neglected.

The addition of seventy-five men to each battery, to constitute brigade training schools, must commend itself by every argument that can be applied as an urgent necessity. The question of localization, organization and equipment of these batteries and proposed additions, was ably discussed by Major J. G. Holmes, Adjutant of "A" and proposed additions, was ably discussed by Major J. G. Holmes, Adjutant of "A" Battery, in his prize essay of August last year, to which I invite attention as an excellent commentary. I have said so much on the subject already, I must only leave the solution of this important improvement to the careful consideration of the Legislature.

No better opportunity could be taken to expand these useful batteries than as a sequence to the gracious consent of the Queen to the two gunnery schools of Canadian artillery being termed henceforth "Royal."

The special reports on these batteries by their commandants will be found interesting, in the Appendix No. 4.

In the course of the past year, Lieut.-Colonel Strange lectured before the United Service Institution in London, upon the "Military Aspect of Canada." The character of the information given in that paper renders it of value. It reflects credit on the assiduous labour of its author to spread abroad the fullest military considerations of this great Dominion, and I think it an important addition to the Appendix No. 7.

The constitution and satisfactory progress and development of the Royal Military College at Kingston was so fully mentioned in last year's report that I need not refer at any length to it again.

Under the enterprising command of Lieut.-Colonel Hewett, and his able staff of instructors, the college has even surpassed expectation, and forms one of the most important military institutions in the Dominion.

The staff, numbering thirteen professors, is now complete. Seven of these are officers of royal artillery and engineers, the remainder are Canadian gentlement

of collegiate culture, and the captain of cadets, an officer of the 90th Light Infantry is of Canadian family. The cadets now number eighty-two and the names of twenty-five new candidates have been registered for examination being almost the complete quota of one hundred and eighteen comtemplated by the Act as amended in 1876 by Order in Council. In June next, the first batch of cadets will have completed their curriculum, and will quit the college with a high standard of education. By the gracious consideration of Her Majesty, four commissions in the army may be competed for each year, either in each of the four arms, or otherwise. according to the choice of the cadet. This will be looked upon as a prize worthy of every emulation, and will become another interesting connection between Canadian families and the Mother Country. Should the nucleus of permament corps be adopted, these young men will be foremost as disciplinarians and instructors; their high class education will render them valuable in any position of military or civil life; they will present an admirable tone to their surroundings as cultivated examples of order and respect for authority.

In accordance with the Act, a Board of Visitors has been this year appointed to make inquiry into the accounts and general working system of the college. This board will in future assemble annually. It would have been premature to induct this supervision until the college had arrived at its present maturity. (Appendix No. 11 for Report.)

The employment of torpedoes has become so universally adopted by all maritime powers for coast and national defence, it must be considered of great importance that the cadets of the college should thoroughly understand, at least, the theory of the system.

This science has now reached a stage almost as important as gunnery, and I suggest that a class be formed for the instruction of these young men. Besides theoretical aquirement, it would be desirable that, in the summer months, a practical course should be studied, at which officers and some men of the engineer companies should, if possible, be required to attend. A full knowledge of the use of this important engine of modern warfare could be acquired by experiments in Lake Ontario, or in the Cataraqui River, and I think one or two of the "outrigger," which for colonial defence, is considered preferable to the more delicate machinery of the "Whitehead," description of torpedo, as recommended by the despatch from the Secretary of State, referred to at page 27 of last year's report, should be imported before next summer. Lieut.-Colonel Hewett's report is so ample in itself, I need not do more than suggest its perusal in the Appendix No. 12.

The fraudulent enrolment of men in more than one corps for the period o training requires strict attention on the part of inspecting officers, but more particuarly of commanding officers, captains and adjutants. Such misdemeanors are occasionally attempted in the militia of Great Britain, but there they are readily detected by the attendance of the adjutant and a staff-sergeant of neighbouring battalions that are not out for drill at the same period, In Canada, there is no permanent staff to any battalion, though I have pointed out this defect repeatedly. The system adopted for the past three years of only training a portion of the active militia every alternate year tends to a laxity which renders it difficult for captians of rural companies to maintain them efficiently, but there is no excuse for their permitting the law to be evaded, which enacts that men shall be enrolled for three years' service, sign a roll and take an oath, and forbids their quitting without six months' previous notice of their desire to do so. It therefore becomes all the more incumbent on commanding officers, captains and adjutants to take care that the obligations of the Act are not defeated. A case in point has just occurred at Belleville. Two men of the 49th Battalion were detected and admitted that they trained with the 15th some weeks previously, one receiving six and the other two dollars. They said they merely loooked upon it in the light of daily labour. The Adjutant prosecuted these men under the Militia Act 31 Vic., cap. 40, sec. 26, but, for want of sufficient evidence, or owing to some legal technicality, the men were acquitted. The captains who permitted these men to be trained in the 15th Battalion should, however, be called to account, because they must have known that they had infringed the law distinctly laid down in 31 Vic., cap. 40, sec. 9, which directs men to be enrolled for three years, to sign the service roll according to form at page 13 of the Militia Regulations, to take the oath at page 12, section 25, and to observe the law at page 14, section 29 of the same, which, quoting 31 Vic., cap. 40, sec. 8, forbids any militiaman to have permission to quit the force without giving six months' previous notice. Unless officers are peremptorily called to account for allowing their men to neglect or evade the enactments of the law, such misdemeanors may continue. It is not possible for staff officers to be entirely responsible; the onus actually rests with the captains of companies. Their men must be all personally known to them, and if they took proper care that the law and rules before quoted were observed inviolate, these improprieties would be of rare occurrence. The best remedy to guard against this evasion of the law will be by inspecting officers personally, requiring each captain to certify, upon honor, that every man present for annual training with his company has fulfilled all the conditions of the law under the statutes before quoted. They should also be required, before the men are dismissed, to call over the service roll in presence of the inspecting officer, and to account for any casualties upon examination perceptible therein before being certified for payment. Staff officers should therefore, in their annual reports, certify that this rule has been attended to by every corps inspected by them, and with what result. It is distinctly the duty of every officer of the militia, whatever may be his rank or degree, to guard against fraud or misappropriation of Government funds, from any cause whatever. I feel sure it only requires this duty to be pointed out in order to enlist the co-operation of all staff and regimental officers in vindicating the laws essential for their guidance in the proper administration of the militia service.

The Dominion being divided into 12 military districts, each has its Deputy-Adjutant

General and, except three, a Brigade Major, under orders from head quarters on general routine duties and supervision, inspection of corps after annual training, making periodical inspections of armouries, holding boards, courts of inquiry, court martials, &c., &c. Without such well informed local staff officers, the endless details which are more important and frequent than generally apparent or known by the ordinary public in civil life, would not be carried on with reliable accuracy and prompitude. It has been fitly described, that without a staff an army is like a giant lying prostrate, who, though powerful to outward appearance, is destitute of bone and muscle, and consequently incapable of action.

In case of war the existing staff would probably, as a general rule, not be removed from their sphere of action. They are, more than any others, familiar with the military resources of their districts, and possess the requisite knowledge for organizing and forwarding reserves and material to the front. Their presence therefore could ill be dispensed with, and senior officers of the active force would probably be appointed to command divisions or brigades with a suitable staff. There are many admirable officers of long practical experience in each arm of the service, and so it is desirable that annual drill should always be performed by grouping battalions and corps of all arms in brigade camps, in order to practise officers in the operations and manceuvres and handling of large bodies of men. The present district staff are careful and painstaking officers, some with long military training and service. I have reason to speak in high terms of the zealous attention they apply to perform their duties. They have afforded myself and the Adjutant-General cordial assistance and support during my service in this command Referring to artillery inspections in last years report, at page 26, an expression escaped me which taken literally, is misleading My only object was to leave uninterrupted the scientific and technical examination of these special corps to the Inspectors, who are by practical study and education the best qualified in that spécialité. I respect these staff officers who have given me their cordial co-operation, and regret if unweighed words unintentionally hurt any of them.

The Adjutant-General, with painstaking assiduity, has compiled a new Code of Regulations and Orders for the Militia. This consolidated work embraces sections of the law relating to the militia and defence of Canada, the regulations and orders for the militia, and extracts from the Queen's Regulations. This book was in type before the receipt of the Army Discipline and Regulation Act of 1879, which supersedes the previous Mutiny Act and Articles of War, consequently an addendum will follow embracing such portions of that Act as shall be considered in general practice, necessary for reference. As the termination of my service in Canada approaches, I wish to express my thanks to Colonel Powell, Adjutant-General, for upwards of five years able assistance, and very cordial and agreeable official intercourse from our first acquaintance to the present day. He has laboured with persevering tenacity of purpose for nearly eighteenlyears on the staff in establishing, expanding and consolidating

the militia of the Dominion. The result of his single minded exertions is at least, self-rewarding, and will I trust be crowned with continued success.

It has been suggested in previous reports, that there should be another senior officer on the head-quarter staff, to perform the duties pertaining ito Quarter-master General, intelligence, clothing, and supply. It is too much to require one staff officer to perform all the details of an armed force between the Atlantic and Pacific Oceans, spread over an area of territory nearly as large as Europe, a great terraqueous region comprising over three millions and a half of square miles. Through the diligence of the Adjutant-General, the military department proceeds with due regularity; but a sudden call to arms would demand new energies, and they should be trained in peace. The single chief of the staff might become incapacitated, and then there would be a friction without a substitute.

The increasing importance of ordnance manufacture and conversion, the arming of coasts and harbours at the east and west extremities of the Dominion, the proposed introduction and employment of torpedo practice, all point to the expediency of attaching a staff officer of the ordnance branch to the head-quarter department; an Inspector General of Artillery or Surveyor General of Ordnance at head-quarters would be a useful addition to the staff, saving delay and correspondence, which are under the present system unavoidable.

The military forces of the Dominion have attained a more regular and solid character, though the exertions and spirit of the volunteers are deserving of the additional support in parliamentary appropriation which, I trust, the legislature will see fit to grant in due time. National defence cannot, however, be confined to the maintenance alone of squadrons of cavalry and battalions of infantry; attention must be given and energies must be directed to the necessity of sterner armaments in supplement to the excellent and well organized militia of the line. The brave people of Canada will rise step by step, as it were beyond the mere militia stage, and by means of home appliances will shortly accomplish éntire self-reliance for defence in arsenals and manufactories of their own. As this important system expands so must the craftsmen be at hand to work it, and steps should be taken to train on such working staff, who can no more be extemporized without practical experience than the driver of a locomotive on a railway.

It is noteworthy what a staff is considered necessary for civil departments, whether of Government, of banks or counting houses. Their duties are conducted in comfortable offices at regular and fixed hours, with no skilful and active enemy in the field to resist or cope with; how much greater is the need for trained and experienced staff officers for an armed force, where want of skill and practical experienced staff officers for an armed force, where want of skill and practical knowledge, with the confidence to be acquired only in years of military study, might cause irretrievable disaster and loss of life.

Then would duly follow the criticism of irresponsible and non-military correspondents, who passing by the causes, would assume the latitude of sitting in

judgment on the tactics of the commander in the presence of an enemy, and sending their views broadcast, as though themselves capable of superseding to the advantage of the public service the commander they condemn.

Bearing in mind that a country goes to war, not for the purpose of supplying the public with spicy paragraphs, but for the object of conquering the enemy, it is not to be wondered at that restriction has at length been found necessary, as well to deprive the enemy from information as in the interest of the public service and the discipline of the army.

A commander of forces in presence of an enemy is bound to have the services of a trained and skilful body of staff officers of all arms, in the interest of the army entrusted to his guidance.

To drill and discipline in peace time an army at all commensurate with the need of Canada, if obliged to undertake a serious war, is evidently out of the question consequently, all that can be attempted is to maintain in a fair state of efficiency a small force which would, on the threat of hostilities, serve as a foundation of one much larger. With this object in view, it would follow that it might be preferable. with a given sum of money, to increase efficiency even at the expense of some small reduction of numbers. Canada has an excellent organization, but, perhaps, rather widely spread for the parliamentary appropriation; it might be preferable to maintain the numbers only that can be sufficiently disciplined to serve for being adequately increased in time of war. There should be a carefully-supervised organization of the reserves of 650,000 men, and there should be supplies of arms and ammunition, at a proportion of not less than 300 rounds per rifle, maintained for 100,000 men. A deficient amount of time to improve discipline and drill is still however a prominent defect; a more extended period is a great want and an important reform; but while this extension is not possible for 43,000 men on the sum now voted by Parliament for drill and training, would it not be prudent to reduce somewhat the number still further, so as to afford the 20,000, which might for a time represent the active militia of Canada, a reasonable period under arms for being more serviceably moulded. It would at the same time be unfair to overlook the large amount of voluntary exertion on behalf of national defence, by which Canadians are honorably distinguished; and this spontaneous energy will doubtless tend in the future, when revenues increase, to urge the Legislature to extend more liberality towards their national defences, and to keep up the martial spirit, and strengthen the military position of the Dominion.

Meanwhile, until that good time arrives, we are absorbing our stock of rifles, equipment and clothing, and this is a very serious and important matter.

In the annual report of 1876 a warning was given at page 43, and in last year's at pages 9 and 10, that such difficulties were approaching, and so far as relates to clothing, this is now fulfilled. The yearly supply does not meet the yearly wants, and so the reserve is absorbed. With a force of 43,000, men we should require

12,000 new suits per annum; but as the clothing vote only procures about 6,000 suits yearly, the result to be expected is plain. I don't wish to see the reduction I have alluded to in the active militia carried out beyond the unaffiliated corps specified before; but if the present active force is to be maintained creditably, a larger annual vote for clothing at all events is an apparent necessity. An addition to the stock of rifles and cartridges is equally so, and I trust attention may be given to these items. It should be noticed that a large quantity of cartridges is annually purchased by various rifle associations, and that the amount paid for it, being credited to the Receiver-General, is therefore lost to the Militia Department.

With regard to the manufacture of small arm ammunition by the Canadian Government, it may be stated that a communication was lately made to the Hamilton Powder Company on the subject. The company declines to undertake the supply as a commercial adventure, on the ground that Snider Rifles are only used for Government service, and the number of rounds required annually will not afford, after counting interest on plant, a remunerative profit on the outlay necessary to carry on the manufacture. Under these circumstances, and as it is considered necessary the Department should hold a reserve of at least 300 rounds per rifle, amounting to 21,000,000 rounds for 70,000 stand, or 30,000,000 rounds for 100,000 stand, to provide against contingencies, it might therefore appear an economy for the Government to purchase plant and machinery on its own account.

The considerations which prevail with an ordinary manufacturer, in seeking immediate profits on his capital embarked in business, do not apply with equal force in respect to the establishment of a manufacture of this nature by Government, because it is necessary the department should hold a reserve of small arm cartridges, and the cartridges are liable from various causes to deteriorate in quality. The outlay necessary to establish a Government manufactory might be considered about equal to the ordinary purchase during two years of one million rounds of ball and 500,000 rounds of blank per annum, or in other words, if the amount usually devoted to the purchase of small arm cartridges during two years, be expended in the creation of a manufactory, our reserve of ammunition would be diminished to that extent, that is, our reserve being at present 7,350,509 rounds, we should at the end of two years, when the manufactory would be in order, only have 5,350,509 rounds of ball cartridges left in store, but we should have instead, the facility for manufacturing three times as many cartridges in each year thereafter.

Moreover, if the Government possessed a small arm factory of its own the reserve of cartridges considered necessary under present circumstances might be reduced to meet the cost of creating the manufactory, provided no unusual pressure to meet a state of war should arise. The works being once established, we could produce the cartridges as cheaply here as they can be imported from England. The manufactory could be run short handed, or on short time when desirable, and be ready to work up to its full capacity whenever an emergency arose.

The cost of the machinery in England for such an establishment would be about \$30,000, and for transport, insurance, &c., of the same to Canada about \$1,300; in addition to which, buildings and laboratory fitted with an engine, shafting, bands and tackles to propel the machinery and means for filling cartridges would have to be provided locally.

The money required for their purchase might be voted next year in place of the ordinary estimate of \$40,000 for ammunition, providing the \$20,000 available this year be now devoted to the acquisition of supplies for field and garrison artillery. This would permit a reduction of the stock of small arm cartridges through practice during two years to the extent of about 2,000,000 rounds of ball and 1,000,000 rounds of blank. It is stated that the machinery in use at the Royal Arsenal, Woolwich, for the manufacture of the Martini-Henry cartridges, was made by Messrs. Greenwood and Battey, of Leeds, and that the same machinery with slight alteration will manufacture the Snider ammunition. As the machinery will require to be made and cannot be delivered before next summer, it will be desirable, in the event of this proposal being acted on, to give the necessary order at once.

It is becoming more and more evident every day that Canada should have an arsenal at least of second-class, and that this arsenal should be situated under the guns of Quebec. It would then be secure from attack. From it a successful counterstroke might be made against an enemy who had driven in our first line of defence. The transport of stores by rail, water or road to every part of the defensible area, is perhaps, easier than from any other place of arms in British North America, and the resources of the country in timber, in minerals, and the raw material necessary for the construction of munitions of war can be as readily obtained there as elsewhere. It is provided by such fortifications as would ensure its defence by a comparatively small force against superior numbers, and would oblige the latter to undertake its seige or investment with every prospect of final failure.

Quebec and Kingston each present advantages from the presence of the Gunnery Schools and skilled artillery officers. The laboratory men could be employed in the batteries when the cartridge manufactory was not required to work. Quebec is unfortunately too far east; considering that the tendency of the stream of population being westward, it would be far from the most populous districts in a few years hence. But Quebec has suitable buildings already provided, the Artillery Barrack and the Laboratory being quite ready to be adapted, and it can, in addition to its own armament, at any time in summer have the further protection of ships of war. Moreover, the North Shore Railway can now be used for transport, and being on the left bank of the St. Lawrence, and its line considerably removed from the frontier, it is a better military communication towards the west than the Grand Trunk alone. The extension of the North Shore Line with the Canada Central by Lake Nippissing and the Sault St. Marie to the west will provide a safe communication to the great lakes, and as a

centre of communication by rail and steamboat, it may on becoming a through route to the North-West, be found necessary to have a defensible position entrenched on the shores of Lake Nipissing. Kingston has similar advantages to Quebec in some measure, but it sits on the frontier assailable from Lake Ontario; while Ottawa has no buildings at all suited, everything would have to be constructed and provided, and there are no permanent skilled artillerymen at hand.

It would doubtless prove of advantage if the clothing required for the militia could be produced in Canada, but as yet, the enquiries made have not been fruitful in results. The kinds and colours of cloth used for tunics by the different arms are not usually manufactured in this country, and as the annual supply required for each arm is not comparatively large, there has not been much desire expressed by any mill to undertake it in competition with those which turn out large quantities for the Imperial army. The great coats of grey cloth which can be very well made in Canada are being supplied this year from Sherbrooke.

The reports of the several military districts will be found to contain detailed information in the Appendix No. 1. Lieut.-Colonel Taylor gives a justly favorable account of the troops in District No. 1, and comments upon their general efficiency, being well supplied with arms, accourrements and uniform, and their steadiness and attention to drill. The voluntary guard furnished during the Vice Regal progress in September, referred to in terms complimentary to the corps that participated. The exposed position of the County of Essex, on the extreme frontier of western Ontario is also referred to. It is important an efficient battalion should be at that point to cover Windsor. The subject was under consideration of the Government some months ago, but I have received no orders with reference to it.

Lieut.-Colonel Durie reports likewise, in general favourable terms of the corps in Military District No. 2, and refers to the reception of the Governor-General and Her Royal Highness the Princess Louise in Toronto, and the review of the troops on the Garrison Common on that occasion. The remarks of Lieut.-Colonel Murray, commanding 23rd Battalion, annexed to this report, are pertinent to the question of instructing officers and sergeants. He says, in all cases when companies are commanded by intelligent and energetic officers who understand their duties, everything goes well, when the reverse is the case, the company is slovenly, badly drilled, and not interested in the performance of their several duties.

Lieut.-Colonel Van Straubenzee reports very fully on the several corps inspected in Military District No. 3, and with a general favourable tendency. He specially refers to the 46th Regiment under Lieut.-Colonel Williams, M. P., and expresses his belief there is not a finer rural battalion in the Dominion. He remarks, on the impropriety I have before alluded to, in the want of sufficient care on the part of officers when enrolling their men to ascertain that they don't belong to any other corps—he has discovered several men this year drilling twice, and in order to put a stop to it as far as possible, he suggests as I have already done in other words—that

a certificate be added to the aquittance roll—"that every man whose name appears "on this roll is a bona fide member of this company, having signed the service roll for three years engagement, and taken the oath of allegiance." I had also recommended that each roll should be called over in presence of the inspecting officer, and that the captain should likewise give his verbal assurance upon honour, that all conditions had been complied with. By these means more care will be taken by officers, and a stop put to taking men at the last moment to fill the ranks for inspection. It is only by mere chance that an inspecting officer can discover these irregularities, as men have been known to drill twice in the same year under assumed names.

Lieut.-Colonel Jackson, Military District No. 4, gives a good account of the corps trained this year, and very naturally advocates brigade camps of exercise. He considers the difficulty of procuring qualified officers is on the increase from want of any established system of instructional schools. He remaks on the variety of uniforms used in his district, some in the same corps wearing patrol jackets of different material and shape, with head dresses of different patterns, and sword belts and swords of different make and quality. This is very improper, and now that dress regulations have been supplied to officers, no excuse can exist for non-compliance with them.

Lieut.-Colonel Fletcher, C.M.G., refers at considerable length to Military District No. 5, and especially to the excellent spirit noticeable throughout the district in favour of the active militia, and the truly loyal and willing disposition that, prevails throughout the force. In allusion to the garrison brigade of artillery, he remarks there are vacancies for two field officers. I am of opinion that majors in artillery brigades are superfluous, as captains of batteries would work their guns and one field officer to command the brigade is quite sufficient. He gives a notice to the Queen's Birthday review in presence of His Excellency the Governor General and Her Royal Highness the Princess Louise, and to the presence of the American battalion from Brooklyn. It is a coincidence that the double echelon of quarter columns, designed to show a solid formation to resist the impetuous attack by a barbarian multitude unsupported by cannon was adopted with complete success a few months later, only upon a larger scale on spacious ground, by Lieut. General Lord Chelmsford at the battle of Ulundi.

A commander cannot be restricted by fixed rules in the presence of an enemy, general principles must guide him to dispose his forces to the best advantage, according to the nature of the ground and the character and power of the enemy in his front.

Lieut. Colonel Harwood, Military District No. 6, gives a very fair account of the generally satisfactory state of the corps under his command. The St. Hyacinthe Battalion is now full by the addition of a new company, and having the Arthabaska-ville Independent Company attached to it. This corps is now the 84th Infantry Battalion.

Lieut.-Colonel Duchesnay, Military District No. 7, drilled 2,000 men during the training, and reports well of them. He refers to the Quebec labour riot in August last, and affords generous testimony to the conduct of the troops called out and several days kept under arms, by which a serious riot was averted. The magistrates of the city and banlieue of Quebec presented them with an address, acknowledging the valuable aid they had afforded the civil power.

Lieut.-Colonel Maunsell, Military District No. 8, has as usual submitted a report distinguished by many thoughtful and practical suggestions. It embraces a variety of questions of military consequence to the Dominion, and I can only invite a careful perusal of its matter, which it would be unfair to refer to by a mere sketch. The reception of His Excellency the Governor General and H.R.H. the Princess in the Province of New Brunswick, and the prominent share taken in the ceremonies by the militia are noted. The measures adopted by Lieut.-Colonel Maunsell on that occasion, and the quiet and orderly behaviour of the troops were very much appreciated, as afterwards duly recorded in General Orders.

Colonel Laurie, Military District No. 9, reports the training of 2,000 men at annual drill. He very properly calls attention to the necessity for a separate district armourer. By the present slow process it will be nearly five years before the arms have been gone through, and this requires prompt attention and remedy. He refers also to the necessity for infantry schools for instruction of officers and sergeants—a want so generally felt and so frequently suggested in previous reports.

The 66th Battalion, of Halifax, has this year been honoured by the title of "Princess Louise," having had the distinguished good fortune to furnish the guard of honour on the landing of His Excellency and Her Royal Highness in the Royal Naval Dockyard of Halifax, on their first stepping on shore in British North America.

Lieut.-Colonel Osborne Smith, C. M. G., Military District No. 10, Manitoba, points out the necessity of increased forces, in consideration of the influx of foreign labour, in view of the large works of railway construction now in progress. This is a very reasonable suggestion, as experience has shown that this may, at any time, be a very disturbing element. His progress in organizing mounted and infantry companies in the North-West Territories has been already fully dwelt upon in the report. He states that the action of the Government in extending the militia law to those territories and Keewatin has been thoroughly appreciated and availed of by the settlers as far as their yet comparatively sparse numbers would admit. He looks upon the North-West militia spreading with the newly formed settlements as calculated to form an important agent in civilizing that vast territory; and to become a powerful link in the chain of Dominion defences between the two great oceans

Lieut.-Colonel Hamilton Gray, C. M. G., Military District No. 12, Prince Edward Island, gives a fair account of the militia. He refers to the approval of the Governor-General of their conduct and appearance during the visit of His Excellency and

Her Royal Highness the Princess last summer. He also refers to the totally defenceless state of Charlottetown, with 10,000 inhabitants entirely at the mercy of an armed privateer which could in a very few hours levy contributions and exact plunder to a ruinous extent. He suggests forcibly the necessity for some action being taken to allay the well grounded apprehensions of the inhabitants.

This concludes the district staff reports, with the exception of No. 11, from British Columbia, not yet come to hand owing to the long distance of Vancouver Island, but that forms the subject of some special remarks further on in this report.

The reports from the commandants of the Royal Military College and the gunnery schools of A and B Batteries, have not yet reached me, but they will be in the appendix and are sure to deserve attentive perusal.

The artillery is referred to in detail from the various districts. This arm continues to derive great advantage from the gunnery schools. Some of the garrison batteries in the west, formerly detailed, might be dispensed with, having no guns. Three new batteries have been authorized to be raised in the City of Quebec and Point Lévis, where they are so much needed to man the works of the fortress and forts. They have the means of instruction at hand in the Citadel.

The 18 field batteries are in good working order. Fifteen are armed with the iron rifled nine pounder guns, one with 24 pounder howitzers, and the remainder with bronze smooth bore. They are all efficient and generally commanded by able officers.

The cavalry maintains its usual serviceable reputation. The Governor-General's body guard at the Toronto review, under the experienced command of Lieut.-Colonel G T. Dennison; the Cobourg Squadron, under Lieut.-Colonel Boulton, who as senior officer commanded the brigade; and the Squadron 2nd Regiment under Major Elliott, showed to great advantage; while the Montreal Troop under Major Tees and the Ottawa Troop under Captain Stewart elicited approbation at the Montreal review. The Ottawa Troop has had the honour of being styled "The Princess Louise" Dragoon Guards, and the efficient squadron at Quebec, under Lieut.-Colonel Forsyth, has been granted the distinctive title of "The Queen's Own Canadian Hussars." The saddlery, arms and equipments of the cavalry in general in each military district are reported complete and in good serviceable condition.

When the brigade schools of instruction are instituted at Quebec and Kingston, the cavalry of the Dominion will have the advantage of trained drill instructors, besides acquiring a knowledge of equitation and horse management, which are necessary for steadiness and to prevent confusion in the ranks in rapid evolutions.

I am glad to report that you have very considerately made a special appropriation of the funds at your disposal for the purchase of materials, engineering implements and equipments in some measure, as field companies of the several corps of engineers. This will be very acceptable to the officers who have gone to considerable expense and devoted time and talent in the instruction of the men and

providing stores for their service. In August last the Toronto Engineer Company encamped at Niagara for annual training, and was inspected by Major Walker, Royal Engineers, Professor of Fortification in the Royal Military College. His report contains matter of so much importance to the future progress of the Dominion Engineers that I recommend its being studied in the appendix. The first recommendation is for sergeant instructors from the Royal Engineers, qualified to give the necessary practical teaching on technical subjects. Also, for suitable field equipment, suggesting moreover an organization for the whole of the engineer force of the Dominion which, while preserving the existing companies, will ensure their efficiency and provide a nucleus for the necessary pontoon and telegraph trains which would be capable of gradual extension. The report further sketches out in much detail a practicable scheme which if carried out would lead to the formation in the future, of a force of thoroughly efficient engineers; but in the meantime the existing companies should devote themselves particularly to the simple field works required for placing in a state of defence a position, a village, or isolated locality, works of the greatest importance in the present condition of war. Instruction in signalling is also of consequence and should be included in their course, and generally studied as far as possible throughout the service. It is considered better to know thoroughly the application of the simple works required on the field of battle so as to be able to instruct the infantry, than to have a mere smattering of the more technical advanced duties of engineers, to a thorough knowledge of which they cannot attain without an organized system of instruction.

To the infantry I have already alluded at some length. Their organization is good, and their condition as fair as could possibly be expected under the disadvantages of no training schools and insufficient time for instruction in camp, in field exercises, target practice, signalling and especially in discipline, these can only be acquired by long continued experience, practice and application to the regulations of the army enjoining and teaching obedience and mutual respect, reliance and brotherhood, which exposure to difficulties and constant intercourse can alone inspire.

Military drill is instituted to teach men how to stand, how to walk, how to comport themselves with accurate movement of body and limb, how to sit on horseback with the best advantage to the animal and the rider; so is discipline inculcated in order that at first small and by degrees larger bodies of men should conform to recognized laws enacted and issued for their guidance. It grounds and instructs the mind in that obedience to authority which distinguishes a body of soldiers armed and drilled for mutual defence of their country, from an unorganized crowd. The Articles of War, Mutiny Act, the Queen's and Militia Regular tions, and later the new Army Discipline Bill, are each and all compiled and circulated with that just object. No officer should therefore be ever at a loss to understand his duty as laid down either towards his brother officers or the soldiers under his command. It is the duty incumbent upon all officers who are entrusted with the

honoured distinction of Her Majesty's commission to conform themselves, from the highest to the lowest, and to inculcate in those under their orders, these most plain and necessary laws and rules compiled for the better discipline of Her Majesty's forces. Cases do and must naturally occur among large bodies of men where differences of opinion and disagreement must arise. For this, provision is wisely made and the manner in which officers and soldiers should proceed to obtain redress for any grievance under which they may conceive themselves suffering, is prescribed by the 12th Article of War which in set terms states: "If an officer should think himself "wronged by his commanding officer and shall upon due application made to him. "not receive the redress to which he may consider himself to be entitled, he may " complain to the general commanding in chief of our forces in order to obtain "justice, who is hereby required to examine into the complaint and to make his " report thereon in order to receive further directions." On the other hand, the 36th and 38th Articles of War enact very summary measures upon any officer or soldier who shall "conspire with others" or "disobey the lawful command of his superior officer."

In the British army fortunately, the necessity for resorting to a court martial upon an officer is very rare and never, except for flagrant misconduct requiring condign punishment. In the Canadian militia there has been no court martial upon an officer that I can trace or ascertain, and so, evidence on oath is without precedent as regards them. Courts of inquiry have been therefore resorted to as fulfilling the necessary ends; they are not judicial courts, but they are usually required to give an opinion. They are assembled to collect and record information on the origin or cause of certain facts or circumstances that cannot be otherwise procured, and upon which the convening authority may arrive at a fair and just conclusion. Officers entrusted with Her Majesty's commission are bound by a code of honour which forbids any but honourable and truthful dealing. The evidence of officers before a court of inquiry and the opinion of its members are therefore rarely, if ever, found departing in any degree from truth and honesty of purpose. Resort to the 35th Article of War has never been necessary. The president and members of a court of inquiry, with local knowledge and the opportunity of witnessing the bearing and comportment of evidences, have more than any other, the best means of giving a correct and upright opinion. That opinion with the corroborated evidence of several witnesses must therefore greatly influence the ultimate decision. It may be urged that every person whose acts are thus impugned should have the opportunity of rebutting or endeavouring to refute the accusations against them, and so in strictness it may in many instances be admit. ted they should. But there are certain unfortunate occasions when articles of war are obviously disregarded or forgotten, when the law is in a measure taken into the hands of one or more persons; when perhaps, a commanding officer is obnoxious, and they pursue a course of opposition and hostility with the desire it may be, of

coercing him to do that which he declines to do, or even ultimately removing him from the regiment; when it appears that a party of officers act in concert or with a common object of thwarting instead of showing a disposition to support their commanding officer as enjoined by regulations, and the immemorial custom of Her Majesty's service. There can in such cases, be no necessity for prolonged investigation, to mitigate, disprove or excuse, that for which the military code admits of no excuse or mitigation. The 12th Article of War which should have been the guide, has been overlooked. It would strike at the root of all discipline if officers or soldiers were permitted, either thoughtlessly or wilfully to disregard these plain and practical laws, and set themselves at variance with constituted authority regardless of the legitimate means of redress wisely provided for them. It is enjoined by the Queen's Regulations to be the duty of a commanding officer to bring specially to notice of the inspecting officer, without favour or partiality, any officers who may be distinguished for attention to and proficiency in their duties, as well as those who from incapacity or habitual inattention are deficient in a knowledge of them, or show an indisposition to afford the commanding officer that support which he has a right to expect from them, or conduct themselves in a manner injurious to the efficiency or credit of the corps. The authority from whence military commissions emanate has power to withdraw them on sufficient grounds, in the interest of discipline and example, and it cannot be expected that the sympathy of the public, to whom facts are unknown, can influence proceedings in such cases. They are only carried into effect without partialty, favor or affection, without personal regard to the individual, from motives of equity, to vindicate discipline and according to the custom of war in like cases for the better government of Her Majesty's forces.

If, as I ventured to mention before, political considerations could be extinguished entirely from the volunteer force, the body itself more solidified by the reduction of certain of the less efficient companies and garrison batteries of artillerymen without guns, previously alluded to, the number of days' drill increased, the assembly of camps of exercise, some rectification of the pay, just claims for contingencies quickly liquidated, and primary schools provided for officers and non-commissioned officers, the active force would be sufficiently effective to all practical intents and purposes. Even corps in rural districts would be comparatively no exception, and would be always as available for duty as the others whose conditions are now fovorable.

The question of affording aid to the civil power which nearly annually occurs, leads to a reconsideration of the prudence of calling upon the active milltia alone to maintain peace and order in the cities and towns where the police may be unequal to it, and to risk their coming into collision with the population amongst whom they reside. These corps whenever called upon always loyally respond, and happily so far there has been no loss of life. I may except the case of "B" Battery last year; but it is not fair to continue year after year to call out local corps to maintain order



or perhaps quell serious riots by force of arms, when some of their opponents are sure to be acquaintances, and may be even friends or relatives.

This consideration among others led to the reference in last year's and previous reports of the institution of permanent battalions of infantry for service in Canada. and by rotation in Great Britain, or if thought preferable interchangeable periodically with regiments of British infantry. I know this scheme to be opposed to the idea of certain students of a special train of reasoning: who fear its adoption would place the militia in a lower scale, and supplant or supersede them in public opinion. As regards that, it would have a directly contrary effect by providing a standard of excellence and furnishing in a far more complete degree, the requirements claimed to be provided by the infantry schools. I wrote a memorandum at considerable length two years ago, entering into details by showing how best the introduction of this plan could be begun; for the introduction would be the chief difficulty; and though I know Canada is not at present rich enough to attempt such a scale of permanent force, yet the time is not far distant when the great, growing and expanding Dominion will require it, when the North-West Territories become a populous region and the Dominion has risen in magnitude and corresponding importance in the family of nations.

The project to which I refer only took the following shape, but the time may arrive in the near future when it will be entertained for deliberate consideration; To be raised in Canada, three battalions of eight companies each, 24 companies, to be trained in Canada for six months. Each company 80 men, enlisted for six years. After six months, six companies of each battalion, or three battalions in all, to be sent to England for three years service, leaving two recruiting companies each, or six in all in Canada. On the departure of the six service companies to England, raise two additional depot companies to each battalion; thus making six per battalion in England and four similarly in Canada. After the first three years from the departure of the service companies, they would begin to return, their places being taken by men from the four depot companies. When this takes place the service companies should be raised to eight and two more companies added to the depot, thus maintaining their strength at four per service battalion depot. There would then be eight service and four depot companies for each battalion. Two of the latter would after three years in England, be well drilled and disciplined soldiers and on return would join the depot companies. Thus by procedure at the end of the first six years, most of the men of each battalion would have been nearly three years in England and the remaining term in Canada. They should then have, the option to re-enlist with additional pay, or join a reserve with a retaining pay of six pence a day, and if they had been employed in war a gratuity besides. No doubt, many of them would gladly join the active militia where they would be very useful as drill instructors. After six years, it is not improbable that Canada will find it necessary

to maintain three full battalions of eight companies each, composed of 80 rank and file per company. A regular system of affiliated battalions would thus follow, three serving in England and three in Canada, from whence the officers and men could be drawn.

This project though only now presented in a crude form, would eventually materially benefit Canada, and the Empire as well. It would of course when taken up be put into working shape by financial experts. The difficulty would arise at the outset, because a chief point would be to introduce the system as cheaply as possible. The second point is to affiliate the Canadian with the royal army, and so draw even closer the bonds of union between Great Britain and the Dominion, besides notably providing the latter with a constant flow of disciplined officers and soldiers to serve after their engagement, either in the active militia or enrolled in the reserve.

The method sketched out, with the view of falling financially light on Canada, corresponds in some measure with the old system of recruiting the army in India, by which a battalion always serviceably strong, except perhaps just after supplying the yearly drafts, was maintained by provisionally amalgamating all the Indian depots at Chatham. The officers and men were maintained in the British establishment till the date of their embarkation to India, after which they were paid by the Indian Government. In the same way the projected plan would be agreed upon between the Dominion and the Imperial Government, and Canada would have the pleasure of assisting materially in the solid foundation of an organized military empire, and at the same time have the benefit of a well disciplined battalion of infantry for six years, and three battalions after that term for home service. The former system of maintaining at home a four company depot of every regiment on foreign service other than India and China, was much upon this plan; six companies of each battalion serving abroad and four at home, the latter being kept at full strength to fill up the service companies. The companies being 80 strong, we should always have in each depot nearly 300 men for duty, or 900 between the three battalions, though a proportion would of course be recruits. When the reserve was formed there would be a valuable addition to the fighting force of the country without any charge upon the Dominion Exchequer, as they might be paid by the Imperial Government and be liable for future army service. As the Imperial Government would have the use of three battalions of soldiers, it is suggested that all transport from and to England should be defrayed by the latter; it would amount to little more than a few hundred tons of troop ship coal per annum. The Royal Military College of Canada would supply a highly educated and professionally proficient class of young officers, and Canada can provide from its gunnery schools and elsewhere many young men of an excellent military class besides. As I have stated the inauguration of this system would be the chief difficulty on account of expense, and it might hardly be appreciated or commend itself generally until developed and fully worked out. Last year's report showed, the approximate cost of maintaining three battalions of infantry in Canada, and it has since been stated that the British army is the most expensive in the world. Notwithstanding that assertion the cost of 500 officers and men on British pay would be about £35,000, inclusive of barracks, fuel and light, equipment, clothing, medical aid, and all contingencies, and at the Canadian rate, about £40,000, so that the British army proper compares favourably with its Canadian auxiliary in that respect. Of course the rates would have to be assimilated at the lowest figure for general service. But Canada cannot yet afford this expense in addition to her admirable militia force.

The arming of her seaboard must also be one of the prominent and more immediate objects, for it will not be suffered that every-time a diplomatic difficulty occurs with one of the great powers in Europe, a sensation should follow here as to the safety of our mercantile marine and our seaport towns. In the meantime, another and very feasible project courts attention. There is an impression that every dependency of the British Crown that has responsible government and is in a position to have defensive forces, ought to be moved to take part in the military and naval defences of the empire at large. Some of the most important would certainly do so were the emergency to arise, and Canada alone would be able and willing to send ten thousand men as an army contingent if Great Britain were 'at war, but it would take time to raise and organize such a force, and the emergency might have passed into disaster before their services could be employed. The moral effect of such a contingent would however be very important, proving to the world that the British Empire, though composed of a varied collection of properties in nearly every part of the globe, could nevertheless be banded together for general defence. The establishment of permanent corps just spoken of and their consequent reserves would be one method of drawing this bond together. But there is a less expensive mode for Canada until she is in a position to take a firmer grip.

An Imperial reserve would make a solid commencement in banding together the component parts of the empire for organized and mutual support. Canada is leading the way and setting an example to other sister dependencies of the Crown in military affairs. The annual reports of the militia receive favourable comment from the British and Colonial press, reflecting the action of the Dominion Government. The conversion of smooth bore into rifled cannon; the manufacture of projectiles and gun carriages; the proposed construction of a cartridge factory, and other material progress, are acknowledged to indicate the growth of a healthy self-reliance and national military enterprise. It follows that Canada should improve her lead as an example to her sister colonies and a great addition to her own strength by forming an Imperial reserve. The experiment would prove the country to be in earnest, would probably be followed by Australia and other colonies, and produce an independent moral, as well as material effect upon foreign nations.

As I have often had the pleasure of saying before, there is no lack of military spirit in Canada; the population would make immense sacrifices in case of danger to their country, and they possess the hardy material for splendid troops in an eminent degree. The hazardous lives of the backwoodsman, their precarious calling in the forest and in navigating the mighty rivers of this continent, inures them to danger, accustoms them to discipline and resource, and binds them in a bond of mutual reliant brotherhood which would render them valuable and excellent as soldiers On the outbreak of war and a call for reinforcements, Canada could speedily send more men than could prudently be spared, for war in Europe would require Canada to look after her protection at home; but to raise an army reserve in Canada in calm deliberation, with no sentiment of war to excite military ardor, might depend for success upon the conditions and advantages held out. These can however be made sufficiently attractive. Farmers' sons, farm laborers, mechanics and tradesmen's families, and such persons of fixed tenure in the country, would naturally be the class to look to; the loose and nomad population of towns would be worthless, while young men with some fixed abode and tenure in the soil would no doubt be found in ample number. The migration westward now in considerable motion, might be some check, because the country is so territorially enormous men could hardly be recovered who had found their new homes among the inviting valleys between the spurs of the Rocky Mountains, but we must always expect that though some might shirk their obligations many would not do so.

An Imperial reserve, paid by Imperial funds, officered and recruited from Canada alone, would be a strong and important support to the militia. They could in time of war, not only release the Imperial troops from Halifax, but send a contingent to reinforce the army. The plan upon which this organization could be adopted has been considered, and I am sanguine it would succeed. The time has not arrived to notice it more fully here, but its institution, which is valuable and important, would be incomplete without providing for the drill instruction of officers and sergeants, to ensure them to be competent in their turn. Native officers and sergeants, as well as rank and file, must be employed, accepting Canada for Canadians; the men are intellectually and physically as good as the world can produce, but unless an intellect is trained to the persuit or profession in which it is to work, it remains sterile for that work to all practical intent. Military training even of the simplest order, requires education, study and practice in ordinary drill which is easy and mechanical, in discipline of mind and body, interior economy of companies and battalions, system, law, order, equitation, topography, the management of men and knowledge of character to command with a ready head and quick hand for every emergency. How often do we find that, though nothing specific can be said against an officer, yet he may be quite unfit for his position; it is difficult for instance to prove want of tact or temper, or general weakness of character, and yet each is a serious disqualification for high military rank. Therefore, I return to the elementary military

schools I have advocated for five years and again alluded to at some length in this report. By having brigade schools affiliated with the Quebec and Kingston Batteries. the officers and sergeants would have every facility for acquiring in early life the law of obedience and respect for authority, the want of which is a bane through life. Suppose for instance this reserve be raised in proportion, by companies, in Ontario, Quebec and Maritime Provinces, about 56 companies, or seven battalions. to be trained for a month each year with drill pay, in addition to 6d. a day per annum; enrolment for six years; to serve anywhere, and provision for families during war; a gratuity on discharge after war service and on joining reserve; six months' notice to quit, and permission to change residence or penalty in default; age 20 to 35, respectability of character, and must be British subjects. The reserve force would add upwards of 4,000 trained and disciplined men, with their proportion of officers, to the military strength of the Dominion, outside and in excess of the present active militia, paid and clothed I venture to submit, by the Imperial Government. Upon the first being called away for service, a second reserve could be raised under similar conditions.

There is but one feeling in Great Britain, whatever difference of party politics may exist, in desiring to bind more closely those ties of affection and good-will which unites the Dominion with the Mother Country. Nothing can more effectually carry out those feelings than by striving to unite those defensive forces which must result for the benefit of the common empire. What can be a better proof of this feeling than the fact, that though pressed by a crowd of applicants, Her Majesty has very recently assented to a proposal which will enable successful students at the Royal Canadian Military College to enter into a competition annually for commissions in the English army? The appointment last year, as honorary Aides-de-Camp to the Queen of Colonel John Dyde, who may be called the progenitor of the Canadian militia dating from 1812, and of Lieut.-Colonel Casimir Gzowski, who has so eminently drawn together the Canadian militia with the British volunteers at Wimbledon, cannot but tend to cement the national feeling and to strengthen the bonds of union. These graceful recognitions prove that the interest felt by Engishmen in the colonies is very strong, that the connection of the colonies with the mother country adds mainly to the greatness and magnitude of the empire, and that Canada is one of the most valuable and important, as it is geographically the largest in area, of any possession of the Crown.

The British Empire, composed of so many separate countries and nationalities, would be far stronger if more completely organized. Political federations are not questions within my province, but the side on which organization is really possible and necessary is the external, material part of an Empire's existence; its armed strength. There is much to be done here, and some of the foregoing suggestions tend in that direction. We saw the effect of landing seven thousand Indian troops at Malta last year; but what a position Great Britain would assume in time of war

if the law was so clear and plain that to resist any hostile encroachment, to uphold our action in Europe, to garrison our military and maritime colonies, we were at liberty to bring at once, and without question, all the native troops from India, and to raise other regiments to supply their places. What a prospect for dealing with the question of feudatory armies; so many for Imperial purposes; so many for home defence; it is only the idea which follows the representations before proposed. Why should not other great colonies be as patriotically imperial; they are parts of the empire, and as they care to preserve it, they should be willing to take some responsibility in its preservation. An empire so organized would be impregnable; it would strenthen our prestige, add to our army and navy, for both should be included, and Canada could produce plenty of well seasoned seamen and some fine ships. Such an army organization and naval extension are worth deliberate consideration, to make the British Empire a living, powerful, organic whole.

In my annual report of last year, I submitted the passing of an Act, in pursuance of the third section of the Colonial Naval Defence Act of 1865, which intended to make better provision for the naval defence of the colonies. In this view, it would be a mutual benefit if the Imperial Government would bestow or lend to the Dominion an iron-clad or a wooden frigate, partly for coast defence in the Gulf of St. Lawrence, as well as for training naval volunteers, and a school for lads on the principle that many line-of-battle-ships and frigates are now employed in the Thames, Mersey, Clyde, and other British ports. Hitherto but little attention has been paid to the education of young seamen for the naval service, though the great extent of sea-board on two oceans and the vast inland lakes and rivers of the Dominion render it most prudent that a naval reserve should exist, available as a powerful support to the land forces in time of war. The theory of navigation can be easily acquired on shore, but seamanship and naval discipline, with the handling of guns on board ships in motion and in a sea way can alone be mastered by sea experience.

It is believed that approximately, there are about ninety thousand seafaring men in the Dominion. In 1876, there were some six thousand vessels of various tonnage, and later, some 500 have been added. It appears in the annual report from Newfoundland that some ten thousand men were engaged in the seal fishery, including most of the active male population. The rigorous climate of Canada throughout the long winter renders it impossible for fishermen to pursue their vocation, and that long interval of enforced idleness would afford an admirable opportunity for attendance at naval drill without interrupting their regular employment. Would it not therefore be well to make an effort to enroll a considerable number of these fishermen and sea-faring men in a Naval Reserve. They are thoroughly inured to the exposure of the sea, and the severe weather of these coasts. No subjects of the Crown are more loyally patriotic, and they could be assembled for training at a port easily accessible from their homes. Such a ship as I refer to might be

commissioned specially for training these men of a naval reserve from the Gulf Ports, the Maritime Provinces, and even Newfoundland. The ship should have an armament, and drill in winter could be carried on between decks in any inclement weather.

We have taken steps and made considerable strides to avail ourselves of the services of the population for land defence by a well organized militia. There can hardly be a sufficient reason against recruiting for a naval reserve among the vast numbers of loyal inhabitants who dwell upon the coasts of the Dominion. The reserve would in natural course be administered by the Department of Marine and Fisheries.

Not many years ago, it was stated in Parliament, that in the men who sail the fishing fleet of Canada, we see the element of a powerful marine, which would be found invaluable in time of national danger, and no reason why training ships supported by Government should not be employed on a system similar to what has worked well in the United Kingdom. This seems in accordance with the views expressed by the late Earl of Elgin who when Governor General, urged with such force the advantages to England and the colonies of an intimate union between them. "Is the Queen of England, he wrote, to be the sovereign of an empire, grow-"ing, expanding, strengthening itself from age to age, striking its roots into fresh "earth, and drawing new supplies of vitality from virgin soil, or is she to be. for all "essential purposes of might and power, the monarch of Great Britain and Ireland "only. The organization of a naval reserve in Canada would be an additional means of defending the coasts of the Dominion, and only add naval strength and supremacy as contemplated in the Colonial Naval Defence Act referred to. Organization before hand is essential to success in war; we have abundance of seamen but no naval organization for national defence.

Early this year Sir William Palliser, the enterprising and successful inventor of manufacture and conversion of ordnance, projectiles, &c., addressed the First Lord of the Admiralty, offering to give instruction to colonial Governments, in the preparation of merchant steamers as swift armed cruisers, the instruction of marine gunners, and the conversion of cannon of suitable calibre for their use. The despatch enclosing this valuable and important offer was referred to me on the 20th of November last, when I lost no time in strongly suggesting that Sir William Palliser should be thanked for this offer, with a request he would be kind enough to supply the very useful information he expressed his willingness to bestow. The information will be of high value in connection with the project of training a naval reserve. With ships and their requisite appliances and with trained seamen to man them, we may probably hear less in future of hostile armed cruisers threatening to molest our shipping and sea coast harbours.

It has been stated that self-government when conceded to colonial possessions,

should form part of a great policy of Imperial consolidation, and that every effort should be made to resuscitate as much as possible our Colonial Empire, and to respond to those distant sympathies which may become the source of incalculable strength and happiness to Great Britain and its foreign possessions. This leads me to revert to Victoria and Esquimalt, in the remote Vancouver Island, to which I have more than once had the pleasure to draw attention. The ten long-range rifled guns mounted there last year have greatly added to the protection of those ports, but hands to work them are not so readily attainable. The importance of these ports is so great, I may perhaps claim indulgence for dwelling on the subject at some length.

Since my long journey across the Prairie Territory and Rocky Mountains to British Columbia in 1875, I have frequently urged the necessity for more completely protecting the only naval arsenal and dockyard on the shores of the Pacific Ocean. In the annual report of last year it was stated that the defence of Esquimalt might be considered as much an Imperial as a Dominion question, but that it intimately concerned the honor of both and the supremacy of British naval power in that region. Our security in the Pacific requires it to be well guarded; our fleets must keep the sea if necessary in all weathers, and they cannot do so without coal. That important element is in ample stock and prime quality at Nanaimo. The British navy is scattered over the Pacific, and there were no works of defence at Vancouver till last year; no forts for protection of our coal nothing but British prestige, and a few companies of militia at Victoria and up the Frazer River. The works thrown up hastily last year when a Russian squadron appears ed on the coast, rendered it necessary to despatch a commission there during the past summer. Col. Lovell, Royal Engineers, from Halifax, and Lieut.-Col. Strange, Royal Artillery, from Quebec, have thoroughly examined and reported on the capabilities for defence of Vancouver and the seaboard of the main land of British Columbia. This joint report I have not seen, but the able separate report of Lieut.-Col. Strange, will be found in the Appendix. A few remarks of a general military character may not therefore be out of place on this subject, which can hardly be considered too carefully at this juncture. It would of course be necessary to hold the peninsula which is bounded on the one side by Esquimalt Basin, and on the other by the narrow inlet called "The Gorge." There is a small neck of land at Portage Inlet separating those two sheets of water, and there the position could be entrenched Signal Hill close to the Dockyard, dominates the harbour and the Royal Roads outside its entrance. This should certainly be fortified. Rear Admiral de Horsey said to the Admiralty: on examining the chart, the eye will be immediately struck with the capabilities of defence of this peninsula. The Dockyard itself with its commanding outpost, Signal Hill, is capable of defence by a few mon, whilst if at any time it be decided as in my opinion it is most desirable, to "fortify: the peninsula could be made practically impregnable by placing redoubts on and occupying the heights

with a sufficient garrison. As regards Signal Hill, he did not overlook the rule that guns should not generally be placed to draw the enemy's fire on the position they protect, but this rule hardly applies to the present case, because fire aimed at Signal Hill could scarcely be so bad as to strike the Dockyard seven hundred yards at right angles to its line.

I had previously urged the arming of Signal Hill, a commanding point whence to engage an enemy's ships approaching from sea, and to render Esquimalt Basin a

shell trap for any unlucky ship that might enter it.

Lieut.-Colonel Irwin considers the present sea defences both of Victoria and Esquimalt, while efficient enough against wooden vessels, would hardly serve to prevent an iron-clad from shelling either of them; the eight-inch nine ton gun on Brothers Island being the only armour-piercing gun to defend the latter. The naval stores are at present in an exposed position to naval attack; the site of the naval hospital and Hudson Bay store would be more protected. Lieut.-Colonel Irwin does not consider the graving dock in an unsafe position, nor likely to be destroyed by an enemy's fire. It would hardly be possible to muster militia soldiers enough in British Columbia to defend Victoria and Esquimalt from a combined land and sea attack. The Victoria peninsula presents many facilities for landing troops, but though the city itself might be difficult to defend, it would be hazardous for an enemy to cross the Gorge, which is deep with a strong tide way, and commanded by a ridge along its southern bank. Therefore, Esquimalt would be tolerably secure, provided Signal Hill and Rodd Point had heavy guns, and the neck at Portage Inlet strongly entrenched. The guns should be manned by trained artillerymen, and regular troops enough to keep the volunteers up to the mark and act as a reserve.

The question of the general utility of Esquimalt as a naval station and coal depôt would naturally depend upon its advantages as a secure and convenient harbour, a suitable base for supplies and facilities for repairing ships of war damaged at sea, The first seems better fulfilled there than would be probable at any of the South Sea Islands, while the completion of the graving dock would fulfil the latter. As a coal depôt however, the safety of Nanaimo, where the mines are situated must always be a most important consideration. Lieut.-Colonel Strange, alludes pointedly to this, as did Lieut.-Colonel Irwin, and from my own knowledge I have little doubt the place presents facilities for easy defence against a naval attack. The above considerations however seem almost of secondary importance in view of the proposed railway terminus at Burrard Inlet. To any one who has seen the shipping at San Francisco, and noticed the business done by the Union and Central Pacific Railway, it must seem to be a matter of the very highest political and military importance to possess a naval station at what will be eventually the terminus of the great British American highway of commerce from beyond the Pacific.

The position of Esquimalt with reference to the Straits of San Juan de Fuca, the Channels of Haro and Rosario, the entrance of Puget Sound, and the general configuration of the locality, seems admirably adapted for protection and command. Once the railway is in working order, the question of supplies, reliefs, &c., will receive the most satisfactory solution, and its otherwise unprotected terminus at Burrard Inlet seems to furnish the strongest arguments in favor of retaining Esquimalt, and rendering it thoroughly secure as a naval station and marine arsenal.

I almost doubt whether the value of the coal supply of Nanaimo is yet thoroughly understood and appreciated, either on this or the other side of the Atlantic. In 1875 for instance, the output was stated to be 110,000 tons; three companies at work with plant, including eighteen engines, six steam pumps, and tramway to the wharves, which are 500 feet long and sufficient depth of water for large ocean steamers.

The construction of the Canadian Pacific Railway will eventually render the conveyance of reinforcements easy in time of war, and it may be expected the ocean terminus will in time be located at Esquimalt or Barclay Sound; thus the present inadequate force of one battery of artillery and two infantry companies at Victoria could be soon relieved, but we must always rely also upon the Royal Navy, for Great Britain cannot possibly neglect the advantages Esquimalt affords as a strategic naval base in the North Pacific.

We should not overlook the progress in naval strength and resource which the Russians are rapidly developing at Petropolouski and Amoor River; the former only 4,500 miles from Vancouver, the latter barely 500 miles further. In the event of war, Russia might be in a position to harass not only Hong-Kong and the China and Japan trade, but to send a squadron across the ocean in thirty days to attack the western sea board of the Dominion. This, unless properly fortified, would in the absence of the British squadron, be in some measure at the enemy's mercy. What the result would be of such a hostile descent upon these shores, where so many monuments of British industry and energy exist, must awaken grave thought. Great Britain cannot therefore withdraw her protection from her North Pacific possessions, which the Dominion has conjointly already spent a large sum in partially fortifying.

If naval history proves anything, it proves that the commander of a sea-going squadron must have full discretion, and that his success will be proportionate to his self-reliant genius; to restrict that quality may not be advantageous. Telegraphic communication on the other hand, is a very important element which cannot be overlooked; although it might not be prudent to send a continuous stream of instructions to the commander of a squadron, yet the telegraph must play an important part in future naval warfare. The telegraph wires running across the continent on British territory render it all the more important that Vancouver should ever continue the naval base in the North Pacific.

On the opposite side of the continent Halifax is the imperial fortress, designed, heavily fortified and maintained as an important base in the North Atlantic. Our

North Pacific fleet, struggling without a telegraphic base, without a secure and well fortified coal depôt, dependent perhaps on an island in mid ocean for its coal and supplies, might sometimes be in a precarious condition. It must be foreseen that in a long naval war it might not be possible to keep an island depot supplied by coal transports, nor might it be always possible to protect it. Were Esquimalt navy yard given up, and an island in mid ocean substituted, the Pacific squadron would rely r coal upon New South Wales, England, but notably still upon Vancouver, prhaps, all three. Wherever it comes from it must be carried by colliers to its island point, and how many of these colliers might fall into the enemy's hands en route, supplying them at sea with the very material most needed.

Now, where a dockyard and arsenal already exist, a graving dock for disabled ships in progress, unlimited coal deposits abound, land forces at hand, and bye-and-bye by railway to be reinforced in twelve days from Ontario, land batteries built and easily supplemented, a telegraph terminus, and perhaps not the least noteworthy feature, where a loyal and a brave people can be thoroughly relied on to rally round, appears to stamp Esquimalt before any other place in the Pacific as the proper naval base and coaling station.

To withdraw from it, might run the risk in time of war of being swept out of the Pacific, and supposing such a thing possible, and an enemy in possession of our stores and coals at the important base Vancouver: he has shut us out entirely until a powerful squadron got round Cape Horn to recover our supremacy; and on what would that squadron have to depend, without any coaling base and at great disadvantage, in trying to recover that which we should never run the risk of jeopardizing. It would be wrong to disperse forces at a number of points of little use in a great war, but an important position on which the supply of and communication with the North Pacific Squadron depends, must never be left to an enemy, nor yielded in any way.

The importance of Vancouver as a naval base and the consequences of losing it, renders the railway across the Dominion one vitally concerning the whole Empire; and for these reasons, it is most desirable that Vancouver Island should never be abandoned by our ships of war. Esquimalt is available for ships of any tonnage or draft of water to run into in a gale of wind by day or night, where they can anchor in from seven to nine fathoms in a land locked basin.

It will be kept in view that Russia is the power against which we might have to take precautions, for with respect to our friendly neighbours over the border, we need hardly have any anxiety. It is true the United States frontier has been advanced, so that the channel entrance to Nanaimo from the southward can be commanded by American guns from the Island of San Juan, which we have allowed to become American ground. There is a military post, formerly the barrack of our Royal Marines, on the Island within sight of the City of Victoria; another at Port Townshend, about forty miles up Puget Sound, and another at Fort Vancouver,

on the Lower Columbia River, the entrance to which is defended by heavy batteries near Astoria.

The United States are keenly sensible that fleets without well defended coaling stations and fortified bases accessible to the telegraph and in military occupation, are dangerous to trust to in modern warfare, and hardly reliable alone to protect fixed points. But America is peopled to a large extent by descendants of our own race; she has the same language, the same traditions and aims as ourselves, developing amazingly side by side of our own family. Proud of our history as reflecting upon herself, she imitates and rivals our institutions, and she will, like ourselves never encourage the art of war with a view of promoting that which she knows full well never can follow in the wake of a purely warlike policy, namely, wealth, social progress and material development for her people and her industries.

It was stated that during the recent Russo-Turkish campaigns, there were eleven ships of war flying the Russian flag in San Francisco Harbour, all in first-rate order, carrying about 2,000 men, and more guns than in all our squadron from Chili to Vancouver. Their object may be taken to attack British possessions and commerce if we had been drawn into war. Might such an event not be possible in the future, and should not Esquimalt be thoroughly armed as a great naval basis, telegraph and railway terminus in the North Pacific, and as a standard of efficiency and support, should not at least one hundred marine artillerymen under the Admiral and on the ship's books of the squadron, be stationed there?

It only requires a glance at the general chart of the world to trace the various lines which mark out the great highways from port to port, upon which the ocean commerce of the world chiefly passes. Almost without exception, every one of these lines begins or ends at, or passes through some British possession. There is but one great gap in the system of defence supplied by our foreign possessions-that is the line that begins at Vancouver and ends at the Falkland Islands, through the Straits of Magellan or round Cape Horn. That line is flanked by foreign countries, and we have no station within those limits, which lie about seven thousand miles apart, where we can post a defensive squadron, or have a secure base for telegraphic intelligence, coal and sea stores. But we hold one end firmly, and when better fortified, and the Pacific Railway is complete across the continent on British soil, we shall do so still more strongly. We also hold the other end at Falkland Islands. If therefore we maintain the positions we have got, and add securely to their defence, we prevent the only class of cruiser that can be sent abroad by such an enemy as Russia from obtaining coal, and the danger from such cruisers need not then be greatly apprehended. At the first outbreak, they perhaps might do mischief, for they would be ready and we might be tardy; they would start with full coal bunkers and stores. which by our holding Vancouver and Nanaimo mines, they would find difficulty in replenishing. It is apparent therefore that a great naval base, coal depot, railway and telegraph terminus, must never be abandoned. On the other hand, how hazardous a

policy it might be in time of war to remove from such a strong and important base, to risk our coal and supply station upon any island whatever in the Pacific, to which munitions must be carried by sea, and if not fortified and strongly garrisoned, the base of supply would be en l'air.

The necessity for a graving dock is a question of no light importance, more necessary perhaps now than in former years; since we have evidence that should our enemy be Russia, her naval operations may be as active on the Pacific as on the Atlantic. The object of sending the Cimbria, last year from the Baltic to American waters with such a crew and cargo as before stated is suggestive. We have even learnt that Russian naval officers declared their object was to employ fast steamers to intercept and prey on British commerce, and place under contribution or destroy Canadian ports. May not this new method of attempting to cripple England on both oceans have taken a firm hold on Russian policy; and may not another and more formidable "Cimbria" let loose on the Pacific asquadron of mischievous Alabamas. In such case her cruisers would scour the seas in search of British merchantmen. Her now extensive home stations at Petropolowski, the Amoor and Vladovostock, with telegraph lines direct from St. Petersburg, might possibly enable her to have a preponderance of naval power on the Pacific, unless our fleet were reinforced in time by a similar class of swift steam boats, and our naval base and railway and telegraph termini at Vancouver's Island, were fortified and garrisoned beforehand.

Even now, Russia is preparing such a number of merchant steamers, fitted as armed cruisers, as to attract attention in England; and the natural question is asked: Why does not England with her world-wide colonies and vulnerable points do likewise? Would it not be wise to take precautions in time, and not wait till perhaps war falls upon us, and our merchant ships and outlying possessions such as Esquimalt, stand the chance of being in flames; millions worth of property perhaps destroyed, rather than expend a few thousands in fortifying our coasts, and rendering secure such commanding and important positions as Esquimalt must undoubtedly be in case of a long maritime war.

It needs only further to draw attention to the Canadian Pacific Railway and the impolicy of removing British naval protection from Vancouver Island: The people of British Columbia are very loyal and desire to remain closely united with England, from whom they derive their origin, but they feel that their interests have been sometimes neglected, and there is no knowing how they might act it they found themselves free to act according to their interests. The colonists who live there now are familiar with the state of the country, its position and surroundings; they are satisfied that this new continental railway will be of immense importance to the British Government, and they regard it quite as much an Imperial as a Canadian question. It will open a magnificent country for settlement to the surplus population of Great Britian, who will upon their arrival there, find themselves part of a

people thoroughly British in their thoughts and ways, and bound to the United Kingdom by the strongest ties. This railway, passing through the fertile belt or zone, a magnificent country, capable of raising a food supply sufficient for Great Britain, would open up direct communication with the whole of British North America, China, India, Japan and Australia. The large supplies of eastern produce required by Canada would be carried by this route and help to develope trade in a community who draw their manufactures in a great quantity from England, instead of, as now, going through and helping to build up American interests. This railway will probably ultimately extend from Nanaimo to Esquimalt, or Barclay Sound, as its ocean terminus and a strong naval station must consequently be maintained there in the interests of Great Britain, as well as of the inhabitants of British Columbia.

Lieut.-Colonel Strange was appointed upon this joint commission, being the senior and an officer of acknowledged high professional attainments very desirous to be so employed. It was desirable that both Dominion Inspectors of Artillery should know the defences and the sea coasts of Vancouver and British Columbia. Lt.-Colonel Irwin, an excellent young officer of much promise, had already made a long and fatiguing journey across the continent. The manner in which his duty was performed last year having called for my approbation and justified my representing his able report in that sense to the Government and to the Colonial and War Ministers.

I invite attention to the able papers read by Captain Colomb, Royal Marine Artillery, at the United Service Institution on the foregoing subjects; they are well deserving of study and careful thought.

In the early part of last year I had the honor to draw attention to the defenceless state of the Atlantic coasts and seaports of the Dominion. The sudden arrival of the "Cimbria" in a seaport of Maine from the Baltic, with a cargo of rifled guns and a large crew of Russian seamen, called for immediate attention. Her avowed object was to equip a fleet of fast cruisers to intercept British traffic and to lay under contribution or bombard Canadian seaports. The Atlantic coast had but few guns mounted for defence, and the sacrifice of life and property that would have followed a state of war would have therefore been serious. Fortunately the Treaty of Berlin for a time put a stop to apprehension, but my report having been referred to the Colonial Defence Committee in London, a despatch was soon after received, recommending the purchase of twenty 7-ton and sixteen 64-pounder wrought iron Woolwich guns, at a maximum cost of £50,000 sterling, or £37,000 in case of specific modifications. It was ultimately decided to purchase a less expensive armament, and 17 converted \$2 pounders were ordered. The Defense Committee objected to these guns as of insufficient power and range to engage longer range guns on board ships which could still have been able to reduce the seaports from a distance by shell fire. The question has been in abeyance till now, and the Atlantic coasts are as defenceless as before.

I refer to the question again owing to the recent apparent uneasiness of publicopinion, regarding renewed European complications. Nothing may immediately follow this, but supposing a sudden rupture were to occur, we are still unprepared in Canada; and why should we continue from month to month to rely upon a special immunity from the danger a war would surely entail, and remain inactively and supinely to risk the destruction of millions of property and much valuable life by neglecting to provide at leisure against such a misfortune and loss of prestige. The judicious expenditure of a few thousands while there is leisure, might prevent our coasts from being infested by a swarm of mischievous privateers flying pennants, and ensure a feeling of preparation and strength against attack during a maritime war. I refer therefore to the despatches enclosing the recommendation of the Defence Committee, and to the armament proposed by them, which however would, have to be manufactured. In the meantime, the recent trial of the converted 32 pounder in Montreal has been quite successful; the gun stood the tremendous charge of 24 pounds of powder, with little perceptible effect on the coiled tube. Lieut.-Colonel Strange and Lieut. Colonel Irwin, Royal Artillery, have both reported very favourably of the result of this experiment and of the capacity of the Montreal Engine-works to manufacture, as well as to convert heavy rifled-cannon and projectiles. The colonial empire is watching the lead and example Canada is taking for self-defence; India and Australia are both making inquiries about the conversion of guns, and I am informed when Canada sets the example by giving an order for the manufacture as well as the conversion of rifled guns of heavy calibre, it would in all probability be followed by them; thus forging more links in Imperial organization and proving that Canada can provide for her own fortification by home manufacture.

I therefore, concur with Lieut.-Colonel Strange, that it is important in view of economy to utilize the large stock of smooth bore guns owned by the Government, amounting to some 400 in all, and to order the conversion of twenty 32-pounders of 56 cwt. to 64-pounder rifled guns, and two 68-pounder and eight 8-inch into 80-pounders and 64-pounders, respectively. As the 64-pounder rifled guns are only available to resist boat attack and to arm steamers for coast service, as well as to arm batteries on the rivers, it is strongly recommended that 12 9-inch long B.L. rifle guns on the Palliser principle be manufactured to mount on the harbours of the Atlantic coast. This gun would be about eight tons weight and throw a projectile of about 200 pounds, capable of piercing heavy armour. A reserve of 64-pounder guns is necessary for steam cruisers and suitable for the purpose. I have had the honour to recommend before, that torpedoes should be provided for harbour defence and men instructed and trained to use them.

It must be borne in mind that heavy guns take time to manufacture, and that a sudden declaration of war would leave us no time. I trust therefore, my duty may lead to the mature consideration of the Government, in the hope that action may be soon taken to that effect.

Captain Palliser recently proposed to the first Lord of the Admiralty his willingness to offer suggestions on the conversion of merchant steamers into armed crussers, the formation of marine gunners, and the armament for such ships with guns to be converted into rifled cannon in Canada, to which I have just referred. I strongly advise his suggestions to be obtained and favorably considered. The despatch containing that proposal was dated 5th February, 1879, and referred to me on 20th November last, as before mentioned.

The important question of manufacturing rifled guns and projectiles in Canada, taken in connection with the proposed cartridge factory, the adoption of home-made gunpowder, the making up of military clothing and equipment, with other strides of advance in self-reliant military progress, appears of so much consequence just now that I am induced to give prominence to the subject. Much of the information has been obtained by correspondence with Sir William Palliser himself, who it may be remembered has generously bestowed on Canada a seven and an eight-inch rifled gun, now at Quebec, and he is, I believe, manufacturing a nine-inch gun as a present, which was offered and accepted by the Dominion Government about two years ago.

The successful attempt to manufacture rifled guns in Canada has been justly mentioned in the English press as "an event of Imperial importance," for a nation which depends on the supply of such weapons from a source 3,000 miles distant must always be in a more or less dependent position. Canada not only requires an armament for coast defences, but also to have a sufficient number of guns of position in store. A foreign power has lately adopted such a system of armament for offensive purposes on large trading fleets as to demand the most serious attention of England and her colonies, but more especially of Canada, as one of the greatest trading countries of the globe. The armaments referred to consist of numerous swift merchant steamers, which have been purchased and fitted up for war purposes. The design, as openly admitted, is that they are to burn and destroy the merchant fleets of the greatest carrying power of the world in case of war breaking out. It has been announced in the English press that the result hoped for is the forced separation of the powerful colonies from England. The power of the British Empire is, owing to the increasing growth of the Dominion of Canada, of Australia and of New Zealand, becoming capable of an overwhelming development if it were armed. It is not so at present, and for that reason probably, we hear of these alarming preparations. To expect Canada and the colonies to fit out men-ofwar would be unreasonable and unnecessary-England can deal with such; but it would hardly be possible for her to account for the numerous merchant cruisers which are now at sea and in course of preparation. On the other hand, there can be no doubt that the ocean going steamers of England, Canada and Australia would soon dispose of these if they were armed and prepared for the occasion.

The Admiralty have already placed themselves in communication with the Canadian Government regarding the system of preparation of large steamers for

their armaments on the plan so successfully carried out by them in the case of the "Heela," a merchant steamer purchased by them and fitted as an experiment. What has now to be dealt with are the rifled guns, with which the ships should be armed There are only fifteen now in Canada, but it is satisfactory to know they can be made here. The armament selected for the "Hecla" are the 64-pounder Palliser rifled guns, the very guns we have shown we can make without any difficulty. Messes. Gilbert offer to make, by the 1st May next, six nine-inch 14 ton rifled breechloading guns, complete, with sights, for \$4,000 each; six seven-inch 81 ton rifled B. L., complete, \$3,000; two 68-pounder five ton to be converted to 90-pounders. including long barrels, \$650; six eight-inch 65 cwt. converted to 64 rifled, \$500; 12 32-pounder five cwt. \$500; 500 rounds projectiles, Woolwich prices. Double plate ron American carriages for all the above, cheaper than English or wood; all subject to approval of the Inspector of Artillery. I am happy to announce that the Government has been pleased to authorize the General Officer commanding to arrange with Messrs. Gilbert, of Montreal Engine Works, for the construction of two 7-inch 81 ton guns, and the conversion of ten 52-pounders to 64-pounder rifled guns, which may be considered an auspicious commencement to a great work in creating a home supply of heavy ordnance. The experimental gun, as I have before noticed, was put through a formidable programme. After passing the usual proof, it was fired, as before stated, with 24 lbs. powder and a 64 lb. shell. It was perfectly right to test the first gun with heavy charges, though it is usual now to chamber guns for large charges. Sir William Palliser explains that this is done by enlarging the bore of the gun at the seat of the powder charge, so as to avoid an immoderately long cartridge which fills up the bore, and causes a very heavy strain on the gun.

A chambered gun, he states, has less strain when fired than an unchambered gun with the same charge. The coil mark was caused by an imperfection in the welding of the barrel. When the barrel was completed at first, it was an excellent one; when bored out it was seen that the portion where the powder chamber would come was somewhat enlarged. This was no drawback at all, but the manufacturers thought it well apparently, to cut it off and weld on a piece in its place, always a difficult work when the barrel has been bored and is therefore thin. Considering that this is the first that Messrs. Gilbert have produced, their success is remarkable. Sir William Palliser informs me he fully expected to have heard of several bad welds being developed at proof, and there can be no reasonable doubt but that they will succeed in future in producing barrels wholly devoid of bad welds. The serviceableness of the gun for the service charge of eight pounds of R L G powder, or 12 pounds of pebble powder, will not nearly reach to that part of the gun as shown in the engraving in the Appendix. As a first attempt the gun surpasses expectation, and any number of 18 pound charges might be used with complete confidence.

The ordnance required for coast defence are as the smallest calibre, seven-inch eight and half ton guns and 90 pound rifles, both of which can be made in Canada without diffi-

culty. The 90 pound gun might be the converted eight-inch 65 cwt. gun, as represented in the Appendix, and has a length of bore of 25 calibres, the same length as the Krupp gun, which gave high velocities with charges of mild powder and consequent low pressures. As the great length of bore would give an undue muzzle preponderance, that is overcome by placing a large coil of wrought iron over the breech; this will not only balance the gun properly on its trunnions, but will add to its strength.

The guns will be the same calibre as the Woolwich 64-pounder, viz.: 6·3 inches. The charge for these Woolwich guns is 14 pounds of pebble powder. To test the Moncrief gun carriage, a few rounds were fired from one of these chambered guns with 30 pounds pebble powder and 90 pounds shot, but they do not for that reason stand in the service, says Sir William Palliser, as 90 pound guns. There is no reason however he states, why the Canada guns converted as shown in the drawing, Appendix No. 9, should not be used with 24 pound charges and 90 pound projectiles. It will be observed that the barrel is one-half inch thicker than that of the first gun made by Messrs. Gilbert, and that there is a strong jacket added round the seat of the charge, and further, that the weight of the gun itself, about four and one-half tons, will admit of the use of this large charge, while the great length of bore will enable all the effective force of the large charge of pebble powder to be utilized. The 90-pounder rifle will, it has been proved, pierce six inches of iron.

In considering the means available at very little outlay for the defence of the coast, it should be remembered that Canada has a good supply of cast iron mortars. It has been under consideration to convert these to rifled mortars for the defence of harbours. An engraving in Appendix No. 9 shows the 8-inch service mortar converted to a 6-3-inch rifled mortar to fire the 64-pounder or 90 pound shell. The advantages of rifled mortar batteries are that they can be concealed from the view of an enemy, and their fire can be directed by signal by the artillery officer commanding.

The batteries being distributed in the most suitable positions, the harbour to be defended marked out in zones, (Diagram in Appendix No. 9,) and a supply of powder charges made up to reach each zone, would enable the officer commanding the artillery to concentrate, by signal, a vertical rain of shell fire on the ships of an enemy entering the zones to bombard the town. The disaster of one shell descending upon the deck of a ship would be so great that only the most dashing and adventurous sailors would remain exposed for any length of time. Admiral Gran lately ran the "Huascar" within 600 yards of the batteries of Antofagasta, which are armed with the best European rifled guns, one of them a 300-pounder. The "Huascar" lay with her bow to the town and bombarded it, suffering no damage. It would have been impossible for her to have remained an hour under the fire of 30 rifled 6-3-inch mortars at a range of 600 yards, on which they had frequently practiced. Yet these rifled mortars altogether would hardly cost more than the 300-pounder, dismounted at the first round with its wrought iron carriage and slides.

The idea is illustrated in the drawing in diagram Appendix No. 9. On a decla-

ration of war, the officer commanding the artillery could mark out the harbour in his charge roughly into zones and sections with buoys, each section, say 500 yards square, the powder charges to reach each section from the various rifled mortar batteries could thus be prepared. The charges should be kept in separate canisters in the magazines, each canister being marked with the letter of its section; a few rounds from each rifled mortar, which should be able to traverse towards each section, would determine the range of section, and a little practice might be made in concentrating the fire of the 30 rifled mortars on sections selected and telegraphed by the artillery officer from a central position.

On the approach of the enemy's fleet, and should the leading ship continue her course towards section 4 shown in the drawing, the officer could telegraph to load for and concentrate on section D. A steamer moving through the water at ten miles an hour takes two minutes to 586 yards, so that all would be ready by the time she reached the position of letter D, when at the signal "fire," a vertical shower of 30 shells would descend into that section, and smart gunners would send another shower upon her into sections K or L. It would require skill and judgment on the part of the artillery officer commanding to continue this practice during the bombardment, or to decide whether it would be more advantageous to trust to the independent firing of the mortar batteries under their own officers. In either case, the buoying of the harbour would be an advantage, and this could be done with casks colored for each zone and anchored there. An enemy would no doubt, try to remove the buoys by boats at night, but they could be kept off by steam launches armed with gattling guns.

It should be remembered that the subject of numerous batteries of cheap rified mortars is probably insignificant in the eyes of those who manufacture ponderous rifled ordnance, which costs large sums of money, giving large profits, and therefore little or no mention is made of them in Europe; but it must not be forgotten that Germany, with her usual forethought and prudence, has discovered their value, and numerous rifled mortars now in the German service constitute not the least powerful portion of her armament.

Russia would also appear to be alive to the use of vertical fire. The late Consul at Sebastopol was in that port when a small Russian steamer returned, having just escaped capture by a Turkish iron-clad of superior speed and heavy armament of 12 ton rifled guns. This steamer had been struck by 9-inch 250 pound shells in almost every portion of her hull except the engine-room; many men and some officers had been killed and wounded, in fact the steamer was almost a wreck nevertheless she escaped, and it is stated by Captain Harford, late of Her Majesty's 56th Regiment and Consul at Sebastopol, that her escape was solely due to the vertical fire from the mortar battery. It appeared she had no guns and that her armament consisted of six smooth bore 6-inch mortars, three in her bow and three in her stern. When the iron-clad gave chase she rapidly overhauled the

Russian steamer, firing all the time and making great havoc among the Russian crew; although two of the mortars were dismounted, the remaining four continued the fire at the huge iron-clad within 500 yards. The Russian captain told the Consul he was about to give up his ship as hopeless when one of the 6-inch shell fell upon the Turk's deck and burst near the funnel. A jet of steam issued from midships after the explosion, confusion appeared among the crew, her heavy guns ceased fire, her engines stopped. Soon she moved on, but sheared off to some port, and the Russian escaped. No better illustration could be given of the value of vertical fire.

Converted rifled mortars are very cheap, and it is certain they would be very formidable in sufficient number. Six mortar batteries of five rifled mortars each, as shown in the drawing, and their fire directed by signal, would be a cheap and useful auxiliary to the batteries of rifled guns. The efficiency of the rifled mortar fire would depend very much upon the number employed in order that the chances of a lucky shell might be increased. Economy combined with efficiency is what Canada seeks, especially when the work can be done in her own shops. Sir William Palliser's remarks on ordnance are annexed to the drawings in Appendix No. 9.

In the course of the past summer, accounts were received tending to show that Indians of the North-West Territories were beginning to suffer hunger from the disappearance of the buffalo. It was supposed that necessity might drive them to plunder or steal for their support. Although the Government had taken precaution to provide a stock of supplies, it was presumed that as the long and severe winter of the prairie district proceeded, marauding parties might cause alarm and trouble among the settlers. It was therefore determined to organize some militia companies round the most populous settlements to give confidence, and accordingly Lieut-Colonel Osborne Smith, the Deputy Adjutant-General for Manitoba, was entrusted with that duty, and dispatched to make the neccessary arrangements.

That officer carried out his instructions, and acted with the judgment which distinguishes him, in selecting the most important points for the establishment of armed corps, and the general dispositions with regard thereto. His report will be found in full in Appendix No. 1, and I need only draw attention to it, as I, think it will be read with interest by all who look towards the importance of that great region in its not distant future. Lieut.-Colonel Osborne Smith has succeeded in forming the nucleus of one company of infantry at Battleford, the seat of Government, under air. Scott, the Registrar for the North-West Territories, although the population capable of bearing arms hardly admits of a full company being formed until the winter season, when freighters and hunters will have returned.

At Duck Lake, between the branches of the Saskatchewan, and a few miles south of Carleton House, a troop of mounted riflemen has been formed, under Mr. Owen Hughes, who is in charge of that important trading-post. He feels sure that with the men about his post, the settlers in the neighbourhood, and the Half-breeds at St. Laurent, he will be able to maintain a thoroughly efficient mounted troop. The

Rev. Father André, of the St. Laurent Mission Station, who exercises an almost unbounded influence over the French-speaking Half-breeds in the settlement, corroborates his views. The head quarters of this troop will therefore be at "Stobart," Duck Lake.

On the north branch of the Saskatchewan, near the Forks, the main settlement of Prince Albert lies, and here there are more houses and stores now than some six or seven years ago there were in Winnipeg. The enterprise which is apparent bids fair to make this district one of, if not the most important, in the whole of the North-West Territories. The population are most anxious for military protection, in reference to the gradual influx of armed Sioux Indians in search of subsistence. Prince Albert will therefore furnish two troops of mounted riflemen and one company of infantry—the troops under command of Captain Young, late of Her Majesty's 50th Foot, and Captain Moore, late of the Antrim Rifle Militia; the infantry company under Mr. Thomas McKay, an influential native of the country and Agent of the Hudson Bay Company.

The action of the Government in extending the militia organization to the North West Territories is appreciated, and I would recommend its still further extension to other localities, such as among the settlers of the Little Saskatchewan and others on the western portion of Manitoba. Arms, ammunition and saddlery have been accordingly issued for the equipment of these corps before the setting in of winter; but, owing to the deficiency of clothing in store, from causes I have foretold in previous reports, they cannot be supplied with uniforms at present.

When orders were issued for the organization of militia in the North-West, I noticed that the Act did not apply to those territories; accordingly an Order in Council was passed in November directing proclamation to be made that the entire Militia Act should apply to the North-West Territories and Keewatin. An enormous additional country has thus been added to the militia responsibility, which now extends over the entire Dominion of Canada.

In connection with this extended military occupation it may not be out of place here to consider the military aspect of those territories, and the forces employed for their protection.

In the summer of 1875, I was sent by the Government through the North-West Territories, and across the Rocky Mountains to British Columbia and Vancouver Island. My orders embraced the duty of inspecting as many of the Mounted Police posts as possible, and to inquire generally into the condition of that force for its duty; my orders likewise required me to confer with the American general officers in Montana and Washington Territories, regarding the repression of crime and the peace of the frontiers generally.

These duties I fulfilled after a journey from first to last of 11,000 miles and duly reported the result on my return to Ottawa. A portion of my report was published, but much of it was not. I have recently had a memorandum from the

Department of the Interior, and noted the suggestions as to the future distribution of the Mounted Police.

That force, as its name implies, is in no way under the orders of the Military Department; it is entirely a civil body, and prudently so in the nature of its duties. In a constabulary force every man has power to enforce the law; he is a civil constable charged with the protection of the community under the law, and can personally put in force any summons or civil process which may be issued by constituted authority—he is in fact a limb of the law itself; whereas a soldier or body of soldiers, cannot legally act without the presence of a megistrate, their duty being only to aid the civil power when not strong enough to do its own work.

The Mounted Police was, I conceive, established with a three-fold object :-

- 1. The occupation of the Territory; to enforce law and order, and to protect the inhabitants.
- To prevent internecine disputes among the Indians; to prohibit the nefarious liquor traffic and prevent smuggling.
- 3. To give confidence generally to Indians as well as settlers by the presence of an armed force.

In all of these objects this excellent force had been successful at the time of my expedition over four years ago. They were respected by traders, residents and Indians. At that time the buffalo were plentiful over the plains, there was no scarcity of food in the country, and the distribution of the force was sufficiently good for the occasion. The chief defect I noticed was the establishment of its head-quarters at Swan River—a most unsuitable place in almost every point of view. This was removed after my report, and its present site at Fort McLeod was an accident due to the senior officer being stationed there when a change of commandants occurred.

Now that buffalo are nearly extinct, and hunger is beginning to press the Indians, perhaps in a military view, a redistribution of the force might be considered with prudence in connection with the recently-formed militia companies. The officer in command and the head-quarters might be better placed within more easy reach of telegraphs and mails than at the back door of the territory at the base of the Rocky Mountains. Qu'Appelle therefore, near the junction of that river and the Assiniboine, suggests itself as a position of more importance and command; Touchwood hills on the main trail to Carleton from the south would be an equally important position. It abounds with wood and water and is generally a fertile and and beautiful tract of country, a line of communication with Winnipeg would then be easy and safe from either point.

If it is desirable to occupy the posts noted besides Fort Ellice, Saskatchewan, Battleford, McLeod, Walsh, Wood Mountain and Souris, each should, if possible, be individually strong enough at least for self-defence. There are but 350 officers and men of Mounted Police, but there are about 15,000 Indians, of whom 3,000 may be fight-

ing men. They are well armed with repeating rifles, and for the most part mounted.

Should starvation ensue and the Indians be in despair to provide food for their people, they may become troublesome and aggressive. Therefore it may become imprudent to have so many small police posts, 150 miles or more apart, without mutual support. A military axiom forbids a force being divided, beyond individual power of self-defence and mutual support. Qu'Appelle should be strong and entrenched; Fort Ellice also. Saskatchewan need only be a small garrison, but also entrenched. Prince Albert will have two mounted and one infantry corps of militia; they should have a place d'armes in entrenched lines. Battleford, the seat of Government, will probably be frequented by Indians clamouring for food, and should, besides its company of infantry militia, as yet not very reliable, have a body of police, with works of defence. Duck Lake and St. Laurent will have their mounted militia troop. It will require more local information of the present condition of the Indians than I have, to determine whether McLeod and Walsh should be maintained. As strategic points they are excellent, and as police posts equally so; but can they be made strong enough to hold their own in such isolated positions if assailed by starving Indian bands? So likewise, the small post on the Souris trail, and Wood Mountain, if not entrenched and strongly garrisoned. All these outposts are good in easy times, and admirablepolice stations, but might be hazardous when the Plain Indians are turbulent from want of food.

In fact, a series of weak posts only invites attack for hungry men, and if a quarrel should ensue, even over a bag of flour, a fight may follow, and the weakest goes to the wall. Weak posts cannot be deterent and might be provocative.

The American Sioux Indians may in time give up their arms and return to their own reservations; if so, and it is true that herds of buffalo have crossed the border and gone out on the North-West prairies, no trouble may arise, and there will be time to consider the future occupation of the country generally by the militia and the Mounted Police.

My report of 1875 on the Mounted Police suggested that, as this force was dispersed necessarily in the North-West, its efficiency would be assisted by having a depôt at Toronto, to which all young officers and recruits should be attached for six months before being sent to join their troops. They should attend in that time, besides a course of drill and equitation, the police court of the city, and learn in some degree the mode of administering civil law. They are constabulary though doing military duty as well, and in military dress and equipment, and should when sent to the front, understand their drill, discipline and police dnty, and be thoroughly proficient in the use of their rifles. All remount horses should likewise be sent to the depôt and well trained in a manege, and the force should have a standing code of regulations.

"Two militiamen" wrote a pamphlet last year, "A Plea for the Militia." They

*tate, what is well established, "our Amor Patriæ is not on the surface, but it may "require a stimulus to stir its inmost depths," and those are words with much meaning. They contrast the position of Canada with that of the small European powers, and give the following synopsis, which are worth attention and application, viz.:—

lan.	_	Dominion of Canada	Nether- lands.	Switzer- land.	Sweden.	Norway.	Denmark.	Greece.
	tion	3,727,000 3,580,310		2,669,147 15,991		1,817,237	1,910,400	1,457,86
A rea		sq. m.	sq. m.	8q. m.	171,750 sq. m.	122,280 sq. m.	15,504	19,94
Reven	1e		£8,612,556	£1,580,640			£2,584,000	61 286 07
мхрец	diture for military							21,000,01
purp	oses	£200,000	£1,541,909	£586,237	£925,000		£1,114,000	£336,75
Army		none.	61,947 men	84,369 *50,069	7,885 131	12,750p'ce. 18,000 war.	37,000	14,061
Warne	Ships		67			20	33	14
Navy	Guns	none.	705	none.	394	156	291	
) Men		9,200 men	1000	4,693	2,393	1,125	653
Militia.		43,729	100,323 "	65,981	29,940* 94,950 13,166	62,000*	32,393	24,000
	A CONTRACT OF THE PARTY OF THE	The same of		*Reserve.		*Reserve.		

From these figures it appears that, with a population almost equal, and a revenue half as large as the Netherlands, we spend less than one-seventh as much for military purposes, train for such service less than one fourth the number of men; and have no permanent force at all beyond two batteries of artillery and the mounted police. They show that in Switzerland staff officers are obliged to pass through the Military School at Thun, as are also the officers of engineers and artillery. Regimental staff officers also pass examinations on promotion, and they dwell on every practical point. Thus we see what can be accomplished in the way of defensive organization by smaller nations with lesser revenues than our own. What are we to do towards the same end? No hurried extension of our present system is necessary or would be prudent; armies are not made in a day, nor can a military system be perfected in a year, "but the framework must be built in time of peace, "upon such solid foundations that it will neither shrink nor give way under the "pressure of war."

To have an efficient militia, sufficient funds must be provided to carry on the work regularly. It will not do to spend two millions one year and half a million the next; the vote should be a standing sum in time of peace necessary to maintain a fixed force with its staff and arms, ammunition, manufacture and conversion of cannon, clothing, magazines, educational establishments and war material of every necessary description. Let the country decide what it can afford to spend annually for defensive purposes, and then hold those responsible for its proper expenditure who are responsible for the efficiency of the force.