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The Volunteer Review

AND MILITARY AND NAVAL GAZETTE.

A Journal Devoted to the Interests of the Military and Naval Forces of the Dominion of Canada

VOL. VII.

OTTAWA, (CANADA,) TUESDAY, JUNE 17, 1873.

No 24.

NEWS OF THE WEEK.

A freshet did a great deal of damage to the lumbering interests in the neighbourhood of Quebec. It is computed that 5,000,000 feet of timber have been swept away.

A Lad sixteen years of age was killed by lightning in Quebec, while sitting between his father and mother. Both parents escaped injury.

Information reached Washington from London, that the Government of Great Britain have made an arrangement through the Bank of England with certain bankers to deliver to the Secretary of State in Washington, on or before the 13th September, fifteen and one half millions of dollars in gold, the amount awarded by the General Arbitrators to the United States.

The report of the proceedings of the Board of Enquiry at Vienna, in the case of General Van Buren, while it does not impugn his honesty, shows his incapacity for the business placed in his charge.

The massacre of Modoc captives at Lost River crossing, is denounced by every one here. Both General Sherman, with the military, and Attorney General Williams, with the judicial authorities, will exercise every possible means to capture and punish the cut-throats.

Advices from Arizona state that a band of Apache Indians started south, probably intending to invade Mexico. Another band is besieging St. Cruz, in Sonora.

Advices from General Davis' camp represent that only four or five Modocs remain at large. The Pitt River Indians delivered eleven Modoc refugees to General Davis on the 7th inst.

A Spanish force, (Cuba) after five days hunt, came upon a rebel band under Magin Dias, killing the latter with 29 of his followers and taking 16 prisoners.

A despatch from Berlin says the prevalent opinion in the German capital is that President McMahon will prove a counterpart of Gen. Monck, restorer of the house of Stuart to the English throne, and that his election

heralds the Legitimists restoration in France.

Mr. Disraeli has written a letter in acknowledgment of an address, in which he emphatically pronounces against the anomaly of excluding women otherwise fully qualified from the political franchise.

The new ironclad turret ship *Decasta*, returned yesterday to Queenstown from a thirty hours' cruise in the Atlantic. She failed to encounter a gale, as desired, but met with rather heavy seas in which she was found to roll and pitch to a greater extent than had been expected.

In the Tichborne case the last two days have been occupied by the examination of witnesses who had known Arthur Orton during his residence at Wapping. All of them, including Miss Loder, a former sweetheart of Arthur Orton's, more or less positively identified the claimant as that person.

A Dublin despatch says that at the recent great fire in that city, crowds of persons, whose object is to plunder, hinder the efforts of the firemen to extinguish the flames. At one time they stoned the firemen and a detachment of soldiers which had been brought to the spot to preserve order. The latter charged on the mob, wounding many of them. The Mayor of the city was present. Intense excitement prevails in the vicinity of the fire, and during the charge of the troops it was fearful. Property to the amount of £100,000 has already been destroyed.

The annual races on the 10th inst. at Ascot Heath began. Great crowds attended. The races run were for the Prince of Wales Stakes; Ascot Stakes and the gold vase. The Prince of Wales Stakes was won by *Kaiser*, with *Gang Forward* second, and *Combat* third. Nine horses ran. The Ascot Stakes was won by *Whalen*. Nine horses ran. The gold vase was won by *Thorn*, with *Hannah* second, and *Strawn* third. Seven horses ran.

The mutiny in command of the Spanish General Velerde arose from superceding a captain. 1,200 of the troops remained faithful, and retired with the General to Tortosa.

Mr. Whitley, proprietor of the *Liverpool Daily Post*, and father of the penny press is dead.

It is reported a treaty of Alliance has been concluded between Germany and Italy.

The Ascott race for the gold cup was won by 'Cremorne,' 'Flagolot' second. Seven ran.

General L'Admirault has applied to the French Assembly for authority to prosecute the Communist Rance, who is now a member of that body.

Ex President Thiers has written a letter to a friend, in which he says he has retired to private life, believing that party government in France is a mistake, and will only lead to a fresh division.

The Sultan has issued a firman, granting to the Khedive of Egypt an independent civil, military, and diplomatic right.

In the Cortes on the 13th instant, an official statement of the future policy of the New Ministry was read. It favors a speedy demarcation of the Federal States; restoration of discipline in the army; proclamation of martial law against Carlist insurgents; liberty of the Antilles and suppression of slavery. It estimates the deficit in finances at the end of the present month at 2,800,000 reals.

A Madrid despatch to the *London Times* reports that the crisis in the Government of Spain continues, and fears of a serious outbreak in the capital are entertained.

The Cortes remained in session most of yesterday. During the deliberations a party of armed volunteers surrounded the Palace of the Cortes and a large body of armed police concentrated at the Column of Dos Mayo, and detachments of troops were posted at other places ready in anticipation of an outbreak, but their services were not called into requisition.

The irreconcilable press openly advocate an armed revolution. The situation is very disquieting.

General Hidalgo has been appointed Civil Governor of Madrid.

A rumour is current here that the Khivan expeditionary column, under the command of General Kauffman, has met with a reverse.

ANNUAL REPORT ON THE STATE OF
THE MILITIA FOR 1872.

(Continued from Page 267)

Although the Kingston School of Gunnery (A Battery) has only been in operation for about 16 months, and the maximum authorized strength, namely time limited to 4 officers and 131 non-commissioned officers and men, the Commandant reports that 12 officers and 223 non-commissioned officers and men have joined that school since its formation, and about 30 more are at this date (17th March, 1873) waiting for admission.

8 officers have obtained first class certificates and two officers a second class certificate; 7 first class and 8 second class certificates have been given to non-commissioned officers and men; no certificates have as yet been given to any of the men at present at the school, but they will of course, be entitled to receive certificates according to professional merit on passing the necessary examination in artillery science before they leave the school.

The Commandants of the Gunnery Schools have been very particular in granting certificates. It is indispensable that an officer in any arm of the military service should have some education, and no certificate should be given to any one who cannot write correctly from dictation, and show a reasonable knowledge of arithmetic.

On the conclusion of the first year, on the 26th October, 1872, a proportion of non-commissioned officers and men who had completed 12 months' course of instruction and who were desirous of readmission for a further period, being *good characters and desirable men in other particulars*, were readmitted. This system is being continued, and, if carried out systematically and with judgment, will have the effect of securing eventually, to the service of the Dominion, a picked body of first class artillerymen either for duty or instructional purposes.

Lt. Colonel F. B. Strange, the Commandant of the Quebec School of Gunnery, "B" Battery, reports for my information as follows:

"The examination papers submitted—marked A, B, C, D, E, G, H, I, J, K—and published in appendix show that the practical and theoretical course of instruction of the officers, and the small number of sergeants who were able to avail themselves of it, has been of an advanced character, including the following subjects:

"Artillery drills and exercises, garrison and field-gunnery.

"Artillery material, including the examination and sighting of ordnance, laboratory, &c.

"Minor tactics and military history.

"Fortifications and sieges.

"Rough military surveying with pocket compass and sextant.

"I beg to suggest an artillery certificate, applicable to the higher course of study, in addition to the present gunnery certificate.

"I have much pleasure in expressing my entire satisfaction with the intelligence and application, as well as with the natural military qualities shewn by the officers who have passed through my hands.

"The duties of all ranks have been performed with entire satisfaction, and the absence of actual crime, with the exception of drunkenness, which, however, has greatly decreased, is encouraging.

"I am much indebted to Major Montzambert, Captain Duchesnay, and Lieut. Short, who have each in their turn acted as Adjutant.

"To enable me to carry out the duties of instruction and inspection, I have of late left much of the detail of battery interior economy to Major Montzambert, who has shown himself thoroughly competent, and set the best possible example of cheerful energy and good feeling, which has been followed by all ranks.

"The most obviously advantageous method of utilizing scientifically trained officers during peace, is that adopted by the United States, where a large proportion of those educated at West Point are employed on Public Works.

"The gigantic railroad, canal and boundary surveys undertaken by the Canadian Government give ample scope for the employment of assistant military surveyors and engineers, who would thus form the nucleus of a practically scientific staff corps, whose intimate knowledge of their own country, and the maps they would construct, would be of incalculable value in the event of war and useful in peace. These services are at present, in some instances done for us (and I have no doubt with great ability) by foreign engineers, whose knowledge of our country might not always be to our advantage.

"It would be very desirable that a party from the Gunnery School should be attached as assistants to the Royal Engineers on the Boundary survey. When the latter return to England, their Canadian assistants would have acquired sufficient skill to become the nucleus of a Canadian staff corps of engineer surveyors.

"Royal Artillery and engineer officers are educated together, and their training now covers the whole ground of important subjects taught at the Staff College, Sandhurst; artillery, infantry, and riding drills are already taught at the gunnery schools as well as rough military surveying.

"A few months after the formation of a School of Gunnery a considerable portion of the fortress of Quebec was re-armed, by the men attending it during a severe winter; only one rifled gun having been mounted by the Royal Artillery before their departure, while a considerable number of the old guns had been dismounted by the Royal Engineers to repair the platforms; this while affording necessary and valuable practical instruction to officers and men, carried out an important public service.

"On the 5th August, the services of the battery was rendered on the requisition of the Mayor and Sheriff (who both attended in person) during the elections at Quebec. The battery was formed as infantry, with a mounted detachment as troopers, to clear the streets.

"I reported the circumstance to the Deputy Adjutant General commanding No. 7, Military district, from whom I had received an order to turn out. I was subsequently directed to send a detachment to Montreal for the same purpose; and in the month of September, 1872 to send an officer, and twenty-five (25) non-commissioned officers, gunners and drivers, with two 7 pound muzzle loading rifle guns and their equipment, for service in the Province of Manitoba. Thirty nine (39) volunteered; the surplus were taken as infantry. They were a remarkable fine body of intelligent and trained soldiers including many artificers.

"The number of horses—eight (8)—is inadequate for instruction in field artillery movements. Forty (40) horses would be sufficient for a permanent instructional field battery and riding establishment, especially if officers going through courses were given forage for their own horses, as allowed last year for the cavalry school, such horses be-

ing available for gun draught. The artillery horses might, under these circumstances, be able to perform the transport and fatigue duties for the store and supply department, driving waggons being almost as good practice as driving guns. A considerable saving of money would be the result, combined with efficient instruction, and a field battery always ready for service, which, during annual training at camp, or on emergencies, might be distributed among the field batteries, to whom the addition of a few well trained wheel and lead drivers, with their horses, would be invaluable.

"The gun practice of "B" Battery was carried on from King's Bastion, Citadel, at a target on the ice. Artillery marksmen having been selected in accordance with the system submitted for your approval, the results were published in general orders, and shew a high figure of merit, combined with quickness in laying heavy guns. Mortar practice was carried on from the Lewis curtain.

"With regard to the military schools of Canada I think it will be generally admitted that the time had arrived to establish such schools on a more efficient basis, and this, it will be seen, has been done very effectually as regards the artillery; to afford as effectual means of instruction to the other arms, schools on a somewhat similar system should be adopted.

With a view therefore to promote increased general efficiency in the Militia of the Dominion it is desirable to re-organize the Military School system generally, I recommend that the number of Military Schools be limited in future to one in each Province, based upon the principle of tactical brigade organization, at which Regimental Instruction can be imparted to a certain number of officers, non-commissioned officers and men of Cavalry and Infantry Corps, as thoroughly as is now being carried on for Artillery officers, non-commissioned officers and men in the Gunnery Schools at Kingston and Quebec.

It is an acknowledged principle in the Military service that the best professional school for a Military man, next to the school of actual war, is service with a Regular Army, it follows therefore, that a proper military school should be organized as regularly as a military body can be organized, for the theory, without the practice of Military duties is not of much avail.

I recommend that three brigade schools be established—one at Kingston, for the Province of Ontario, one at Quebec for the Province of Quebec, and one either at Fredericton or St. John, N.B.; as may be most convenient for the Province of N. B., the instruction required for the Militia in Nova Scotia to be obtained as at present from Her Majesty's Regular Troops, stationed at Halifax.

To establish suitable brigade schools at Kingston and Quebec, all that is necessary would be to place on duty one company of infantry, and one Troop of 25 Cavalry, in connection, and co-operation with the present schools of Gunnery; and for the Province of New Brunswick to establish a Brigade School of somewhat less numerical strength.

At these Brigade Schools whilst the Regimental training and command according to the respective arms would be with the Regimental Commanders, The Chief command of the Brigade School itself, would rest with the D. A. G. of the District, who is the responsible commander of all the Militia in the Districts.

I am induced to recommend the adoption

of a Military School organization based on the formation of each School into a tactical Brigade of the three arms for many reasons.

In time of war corps are grouped into tactical Brigades of the three arms for purposes of Military cohesion and combination during operations in the field.

In time of peace corps are also grouped into brigades, concentrated as much as possible in Divisions and large bodies, for purposes of Military duty, instruction and administration.

It follows, therefore, that a military School organized on the basis and principles of a tactical brigade of the three arms, is the proper kind of school for acquiring a practical as well as a theoretical knowledge of the application of Military science.

At these brigade schools a limited number of officers, non commissioned officers and men belonging to Cavalry, Artillery, and Infantry Corps of the Active Militia could be thoroughly instructed in their duties, and in due time a very large number passed in rotation through the Brigade schools.

Officers would have an opportunity of acquiring a knowledge of the Regimental exercises appertaining to the three arms; a matter of great importance. Each Brigade School would become an excellent Staff College in addition, and serve as a model brigade for all corps of Active Militia in the Province.

Should this system be adopted I would recommend that all staff officers in future should be appointed from such officers as have passed satisfactorily through the Brigade School, obtained certificates of qualification in Cavalry, Artillery, and Infantry exercises, and who have acquired a proper knowledge of the duties of Staff Officers; by which means the country would obtain the services of officers qualified to discharge efficiently the military and administrative duties of the higher commands, in addition to securing a satisfactory system of regimental instruction for others.

If the present sums voted annually by Parliament under different heads for purposes of Military School instruction were amalgamated into one fund and an additional sum granted to raise the total amount to \$250,000 I believe a very satisfactory system of real Military schools, adequate to the present wants of the Militia, and the country could be established, but of course the successful working of such Schools would depend mainly upon the qualifications and ability for the officers selected for Instructors.

MILITARY STORES, CLOTHING, AND EQUIPMENT.

Reference to the Report of Lieut. Colonel Wiley, Director of Stores, which is published in the Appendix, shows the condition of the country, in respect of Military Clothing, Arms, Ammunition, Camp Equipage, and Military stores generally.

The receipts and issues of clothing, arms, ammunition, and Military Stores during the past year, are shown in Colonel Wiley's Report, and much valuable Information on other matters connected with his duty is contained in this officer's report.

Lieut. Colonel Wiley is also charged with the care of Militia properties, he is an officer attached to the staff of the Militia Department, directly responsible to the Minister of Militia, and not under my command.

Hitherto the supplies of uniform, clothing, military equipment, small arms, small arm ammunition, rifled field guns, ammunition for Field and Garrison artillery, &c. &c. and

military stores generally have been obtained almost entirely from the Imperial Government or from private contractors in England.

It appears to me that the time has now arrived when an alteration in this system might be adopted, to a very great extent, with advantage.

The desirability of expending in the country, as far as possible, the money voted for the annual supply of these stores is obvious, but I would especially call attention on military grounds to the necessity for commencing the manufacture of small arms ammunition, and such other warlike stores as are annually required for practice, and for the maintenance of a sufficient reserve.

As regards gunpowder, an article of the first military importance, and which could not be obtained in time from England, should a sudden emergency arise, Lieut. Col. French, Inspector of Artillery and Warlike Stores, (formerly Inspector of Warlike stores for the Imperial Government at Quebec, and consequently a competent authority) has reported to me on the subject as follows:

"Having reference to the ammunition required for gun practice for the current year I have the honor to point out that for various reasons it would be desirable to ascertain if the powder could not be manufactured in this country.

"In December, 1871, I inspected the powder mills near Hamilton, and I feel satisfied from that inspection, as well as from conversation with the Manager, and Foreman, that a suitable powder for heavy guns could be obtained at those mills.

"The finer brand of powder known as "Dominion Rifle" is an excellent powder, I have used it a great deal myself, but the fact that it is used in a great measure by small bore riflemen is a sufficient proof of its excellence.

"It is, I suppose, needless for me to mention the advisability of encouraging the manufacture of gunpowder in the country; at the same time it will be necessary, if Government should contract with manufacturers for this article, to look closely after its manufacture, in order that the conditions may be as similar as possible to the manufacture of the powder at present in store.

"I have received from the Superintendent of the Government Powder Factory, at Waltham Abbey, England, specifications for the supply of powder by contract &c. &c., I shall be happy to submit the necessary conditions if required.

And with regard to the general question of the manufacture and repair of warlike stores in the country, that officer reports to me as follows:

"I have the honor again to bring to your notice the advisability of commencing, even on the smallest possible scale, the manufacture and repair of those warlike stores most needed for the defence of the country.

"I would in conclusion, submit that the establishment of an arsenal on a small scale may be pressed on the attention of the Government.

"With regard to the suggestion of the Inspector of Artillery and Warlike Stores, I concur entirely in the views submitted by that officer.

Reference to the Militia Estimates will show that a very considerable sum is voted annually for military stores &c. for instance in the Financial Estimates for the year ending 30th June, 1872, the following sums were voted, viz:—

Ammunition.....	\$139,109 00
Clothing.....	130,000 00

Military stores (including storage however)	85,683 00
Ordnance Stores and Equipment for Field and Garrison Batteries.....	33,606 00
For improved Firearms ..	142,055 00
	\$530,453 00

Although this amount exceeds the average expenditure, it is evident that a very large sum of money has hitherto, (and I believe unavoidably) been expended out of the Country, the greater portion of which might now, on military and other grounds, be expended with advantage in the Country.

ANNUAL DRILL AND INSPECTION OF THE ACTIVE MILITIA BY DISTRICTS.

The annual Drill of the various corps of the Active Militia was, with few exceptions carried out in accordance with the detailed instructions contained in the General Orders of 31st May, 1872, a copy of which will be found in the appendix.

The dates on which the Corps were assembled having been previously arranged to suit the convenience of the majority of the men who are, for the most part, engaged in agricultural pursuits.

MILITARY DISTRICT No. 1.

The Militia in this District are under the command of Lieut. Col. Taylor, Deputy Adjutant General, who reports as follows on the state of his command:

Head Quarters, London, Ont.

14th November, 1872.

Sir,—I have the honor to inform you that the quota of Active Militia required to be furnished from the district under my command is 5,617.

The total strength of the force when mustered at the time of the Annual drill for 1872-73, was 4,303.

There are 1214 officers and men wanting to complete.

The annual drill was performed in accordance with General Orders of 31st of May, 1872, in obedience to which the whole active force in the District (with the exception of the Garrison Batteries, the Lucan company of infantry, and four new corps not equipped), were assembled, on the 18th of June, in a divisional camp at Windsor for sixteen days drill.

Immediately after arrival in camp, a medical inspection was made by the surgeons of their respective corps, and seven men who were found unfit for service were sent home. forty two others were subsequently sent home on account of sickness, the particulars of which will be found in the report of Surgeon V. A. Brown, principal medical officer in camp, which I now have the honor to enclose.

The force in camp was divided into two brigades, which were under the command of Lieut. Colonel Richardson, 2nd Rifles, and Lieut. Colonel Ross, 33rd Battalion as Brigadiers, who fully justified the confidence placed in their ability for these positions. The Brigade of artillery was under command of Lieut. Colonel Shanly, a most efficient officer, and the cavalry under Lieut. Colonel Cole, by whose able exertions the troops of cavalry in this district were now for the first time drilled together as a regiment.

Drill for the first week in camp was confined to company skirmishing, and battalion drill; and the second week, there was a brigade or divisional drill once a day; and a marked improvement was very evident to

wards the end of the sixteen days.

The whole force was inspected by the Adjutant General on the 26th June, and drilled under his command on a divisional field day, and on the 1st of July the division was paraded at full strength, and fired a "feu de joie" in honor of "Dominion Day" after which there was a divisional field day. A great number of spectators from Detroit were present.

The annual target practice was carried out at Camp Windsor in a very satisfactory manner, under the very efficient superintendence of Lieut. Colonel Moffat (the Divisional musketry instructor at camp) whose report on the practice I have the honor to submit, together with the District Practice Returns. The best shot in this district is Private Charles Coombs, 7th battalion, who made a score of 43 points. A list of the names of the best shots in every battalion, company and corps, for this year is herewith transmitted.

The daily scale of rations which were supplied in camp appeared sufficient, the issue of cheese being a great boon in advance of last year. The contracts for rations were carried out in a satisfactory manner, except the issue of bread, at the commencement of camp, which had to be brought from London—a distance of 110 miles—on account of there being no ovens any nearer of sufficient capacity to bake the amount required.

The issue of a marquee for each battalion enabled the officers to form a comfortable mess, and saved them the expense of temporary sheds, as in former years, besides adding much to the social good feeling and harmony among officers in each battalion, so necessary for the cheerful performance of regimental duties.

I have much pleasure in forwarding the following address, presented by the Mayor and Corporation of Windsor, in proof of the general very good behaviour of the Division:

"To Lieut. Colonel Taylor, D. A. G. commanding, Camp Windsor.

We, the Mayor and Councillors of the town of Windsor, on behalf of our fellow townsmen, cannot allow the troops which have been encamped here to return to their respective homes without expressing our gratification at the result of what some were incited to regard as an experiment—the formation of a camp and the performance of the annual drill for the entire volunteer force of the Western peninsula at this point.

"Though it may be a breach of strict military etiquette, we beg of you, Sir, to convey to the officers, non commissioned officers and men under your command, our thanks for the example they have set during their stay here of military training, excellent discipline, and that orderly behaviour, which is characteristic of our Canadian volunteers under all circumstances.

"We feel that occasions such as the present, when 5,000 men, suddenly withdrawn at considerable personal inconvenience from their peaceful pursuits, adapt themselves with alacrity to the rougher life of the camp not with the incentive of any great emergency but merely for the performance of an annual duty, do much to foster the growth of that spirit of patriotism and nationality, without which no people can ever become great.

"Permit us, then Sir, to wish our fellow countrymen of the Volunteer force now in camp God speed upon their return to their homes. Their presence and their conduct

hero inspired us with pride, and cause us to congratulate ourselves that we too are Canadians and fellow subjects of the same most gracious Sovereign.

"On behalf of the Council,
"DONALD CAMERON,
"Mayor.

"Dated at Windsor, 1st July, 1872."

The transport of corps to and from camp was conducted without any casualty though considerable delay was caused on the Great Western Railway. The gunboat *Prince Alfred* conveyed two battalions.

I have to report that the force has been supplied with all the uniform they required for the past year—a Return of the quantity issued is herewith transmitted. The accoutrements were clean and serviceable; the arms in general are kept in very good order; but I would call your attention to the fact that there are in every battalion a few stand of arms that would be useless if called on for service, in consequence of the smaller parts of the rifle having become damaged or lost, such as needle spring, block spring, block pin, &c. and there is no supply at hand from which to make the necessary repairs.

It gives me much pleasure to report the valuable assistance which I have continued to receive from the Brigade Majors and other staff officers of the district during the past year.

I have the honor to be Sir,
Your most obedient servant,
JOHN B. TAYLOR, Lieut. Col.
D. A. G. Military District No. 1.

The Adjutant General of Militia,
Ottawa.

MILITARY DISTRICT No. 2.

The Militia in this District are under the command of Lieut. Colonel Durie, Deputy Adjutant General, who reports as follows on the state of his command:

Head Quarters, Old Fort, Toronto.
18th December, 1872.

SIR,—I have the honor to inform you that the quota of Active Militia required to be furnished from the district under my command is 6,089.

The total strength of the force when mustered at the time of the annual drill for 1872 was—

Officers.....	452
Non com'd. officers and men.....	5,610
	6,062
	38

Required to complete the quota :

Officers.....	} 27
Non commissioned officers and men.....	

The annual drill was performed in accordance with General Orders of the 31st May, 1872, and in the following order:

The force as above enumerated, moved from the respective headquarters of corps on the 12th June last, according to orders, in order to proceed to Niagara; but some difficulty was experienced in the transport of the troops by water, owing to the destruction by fire of the steamer *Kingston*, hired for that purpose, the evening before the day she was

required; but it is due to the activity of Al-ger, District Paymaster, the only available Staff Officer at Toronto at the time, that other arrangements were promptly made, and in consequence the whole force assembled on the following day (13th June), and were encamped by brigades. I would here respectfully suggest the propriety of having a due supply of both tents and blankets stored in the district headquarters' store (Toronto) prior to the troops moving into camp, in order to meet such an emergency as arose last summer at Niagara, on account of the want of tents and blankets (many of the latter having been burned on board the steamer *Kingston*).

(To be continued.)

CORRESPONDENCE.

The Editor does not hold himself responsible for individual expressions of opinion in communications addressed to the VOLUNTEER REVIEW.

To the Editor of the VOLUNTEER REVIEW.

SAULT STE. MARIE,
27th May, 1873.

DEAR SIR,—The 23th inst. was, as usual, observed here as a holiday. A Royal salute was fired at noon by my company.

Jos. WILSON, Captain.

To the Editor of the VOLUNTEER REVIEW.

June 7, 1873.

DEAR SIR,—I have for some time had it in contemplation to write a letter to appear in your most useful journal and valuable paper on the subject of certain grievances that exist in my battalion, with the hope that it might come under the eye of some person who might be in a position to set the matter right by giving some other person a "rap over the knuckles" for improper conduct in turning a deaf ear to requisitions forwarded by my commanding officer. I think I may say repeatedly—and with the same result—but it cannot last much longer. My corps is the only one here that is not supplied with proper accoutrements. The Rifles are well turned out in that respect, so are the Artillery, but we have no battalion bags. We have nothing but a heavy antiquated and impracticable thing behind that might more properly accompany "old Brown Bess" than such a perfect weapon and rapid firer as the Snider Enfield, and that no ordinary fingers can open; indeed I have tried to open some of them and could not without going to too much trouble. When I joined this battalion last year, at the first field day, I found that at the last sound of the word "load" the men thrust their hands into their trousers pockets and they have not got them out yet, in spite of official letters and general inspections. I need not point out how utterly ludicrous and disgraceful this is. It has driven lots of men out of our ranks who would not sub-

mit to anything so absurd, and very soon there will be none left, for there is also a nuisance—the cap nuisance. We are expected to wear forage caps that would not have been tolerated in the dark ages—and scores of men turned away in disgust when they saw what they would have to wear or buy something more suitable. I trust, Mr. Editor, I won't have to write again on this subject; but that the proper authorities will at once take the matter up and save the country the services of what is left of a good regiment.

Yours, &c.,
A HALIFAX SCH.

MONTREAL.

(FROM OUR OWN CORRESPONDENT.)

The Grand Trunk Militia Brigade in the Montreal District, on Tuesday, commenced their 14 days annual drill. The above corps take part in the funeral of Sir George Cartier on Friday. There were parades of several of the city volunteer militia corps at their respective headquarters on the 9th.

The musters were very unsatisfactory, in many cases there being more officers than men.

The eighteen Quebec volunteers for Militia service in Manitoba passed through Montreal en route for the North West, as well as fifty five from Nova Scotia,

His Excellency the Governor General and Lady Dufferin, with their family and attendants, arrived from Prescott by the *Corinthian* at 7 o'clock last Tuesday evening. Their Excellencies were greeted at the gangway, by Judge Coursol, who had the honor of escorting her ladyship from the *Corinthian* to the *Montreal*, on which steamer the vice Regal party took passage to the ancient capital. Although a considerable number of persons congregated on the wharves, apparently few knew of the affair, the attraction evidently being the expected arrival, of the *Druid*. His Excellency looked well.

The preparations for the funeral of the deceased baronet Sir George Cartier, which promise to be very expensive and elaborate. The *Druid* after anchoring off Vercheres all night arrived at Montreal about 10 o'clock on Wednesday. About 5,000 persons were assembled on the wharves, amongst whom were a number of staff and militia officers. The *Witness* says:

After having the *Druid* securely moored alongside the ferry boat, a gang way was hastily laid, while the military guard on board, of the B. Battery, filed on shore and formed a hollow square around the hearse. The seamen of the *Druid* entered the *chappelle ardente*, and a few minutes afterwards they appeared bringing all that was mortal of Sir George Cartier. They slowly paced over the deck, crossed the gangway to the

ferry boat, and then all took off their hats, the band struck up the "Dead March in Saul" and the seamen bore the coffin, a splendid one, but evidently of unusual weight, to the hearse. The guard in command of Colonel Strange reversed arms, and the procession was immediately formed. First as mourners came C. Cartier Esq. brother of the deceased baronet, M. Guvillier, Esq., the latter brother in law; H. Fabre, Esq., another brother-in-law; Messrs J. Desrosier, H. Desrosier and J. Cartier, nephews, and H. Hubert, a cousin. Following, there were the City Councillors, headed by Acting Mayor Brunet; Hon. H. Langton, Minister of Public Works; Adjutant General R. Ross, M. P. Ryan M. P. the judges, the high court officials a number of military officers, followed by a great number of gentlemen. The road from the wharf up to the square was none of the best, and the line of the procession was somewhat broken, but once on the Ballard pavement it closed up and presented a very fine spectacle. The entire window room abutting on the square was occupied by sightseers; all room in the street was appropriated while in front of the Court House the space was packed full.

Its reception at the court house. The procession halted opposite the main entrance to the Court-House. As the coffin was taken from the hearse the escort detachment of the B Battery saluted, and, reversing arms, they followed, in "dead march" procession, the coffin as it was borne up stairs. At the entrance door Sheriff Leblanc received the cortege, and the next minute the coffin was carried up the intricate stairway, along the corridors, into the Advocates' Room, and placed on the *catafalque*. The latter was surrounded with all the altar paraphernalia incidental to special services. The clergy thereafter conducted the church services appropriate to the occasion. An oppressive odor of incense, combined with the densely crowded state of the Hall, rendered breathing in the *chappelle* anything but pleasant. As soon as the coffin, upon which were *immortelles*, &c., had been ceremoniously deposited to lie in state, the immense throng seeking admission at the doors of the buildings was allowed to enter, and a tide of sightseers forthwith filed through the western door, approached the coffin its ornaments blithering in the pale gas light, viewed the solemn scene, and then departed by the eastern doors at 11½. The doors were closed until 1 p.m. while the Sisters make some necessary arrangements; after the hour, sightseers will be admitted when all will have an opportunity of viewing the remains of the deceased.

Companies 4 and 5, 97 Royal Artillery, in command of Major Hardy, with No. 6 Company, G. T. R. Brigade, were ranged in open file along the route of the procession to the Court House, their bands being in attendance. Several buildings in Jacques Cartier Square were hung in black.

On Wednesday evening the relatives and friends of the deceased baronet were present in the *chappelle ardente* at the opening of the coffin. The remains were found to be in a state of preservation as perfect as could be expected, though the face is slightly disfigured. On the whole it was not thought desirable to exhibit the remains to the public and consequently in deference to the feelings and wishes of the relatives, the coffin was closed for the last time.

This morning (Thursday), at 9 a.m., an impatient crowd of sightseers blocked up the entrance to the vestibule of the Court House, and since that time a large number of persons, among them many strangers from the country and neighbouring towns, have passed through the *chappelle*. Opportunity will be afforded to view the lying in State until 6 o'clock this evening. The Grand Marshal, Mr. Davornay and assistants are extremely busy in making arrangements for the funeral.

Crowds visited the Court House all afternoon. In addition to a number of *immortelles* and wreaths on and around the coffin, another, in the form of a cross, has been added. The air was unusually close, and the guard within avowed they had never before been so oppressed, sweat rolled down their bronzed visages, as they ordered the multitude to pass on, while in the hall a stifling dust added to the discomfort. About 15,000 people have visited and seen the coffin; among the number being congregations of nuns, members of Roman Catholic Charitable Institutions, students of the Jesuit College, inmates of the Deaf and Dumb schools, and other schools, seminaries of the Roman Catholic Church, all of whom paraded before the remains.

Cabinet Ministers, members of Parliament, Mayors and corporations of cities, etc. are arriving in Montreal. Among them are the Mayor of Toronto, Col. Gilmour, of the Queen's Own; Mayor Martineau and Alderman Bangs, Pratt, Langford and Roque of Ottawa. Hon. H. M. Cochrane and family. Hon. Dr. Robetille, Solicitor General Chapleau and Sir Narcisse F. Belleau from Quebec; Mayor Aymot, J. Filton, T.D. Harrington, Esqs. Civil Service Ottawa; and amongst others also expected this evening at Lawrence Hall are Hon. P. Mitnell, Fisheries and Marine, Dr. Tache, Col. Fletcher, E. J. Longevin, Esq. M. P. Mr. Dormer, M. P. and others. The Rt. Hon. Sir John A. Macdonald, and other members of the Government, will also arrive this evening (Thursday) and room at the Doneganon Hotel.

The *S. S. Druid* left for Quebec at 6.50 on Thursday; quite a number of persons visited her during yesterday. She is a trim little craft, and everything on-board seemed to be in good order.

Weather very warm.

B.

We are reliably informed that the salmon fishery in the Gaspé and Bay Chaleur districts this season far exceeds anything of the kind known for forty years past. Our informant states that salmon fishing began about the 26th of May, being unusually early; and that the nets were taking sometimes fifty each at a single tide. He adds: "Never has salmon been so plentiful, and never have the owners of stamks seen such a season. Some nets takes \$60 worth of salmon every day. This happy result is ascribed by everybody to the few seasons of protection under the fishery laws which our salmon fisheries have enjoyed."—*Ottawa Times*.

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The Volunteer Review,

AND

MILITARY AND NAVAL GAZETTE.

"Unbribed, unbought, our swords we draw,
To guard the Monarch, fence the Law."

OTTAWA, TUESDAY, JUNE 17, 1873.

TO CORRESPONDENTS.—Letters addressed to either the Editor or Publisher, as well as Communications intended for publication, must, invariably, be *pre-paid*. Correspondents will also bear in mind that one end of the envelope should be left open, and in the corner the words "Printer's copy" written; and a two or five cent stamp (according to the weight of the communication) placed thereon will pay the postage

In another column will be found a synopsis of a lecture delivered before the Royal United Service Institution by Major MONCRIEFF, on the application of his system to Coast Defence. As our readers are aware the gallant Major is the inventor of a gun-carriage which has attained a world-wide fame, its principle being the utilization of the force imparted to the gun on its discharge technically known as *recoil*, for the purpose of bringing it under the crest of the rampart or below the top of the gun pit in order to have it reloaded, and raising it again, thereby making its fire to be delivered without exposing the gunners,

The great range of Modern Artillery demands that in order to attain its full value in shore batteries the lateral direction should not be limited by embrasures, which was a principle requisite of the old system, in order that both the gun and gunners might have the cover of the parapet; it is true that guns were mounted *en-barbette* without any parapet at all, but then musketry range did not exceed one hundred yards and artillery not over three hundred; at present the armament *en-barbette* would be all but useless. The Moncrieff system, however, affords all its advantages as well as many more in manœuvring and manipulating heavy artillery, it is indeed doubtful if the heavy guns likely to be used in futuro could be handled without some such mechanical application.

The lecturer shows the great advantages arising from its use and the possibility of using guns mounted on his carriages in advantageous situations, as a question of coast defence, however, we are of the same opinion with Capt. COLUMB, that the best devised system of land batteries would be useless in the face of the act, that the positions could be either turned or forced; and once the line was broken the rest would not only be useless but a positive disadvantage as retaining troops which should be concentrated to oppose the advance of an invader, no greater mistake in the defence of a country could be made than that of fortifying and guarding a great number of places. It was the ruin of the late Southern Confederacy and the fallacy of the system was proved by SHERMAN's celebrated campaigns in Georgia and the Carolinas, during which he captured the fortresses of the coast and their interior supports by simply cutting their lines of communication and outflanking them.

If the South had collected the garrisons of their great centres, thrown an army equal to SHERMAN's in numbers across his path at a point between Atlanta and Savannah and forced him to two or three general engagements, there would have been no modern *Anabasis*, even if the Confederates had been beaten, which was not at all likely. They did exactly what Major MONCRIEFF advises should be done—fortified all the coast and covered it with strong garrisons—which were obliged to evacuate one place after another without firing a shot, as SHERMAN's army occupied the roads and railways connecting those positions with their sources of supply.

Captain COLUMB is perfectly right when he says that *gun boats* are the proper and indeed sole agents for coast defence, *inshore*, that is to prevent a landing in force, or impede it for strategical purposes. The lecture as well as modern experience points to the conclusion that a country with an extensive line of sea coast cannot be defended without a fleet, and naval supremacy is as much an element of modern warfare

as it was one hundred and fifty years ago, all the improvements in guns and ships to the contrary notwithstanding.

The true policy for Great Britain is to keep up a pre-ponderating naval force—as long as she is able to do that she will be practically free from invasion—and train her whole population to arms. Of course it will be necessary to protect her great sea ports from raids, but the large fortifications talked of are to our thinking a grave mistake, if an hostile fleet appeared before any one of them it had only one course to pursue—the city or town should surrender or be evacuated. The range of modern artillery puts that question at rest, but it should not be so defenceless that it would be obliged to submit to being plundered.

Well appointed field forces, a good fleet, and a moderate share of fortified positions appear to be the conditions necessary for successful defence, Major MONCRIEFF's lecture is well worthy attention as it is singularly instructive.

WE have received the LXXI number of the Journal of the Royal United Service Institution; it contains the following very interesting articles, viz. :—

The Autumn Manœuvres of 1872.

Lowering Boats at Sea.

An Account of the proceedings of the Chittagong Column of the Lushai Expedition.

Personal Experiences and Reminiscences of the Siege of Paris.

The Central Asian Question.

The Strategy of Russia in Central Asia.

All these articles were read as lectures before the "Royal United Service Institution"—amply discussed by officers and civilians of the keenest intellect and most varied experience, and contain the most valuable certain knowledge extant on the various subjects treated.

We have brought before our readers the advantages this Institution offers to its members, and especially to officers of the Canadian Army, amongst whom are several gentlemen of our acquaintance who could furnish valuable papers on the military relations of Canada to the Empire and the United States; and information which would tend to enlighten public opinion in Great Britain as to the actual value of the connection and the strategical importance of this country.

We have received from the Secretary, Captain B. BURGESS, prospectuses and papers of application for membership to the Institution, which we will be most happy to send to any of our readers desirous of becoming members, and endeavouring to serve their country through the opportunities offered by the "Royal United Service Institution."

The following notice attached to the seventy-first number will at once show the advantages offered.

"The Council of the Royal United Service Institution are most anxious to obtain the assistance of Scientific Officers of the Naval and Military Services in carrying out a useful and practical Course of Lectures at the Institution during the year 1874.

It has been therefore resolved—

1. That the Course of Lectures shall commence about the 15th of January.
2. That the Lectures shall relate to all subjects which have connection with the Naval and Military Professions; to the application of Physical Science to Military Art; Military History; and the Description of Countries in which the British Forces serve.
3. That Evening Meetings shall be held once a fortnight during the Season, or as occasion may demand. Officers are invited to read Papers, or send them to be read. Inventors of articles connected with the Naval and Military Professions will be afforded the opportunity of exhibiting and explaining their Inventions. Discussion is invited.

"The Lectures; the proceedings of the Evening Meetings, and the discussions, or a short abstract of them, and the descriptions of Inventions, will be published in the Journal of the Institution, subject to the discretion of the Council, and illustrated when necessary, by diagrams.

The Council propose to appoint a room in which inventions will be exhibited; and inventors are at liberty to give notice in the professional journals that they are deposited in the Institution."

Officers who will favor the Institution with a Lecture, or a Course of Lectures, are requested to communicate with the Secretary on the subject as soon as possible.

By order of the Council,

B. BURGESS, Capt.
Secretary.

The Shah of Persia, is about making a tour of the various European Courts, has been received at St. Petersburg with all honors, and accompanied by one of the Grand Dukes, and some of the diplomatic corps, is on his way to visit the Court of St. James. And all this is occurring while the Cossacks are busily engaged in rectifying the boundaries between Russia and Persia, and loudly knocking at the gates of India.

It would be exceedingly difficult to understand the policy of the British Government with reference to complications which can only end in one of two ways; either a general European war in which a determined struggle will be made to realize the idea of a great European and a great Asiatic power, or the evacuation of India; if we did not know the difference between the men who wield the destinies of England and Russia. In the first case a chance medley collection of traders, lawyers, civil servants and country gentlemen, the accidental leaders or founders of popular ideas for the time being; in the second men

skillfully trained for a specific object and purpose with all their energies concentrated on its accomplishment, their fame and position in life dependent on the advances made towards its attainment—without personal bias or party crotchets or *peace-at-any-price* philosophers to deal with.

The motives which led Russia to tear up the Treaty of Paris in 1870, are rapidly developing, and points to the speedy acquisition of Constantinople, by a flank march threatening Persia. Englishmen of course are satisfied with Mr. GLADSTONE's assurance that "the Russian Government look on Afghanistan as completely outside the sphere within which Russia would be called upon to exercise her influence." But as this is one of the oracular utterances so peculiarly the property of the English premier, whose policy may best be described as being of the *Jim Crow* order, it in reality means that Russia does not intend to trouble herself about India till she has wiped out the Turkish Empire.

As long as Great Britain remains the ally of the Sultan, it would not be possible to turn against her the Mahomedan population of India; but let Russia once occupy Stambul and British supremacy in India is not worth one year's purchase. That movement which is even now in progress would close the Suez Canal and the proposed Railway route through the valley of the Euphrates from the mouth of the Orontes on the Mediterranean to Bushire at the head of the Persian Gulf, and force her to keep up her communications with the East Indies by the Cape of Good Hope, a contingency that would at once lead to the loss of that valuable Empire.

Two very valuable lectures on this subject were recently given before the Royal United Service Institution, and printed in the LXXI number of the Journal, both are accompanied by very valuable maps which illustrate far better than any verbal explanation the Political and Strategical problem in question. The first in order was delivered by Capt. F. TRENCH, 20th Hussars, F.R.G.S., is entitled "The Central Asian Question," which it discusses politically, historically, geographically and strategically.

The second was delivered by Captain R. MURDOCH SMITH, R.E., and is entitled "the Strategy of Russia in Central Asia,"—as the lecturer holds the local rank of Major in Persia and Director of the Persian Telegraph Department, is a F.R.G.S., and otherwise distinguished as an explorer and literary man—a residence of *ten years* in Persia entitles him to speak with authority on a subject of this importance. He denies that there is as between Russia and England any international *Central Asian Question* at all, and confines the subject to the enquiry—"In what way and to what extent does the gradual advance of Russia in Central Asia affect our position in the East—and what are the best means at our command of protecting our possessions

against any danger that such an advance may render us liable to?"

Capt. SMITH doubts the possibility of Russia attempting to conquer India, and believes in her incapacity to do so; but India has been repeatedly over-run before now, and once Great Britain was forced from the field there would be nothing to hinder a repetition of the operation. The country that succumbed to the invasion of a Persian army, not one hundred and fifty years ago, would not be capable of offering a very decided resistance to Russian aggression followed out with the pertinacity of that power. But he truly points out that the interests of the British Empire will be best served by sustaining Persia—and he shews how Russia has her completely within striking distance by the ownership of those two sheets of water—the Caspian and Sea of Aral. An extract from an article in the *Athenæum* shews how little the politicians to whom the destinies of England are confided think or care for this matter:—

"An advance upon the Southern shores of the Caspian may mean an advance upon Herat, or it may mean an advance upon Teheran, and ultimately upon our Euphrates route. The Russians are already half way from the Caspian to Meshed, and Meshed is only 200 miles from Herat. Now, it must be remembered that the Caspian means the army of the Caucasus, and Petersburg itself. The 200,000 men at present in the Caucasus can be upon the Atrek in three or four days from the time they start, and there is water communication by canal and river all the way from Petersburg to those points. Moreover, were a Russian Army to commence its march by Meshed on Herat, the probability is that we should hear of it the year after the capture of the city had taken place. For more than three years the foreign office has been kept informed by the representative of Her Majesty in Persia, of the advance of Russia upon this point. It was as we now know, the very route contemplated by the Great Napoleon as that by which his armies would advance upon India. For years past the boundaries of India, as marked upon our Indian maps, have been wholly wrong upon this point. Ever since the expedition of 1856 the Russians have been advancing steadily towards the position they have reached, and during the last two years they have been advancing fast. In December, 1869, the Russians solemnly promised Persia not to establish themselves upon the Atrek. Within a few days of the time at which the Russians gave that promise, they built a large fort which, in the words of Mr. C. Thompson, left no question as to its being the intention of the Russian Government to retain permanently that position. In February 1869, the Czar himself had told Sir Andrew Buchanan that the frontier of the Atrek would be respected, and he made that promise to Sir Andrew Buchanan at one of those strange horseback interviews which he accords to English representatives; but that promise has gone the same way as the personal promise made by the Czar in July, 1870, that his troops should leave Samarcand. When we talk about the Atrek too, we should remember that the Russians are now far to the south and east of it, and although the Foreign office have known this for two years, they have kept the information to themselves. It is clear the advance of Russia in this quarter tells two

ways—it facilitates alike an advance upon India, and a descent upon Persia, &c."

In the discussion which arose on Captain TRENCH'S lecture, Major POORS truly said "It is not in Central Asia but in Europe that Russia is to be opposed" and he then points out that the true way of exhausting the resources of that power is by destroying her trade; and shut up as she is within the Baltic and Black Seas no particular difficulty could be experienced therein; and the reason why this could be so readily effected, is to be found in the great cost of her Executive Government, which 'cannot be kept up except by the revenue on the exports of the country;' and this is owing in a great manner to her peculiar institutions, the great extent of territory governed, and the diversity as well as disaffection of her population.

The folly of the stupid clauses in the Treaty of Paris by which the *Right of Search* was abandoned, is now apparent; it was designed to serve Russia alone, and the whining philanthropists with their ready tools in the administration practically disarmed Great Britain. If ever any people had a warning on the folly of allowing neutral rights during a struggle for political and independent existence, it was the people of England. The war ending in 1815 was prolonged for at least five years by stupidly permitting the United States to supply the want of a commercial marine to her enemies, and the climax of absurdity was capped when the right of search was abandoned. Those able lectures establish the truth that Russia can be beaten at sea, but it involves a general European war, with its more than probable extension to this continent. JOHN BRONX, the Peace Society, and the Whig Radicals should admire the work of their own hands.

The kindness of C. W. EDDY, Esq., Honorary Secretary Royal Colonial Institute, has supplied us with a copy of a lecture by Capt. J. B. O'HEA, late of the 25th or King's Own Borderers, delivered before the Royal United Service Institution, on the important and interesting subject of "Rifles and Rifling."

The gallant lecturer has experimented largely in every matter connected with small arms, and with what, we should say, from a cursory examination, eminent success. His discoveries practically, in what may be called the natural mode by which a bullet receives its initial velocity, contain the germ of a great improvement, not only in small arms, but in heavy artillery, and bids fair to obviate the difficulty of the successful application of the principle of rifling to the monster artillery.

We are not able to bestow the attention this week on a subject of such importance as Captain O'HEA'S lecture, the funeral honors of the great Canadian Statesman demands our dutiful attention, but promise our readers a full and copious review of the lecture in our next issue.

The movements of our neighbors of the United States must be always of great importance to the Dominion, inasmuch as their political and social economy will furnish us with precedents to be avoided, and benches marking out the dangers of experimentalism in new tangled ideas of Government and social morality. There are two things which concern us nearly, because our acquisition of the North Western Territories has brought us face to face with the problems both in-volve, and as our neighbors are engaged in seeking solutions of both, we can at least profit by the experience they have already acquired.

Of those, the first and most pressing is the *Indian Question*—the method by which the aborigines should be governed, and their social status elevated by civilization without "improving them off the face of the earth." The magnitude of this problem may be estimated to some extent by a paragraph of the following article from *The Manitoban* of the 17th May, which we copy for the purpose of showing our readers how the Government of the United States deal with those people and how carefully the example set us in this respect should be avoided, for it is very evident that if the Red man had been fairly treated, all the precautions detailed, would be unnecessary. For over two years we have had engineers and surveyors at work on the Canadian Pacific, a line parallel to the Northern Pacific, and distant from one to two hundred miles, through the very heart of the territory claimed as hunting grounds by the Indians, and they have been not only unmolested, but the aborigines are their best hunters and friends, while the Dominion has not been put to one dollar's expense, for military purposes as yet. Still we think with the *Manitoban* that it will be necessary to deal cautiously in these matters, as the greater part of the 60,000 Indians he refers to may at any time be forced across the frontier by the lawless acts and aggressions of the United States settlers, and it is necessary to be prepared in the event of such a contingency not only to give them protection from the military violence of our neighbors, as exemplified recently in Mexico, but to enforce order amongst the Indians if necessary.

"No intelligent Manitoban can be indifferent to the question now exciting great interest in the United States—whether the military operations against the Modocs of Northern California, and the Apaches of the territory of Arizona, shall be confined to those localities, and the savages of the plains between the settlements on the Missouri River and the Rocky Mountains shall be restrained from hostilities. On this point the reports are contradictory, especially as to the attitude of the numerous and warlike Sioux or Dakota nation. But whatever may be the result, we notice with satisfaction that troops are distributed along our frontier in sufficient numbers, we hope, to restrain, but at all events to repress any outbreak.

"Mr. Robert Cunningham, in the recent

debates in the House of Commons at Ottawa, is reported to have said that there were 15 posts and 3000 troops at different points in the adjacent territories of Dakota and Montana. The statement was not inaccurate when made, but within a few days the force of last year has been increased by two regiments of cavalry, bringing the number of troops from the Red River to the mountains to 5000 men, one half being mounted. The *St. Paul Press* of April 29 contains an order of Gen. Terry, commanding the department of Dakota, detailing an expedition to protect the Survey of the Northern Pacific Railroad west of the Missouri, which will consist of 1000 dragoons, 1140 infantry, and 75 Indian scouts, total 2215 men, under the command of Col. D. S. Stanley of the 22nd Infantry.

Perhaps our readers may be interested by a more detailed statement of the military organization, which our neighbors find necessary for the protection of a Pacific Railway and its attendant settlements. In July last a Roster of troops in the department of Dakota was published by Gen. Hancock, then in command, which we have consulted. We find that the force then consisted of four companies of cavalry, averaging 100 men, and fifty-four companies of infantry, averaging 60 men—cavalry 400, infantry 3240—total 4640. Deducting the garrisons at Forts Snelling and Ripley in Minnesota (one company at each post, or 120 men), and the total number west of Red River to the mountains will still be 2520, or nine infantry companies more than was represented by the member for Marquette. But if we were correctly informed, four more infantry companies were added during the autumn of 1872, as a part of a column sent to the Yellowstone for the protection of the Railway engineers while this spring, as already mentioned there has been a further reinforcement of two regiments of cavalry. The aggregate at this time, including friendly Indian scouts, is 5830, nearly one half being cavalry. Of course, the escort of the American Commissioner for the survey of the International Boundary is included.

We infer that a necessity exist to patrol the frontier, and the adjacent districts, through which the Northern Pacific Railroad is projected, with half the troops assigned to the department of Dakota, while the numerous garrisons are manned very much as last year.

We have obtained a list of the military posts over the district adjoining Manitoba and Saskatchewan. The first line of forts is in the Red River valley and the vicinity of Devil's Lake, immediately south of Manitoba, and are designated as Forts Pembina, Abercrombie Wadsworth, Ransom, Lincoln and Totten. The next series are along the Missouri, southward from the Canadian district of which Fort Ellice is the centre, and are Forts Randall, Sully, Rice, McKeen, Stevenson and Buford, besides the stations at three Indian Agencies. All the foregoing are within the Territory of Dakota, commanding the area between longitudes 97 deg. and 104 deg. and latitudes 44 deg. and 49 deg.

In Montana the posts are not so numerous, but are more strongly manned. There are four—Shaw, Benton, Baker, and Ellis. Including the detachments stationed at the Sioux Agencies in Dakota—Lower Brule, Cheyenne and Grand River—the whole number of posts is nineteen.

Who will say that this array and distribution of military force is unnecessary in the presence of 60,000 Indians, who are impress-

ed with the belief that the advancing settlements of whites will disperse the herds of buffalo and antelope, and appropriate their hunting grounds? With such a prospect it is folly to expect that collisions will not occur, and without great prudence and precaution, the inevitable antagonism may lead to the indescribable horrors of Indian massacre.

"We may be reminded, that under the régime of the Fur Trade amicable relations have generally existed in Central British America, but not more so than between the Missouri Fur Company and the Saux Indians; but with the intrusion of agricultural settlement in Minnesota the scene changed. Let us hope that we may learn wisdom in regard to the administration of Indian affairs from the errors and misfortunes of our neighbors. But it will be far from wise—it will be the height of imprudence—not to place the Assiniboine and Saskatchewan districts in an armor and attitude which will remove all danger, and even apprehension, of Indian hostilities."

The next problem before us is that of immigration. The energy with which our neighbors labor to attract settlers to, in many cases, a very inferior country, is worthy of imitation by us, who have in reality the Garden of the Continent to people. While our neighbors use all lawful or unlawful means to attain their objects, a few and candid statements of facts should be sufficient, if pushed with pertinacity, to secure for Manitoba and the North West Territories such a share of the surplus population of Great Britain, as would speedily develop the wealth of the richest agricultural country in the world.

We do not wish or want the refuse population of continental Europe, the Dominion of Canada is to be the *Greater Britain*, and we prefer its slow and steady growth by healthy accretions from the parent stocks of English and French to a mongrel population of every nation and tongue on the continent of Europe. It will be the duty of our Government to impart such energy into our Emigration Agencies and to the whole machinery by which they are worked, as will leave no man in Great Britain ignorant of the land of promise awaiting development in Canada.

RIFLE MATCHES.

RIFLE MATCH.—On the afternoon of the 12th a most interesting match was fired at the Rideau Range, being the result of a challenge offered by No. 1 Company, Governor General's Foot Guards, to the whole regiment, 3 men aside, three ranges seven shots at each. The scores are given below as follows:—

	No. 1.			Total.
	200 yds.	500 yds.	600 yds.	
Corp. Sutherland.....	20	14	16	50
Lance Corp, Boswell..	20	18	15	53
Pte Throop.....	20	16	15	51
" Gray.....	18	20	15	53
" Des Lauriers ...	18	23	12	53
	96	91	73	260

REGIMENT.					
Col. Sgt. Cairno	No. 6	20	15	17	56
Ens. Bato.....	No. 3	17	9	7	31
Sgt. Cotton.....	No. 5	19	11	8	38
Sgt. Watters.....	No. 3	19	20	6	45
Capt. McPherson.	No. 2	19	26	4	49
		92	85	42	219

Majority for No. 1 Company, 41 points.

From San Francisco we learn of a most abominable massacre of defenceless prisoners, perpetrated by ruffians who had not the manliness to protect their own homes.

Despatches from Boyle's camp, dated yesterday, relate the particulars of an atrocious massacre of Modoc prisoners supposed to have been perpetrated by Oregon volunteers. On Saturday morning James Fairchild, and about a dozen other men left Fairchild Rancho, Cottonwood Creek—with 17 Madoc captives, including men women and children, and Shacknasty Jim, Bogus Charley, Tehee, Jack, Pony, and Little John. The Indians were in a wagon drawn by four mules. At the crossing of the last river the party encountered a body of Oregon volunteers, under command of Captain Hizer. The soldiers gathered about the wagon and questioned Fairchild. The latter told them that the Indians were all Hot Creek Indians except Little John, and that there were no charges against them. Fairchild undertook to push on to Boyles Camp, and the volunteers retired to their camp near Crawley's. On the road Fairchild noticed two men ahead riding to Rocky Point as if to intercept him. When the team approached the two men one of them presented a needle gun at Fairchild saying, "Get down, you old white headed—," "By what authority?" asked Fairchild. "By mine. I am going to kill the Indians and you to," was their reply.

The leader caught hold of the mules and unbitched them, cutting the harness, Fairchild, clinging to the lines, leaped to the ground.

The poor wretches implored for mercy and begged Fairchild to save them. The warriors were unarmed and knew that resistance was useless. They were the coolest in the party, although facing inevitable death, but the women and children shrieked, groaned, and wept piteously.

Fairchild had nothing but a small pistol and six inches from his ear was the muzzle of the needle gun. He says that tears came into his eyes, and he mingled his entreaties with those of the Modocs in hopes that the massacre might be averted. He adds; It was a terrible scene—one I never shall forget. I shudder when I think what I saw and heard. The tearful voices of those women and children still ring in by ears, but the cowardly hounds were not to be balked. A shot was fired and Little John lay dead in the waggon with a bullet in his brain.

The mules dashed away with Fairchild who became entangled in the lines, five more shots by which Tehee, Jack, Pony and Mooch were killed and Little John's squaw fightfully wounded in the shoulder. Away ahead on the road in the direction of Boyle's camp a cloud of dust was perceived indicating the approach of a team,

The murders espied the dust, and shortly afterwards were riding rapidly away. Sergeant Murphy, of Battery G, 4th Ar.

tillery, with ten men and a teamster came upon the scene of the massacre. Teams, with an escort, were at once sent to bring prisoners, dead or alive. No steps were taken for the apprehension of the felons who performed the bloody work. It is supposed that the guilty parties were Oregon volunteers; Fairchild is of that opinion himself. The warriors killed were not charged with murder. Everyone here condemns the affair as atrocious and without excuse.

A second despatch from Boyle's camp June 8, 3 a.m.—An interview between Gen. Davis, Capt. Jack and Schonchin has just terminated. The Modoc chief says that he was incited to his cruel warfare by Allon David, chief of the Klamaths. He also denied having killed Gen. Canby and laid the blame on his boys. Schonchin told the same story.

The Quebec correspondent of the *Montreal Herald* is pleased to dub our brave volunteers "spurious imitations" and writes that on the day when the funeral obsequies of the late Sir George E. Cartier took place, the half trained artillerists contrived to blow off a poor fellow's limbs. It may perhaps, be interesting to our readers to know that the "limbs" referred to were a couple of fingers of a "poor fellow's" hand. It is very evident that the *Herald's* correspondent in Quebec has never served in either the British army or navy, otherwise he would know that such occurrences, and far more serious ones happen every day, and not to "spurious imitations."—*Ottawa Times*.

The twenty-third regiment of artillery in the French army has a white Cochon China rooster, upon which a great value is placed on account of his meritorious services in the field of battle. This cock passed through the whole campaign of the Rhine, and was carried to Augsburg as a prisoner of war. At Metz, during the siege, the soldiers although obliged to eat their horses, held the life of this truly Gallic cock as sacred. At the battle of Gravelotte he was perched on the shoulders of his master, who was in the Fourth Battery, and was so used to the cannon's roar that he did not pay the slightest attention to it. After his master was killed another artillerist adopted him, and he still remains in the military service.

LONG RANGE OF ARTILLERY.—While practising lately under Admiral Cumming, the men of the *Magdala*, one of the Bombay Harbor Monitors, at the second shot knocked over a floating target stationed at 1,500 yards. Chilled Palisser shot of 400 pounds, travelled upwards of four miles.

Our African enemies the Ashantoes are reported to have sustained a defeat. By the arrival of the steamer *Nigritia*, at Liverpool yesterday, we learn that the Houssa troops, under the command of Lieutenant Hopkins, had beaten them with heavy loss, and they had retreated into the interior. The Fantees remained around Cape Coast Castle, and active preparations were going on to prevent any sudden attack upon that place.

We understand that a British firm is building a turret ships for the Brazilian Government, to mount sixty-ton guns, which guns are also being made in this country. It does not seem very important, therefore, that the British public should concern themselves very much about our little family of Woolwich Infants, which have been outstripped in their growth before cutting their teeth. At the same time we are curious to know what the Brazilian Government can want with an armament of sixty-ton guns, or why Don Pedro, above all other potentates, should venture upon so costly an experiment.

RULES OF THE ROAD AT SEA.

The following lines have often been found useful as a reminder, and so trust they may be of benefit to some of our readers. The author should have as great an amount of fame as he who paraphrased the days of the month and the number of days in each:

1. Two steamers moving head on.

Meeting steamers do not dread,
When you see three lights ahead,
Port your helm and show your red.

2. Two steamships passing.

For steamers passing you should try
To keep this maxim in your eye,
Green to Green or Red to Red,
Perfect safety—go ahead.

3. Two steamships crossing.

This is the position of danger. The steamer that has the other on her starboard side shall keep out of the way. There is nothing in it but a good lookout, caution, and judgment.

If to starboard Red appear,
'Tis your duty to keep clear,
Act as judgment says is proper,
Port or starboard, back or stop her.

But when on your port is seen
A steamer with a light of green,
There's not so much for you to do,
The Green light must keep clear of you,

4. When in doubt.

All ships must keep a good lookout, and steamers must stop and go astern if necessary.

Both in safety and in doubt,
Always keep a good lookout;
Should there not be room to turn,
Stop your ship and go astern.

—New York Nautical Magazine.

AUSTRIAN FIELD BATTERY DRILL.*

The drill instruction in all branches of the Service has for some time engaged the attention of military men both in this country and on the Continent, with a view to its simplification and adaptation to the actual requirements of warfare. It behoves us, therefore in dealing with this subject, to investigate carefully what changes have, recently been made by Continental nations, more particularly as the necessity for such changes have, in most cases, been forced upon them by discovering under the experience of war the shortcomings of their previous practice; and peace manoeuvres on a large scale have afforded excellent opportunities for working out and testing new systems.

Lieut.-Colonel Goodenough has rendered valuable service, therefore, in making the new Austrian Field Artillery Exercises available for English readers: by the translation he has just published. He says in his preface "A long experience of field manoeuvres at Aldershot, &c., has given the writer ample proof that the existing field artillery drill has many shortcomings, it has suggested to him some improvements. The Artillery Service of Austria, from its strong *esprit de corps*, and its conspicuous services, has a high reputation; the writer was therefore more disposed to examine with interest the new 'Austrian Field Artillery Exercise Book,' published in 1871. He found in it amongst much new matter, some of the alterations he had before thought of. The whole appeared to him well worthy of the attention of his brother officers, and he now offers part of it for their perusal in the confidence that, widely read and digested, what is applicable to it in our organization will eventually be incorporated into our system of manoeuvring." It is most desirable

* The Austrian Field Exercises, Parts III and IV. Translated by Colonel W. H. Goodenough, R.A., Woolwich. Printed at the Royal Artillery Institution.

that "what is applicable to our organization" not only in the Austrian but in other Foreign drill books, should be incorporated with ours; and there are, at least, some things in the Austrian Field Artillery Exercises which may be borrowed by us with advantage. We will now proceed to give a slight sketch of their drill. The battery consist of four divisions of two guns each making eight guns in the battery. Eight was, until recently, the number of guns which the Prussians combined into one battery. They have now adopted six; the French also, as well as ourselves, have the same number; indeed, in our Service 4-gun batteries are now unknown. Eight guns are too many, and with the exception that the division into half batteries does not break up a division, we know of no advantage which it possesses over six. The divisional commanders ride in front of their divisions, which seems to meet with the approval of Colonel Goodenough. The opinion of an officer of such experience must have great weight; we cannot, however, help thinking that our system which places them in the centre of their division in line with the gun leaders is the best. The word of command is more easily heard, and the commanders can look after their divisions, and remedy anything which may be amiss more readily than when in front. In the Austrian Service, except when under fire, the interval between the guns is only six paces, and this may be the reason for fixing the normal position of a divisional officer in front of his division.

There is no mounted No. 1 to each gun, but there is a mounted divisional sergeant to each division; he however, singularly enough, is placed on the off side of the leaders of the right gun of the division, a position where he can least look after and control those under him. At full intervals the drivers of the left gun of his division would never hear a word he said. The No. 1 of the gun, or *Vornmeister*, is never, we presume, intended to exercise any command when the gun is limbered up and the detachment mounted, as he sits on the trail whence he can see nothing, and cannot be heard by any of the detachment. Practically, therefore, when the gun is limbered up it is left to itself, with no one responsible for it.

Although each division is supposed to be under the immediate command of a divisional officer, in action this is in fact not so, as the commander of the battery on its assembly "details at his discretion one division commander to observe the effect of the shot, one division commander to conduct the battery fire and superintend the working of the guns, one for the placing and supervision of the limbers, and one for the placing and superintending the battery ammunition waggons," the divisional commanders taking up their duties as soon as the guns are in position. No doubt it is very advantageous that there should be someone responsible for each of these duties, but this is more than counterbalanced by the withdrawal of the commander from his division at the very time when his presence is most needed to set an example to his men, and to encourage and direct them in their duties. Besides, if it should be necessary to move a division to a distance—say, for example, that of the officer who is superintending the limbers—either the limbers must be neglected, or his division must be left entirely to a non-commissioned officer.

The 4 and 8 pounder is used in the field batteries, the 4-pounder only in the Horse Artillery. The 4-pounder has a detachment

of seven men, and the 8-pounder eight men, but in each case one man is with the waggon. Only four men can mount on the 4-pounders and five men on the 8-pounders. There are no seats on the axletree boxes.

In action, the limber is ten paces in rear of the gun, and does not reverse. All the men working the gun are with the latter, and none with the limber. There seems to be no object in this, and it exposes men to fire unnecessarily.

The instructions with the guns horsed is given, first for a division, afterwards for a battery, and then for a brigade. We do not, however, agree with Col. Goodenough, that the division and not the battery is intended to be considered as the unit. Every change of formation is made on the move, and never from the halt. This will doubtless meet the ordinary requirements of a battery, but it may sometimes be desirable, especially when forming with other troops, to alter the formation of a battery from the halt, particularly to change front; there appears to be no good reason, therefore, why movements from the halt should not be retained in the drill book and learned. Our field battery drill is so simple and so easily learned by any one who will take the trouble to analyze it, and ascertain the rules on which it has been framed, and to which there are very few exceptions, and these no doubt oversights, that we do not think that there is anything to be gained by abridging it. Commands are given by the voice, the trumpet, and by signals with the sword. We may, with great advantage, borrow the latter from the Austrian drill book. They have the merit of being simple and readily understood. A code of signals must be very useful, as it enables a commander, having ridden forward to select a position, to direct his battery where to go without the necessity of returning to it.

The regulation as to pace is as follows, Field batteries in ordinary marches and in lengthened tactical movements, proceed at a walk, with the detachments dismounted. Within the actual sphere of action, all batteries move, as a rule, at a trot, with detachments mounted. The gallop is employed only for the direct advance at full intervals, into position with field batteries on very good ground, for not more than 500 paces, with horse batteries up to 1,000 paces.

The eight gun battery is, on the peace establishment, reduced to four guns. There is an ammunition waggon to each gun, but only those of the right half battery remain with the guns and manoeuvre with them, those of the left are treated as a reserve. But although the movements laid down for a battery treat the waggons of the right half battery as part of and manoeuvring with it, yet when the guns are in action these waggons are detached and left 50 or 60 paces in the rear, no longer, of course, under the direct command of the battery commander. We think this faulty. In our Service, one line of waggons used to form an integral part of the battery, and the drill book so prescribes it, but with guns of precision this is impracticable, with the old smooth bore it had its advantages, no doubt. Lieutenant Maxwell, in a note to his translation of "Taubert's Field Artillery," upon the Prussian practice of having the waggons wholly independent of the guns, says: "Our author forgets to notice another very great disadvantage of such an arrangement—viz, the very probable contingency of the waggons not being at hand when required. It can never be available let the waggons take advantage of it, but in every case let them be close at hand. Com

plotely to separate them from the battery, is in nine cases out of ten to ensure them not being at hand. As to cover, it is, according to my experience, in flat countries rarely available; a good arrangement, when possible, is to draw the waggons up in line on the flank and a little in the rear." This was published in 1856, and applies to smooth-bores, and so far was no doubt true, but it cannot be carried out with rifled guns. What we deprecate, however, in the Austrian drill is having the waggons or part of them sometimes manœuvring with the battery, and sometimes detached. We cannot help thinking this must lead to difficulty and confusion. Unless the waggons are to form integral part of the battery, they should be wholly detached and under the command of an officer, whose duty should be to keep them always as close to the guns as is consistent with protection from the enemies' fire. He must always know where the guns are, and what are the movements they are likely to make, and for this purpose communication must be kept up with the battery by one or more mounted non-commissioned officers. The duty of the officer in charge of the waggons would be difficult, and would demand considerable judgement and intelligence. Peace manœuvres, however, afford excellent opportunities for practice.

Except when in line for action, "fire line" is formed, the guns are kept at six paces interval. This has the advantage of keeping the batteries compact, and interferes as little as possible with other troops; but, on the other hand, it renders some of the movements less simple; as for example, ground cannot be taken to a flank by the simple "right or left take ground," or "sub-division right or left wheel," but must be done by the wheel of half batteries, or the successive wheel of divisions. It has, however, what strikes us as a more serious defect, that which takes the drivers longest to learn is to maintain their intervals accurately, the greater the interval the greater the difficulty the tendency is to crowd together, and this tendency cannot but be increased if they are constantly practised at reduced intervals.

Changing front to rear of a battery at reduced intervals by the simple inwards about wheel of half batteries is not in the Austrian Drill Book. The half batteries wheel about to the same hand, so that they cannot retire upon their own ground.

[To be Continued.]

The following is a synopsis of a lecture delivered by Major MONAGHAN before the Royal United Service Institution lately. The gallant Major being the inventor of the celebrated gun carriage which has made his name famous throughout the world, his opinion of its application as an agent of coast defence is valuable.

"After some preliminary remarks, in which he alluded to the practical way in which all great reforms in the United Kingdom were finally brought about by the recognition of their necessity, and referred to the national machinery of defence, said it might be taken for granted, on an emergency it would be impolitic to depend on the Auxiliary forces for the composition of moving field corps like those produced on a recent occasion by the Swiss army. As our local forces would only consist if imperfect infantry, without proper cavalry, field artillery or

military train, the most they could be expected to do would be to strengthen the brigade of the Regular troops, by giving them some of their best battalions, of which they would take as many as they could absorb, though when this was done a force would be produced numerically quite inadequate for the Imperial defences, and some way of utilising to greater effect the remaining scattered battalions of Auxiliary forces was therefore, surely worth considering. For the defence of this island our authorities had already recognised the importance of securing the *foei* of our naval power—the dockyards, which, with the Thames, had been already more or less efficiently fortified, and the question was what was the next most important measure to be taken? If he was not misinformed, it was a foregone conclusion that the capital was next to be defended, the defence of London should begin at the coast itself, where the action of the navy and the difficulties of disembarkation both combine to give the country an advantage which it would be impolitic not to seize. Considering that our coast line, though much extended, had but few points of great importance to be defended, he would divide the coast line into four classes of positions: 1. The dockyards the Thames, &c., which have already been fortified; 2. The great commercial harbours, &c., not yet protected; 3. Sheltered bays and reaches of beach affording favourable conditions for landing a large force, and which therefore might be selected by an enemy for that purpose; 4. The remainder of the coast, which, in proportion to its unsuitability for the purposes of invasion, could be safely left with small provisions for defence. Passing the first two classes, and directing their attention entirely to the third, the sheltered bays and reaches, which an enemy would be most likely to select, the lecturer stated that these places had formerly been protected by marteello towers, but the marteello towers had now become obsolete, though the danger which they were intended to meet still remains, and exists moreover, in a large number of localities, and perhaps in a greater degree than formerly, and he questioned very much the policy of disarming the marteello towers, for as long as they stood, an enemy would certainly try to select other ground to disembark. Doubtless the landing of an enemy would be carried out at several points at once more or less distant from each other, and its chances of success would depend on being able to evade observation in crossing the Channel; it would most likely take at positions far removed from the Channel fleet, only guarded by a few coast vessels, which could be easily disposed of by the war-ships which escorted the transports, and it would be attempted at points where the enemy could depend on the landing being least expected. In the face of such artillery as the war-ships would carry, no common batteries on shore could possibly remain unsilenced long within range of the powerful guns that would be brought into play and which would always be at the disposal of an invader. To put up iron works for small guns in such extended position was out of the question; to mount them behind earthen parapets and embrasures would be to see them torn to pieces as soon as struck; while to work them *en barbette* would be to expose the men to destruction by a sea shell, which was as bad as old grape shot was at short distance. Coast batteries of this description consequently must be discarded altogether. What then he would suggest was neither the building of fortresses, the complete dependence on a field force, nor the making of coast

batteries, which would either be too expensive or useless for the purpose, from their inability to resist ships' artillery, but rather to offer an alternative for bringing on the issue of the battle at the moment most advantageous to an enemy, and under conditions more likely to succeed than if such a field force as we could expect to maintain was alone to be relied on. He then entered into most elaborate and scientific details of his scheme for coast defence, the principal features of which appeared 'the establishing on those parts of the coast it was likely an enemy would select for landing his troops, of a number of batteries, to be constructed in the most advantageous positions, with access to the rear and with each other by roads screened from observation from the front. These batteries would, moreover, be sunk, so that the top would be level with the earth's surface, and be armed with Palliser or G.P. under guns mounted on a new carriage invented by him, whose principal quality he described as combining with mobility the power of recoiling under cover, and the employment of hydro pneumatic agency for utilising the recoil, but which may shortly be described as a method of raising the gun over the top of the batteries would, of course, offer no mark for the enemy's guns, and the latter's shot having nothing to pierce would invariably strike the ground and ricochet. Smaller earthworks for occupation by infantry should also be made in the intervals between the batteries, and from these defensive works a most deadly fire could be converged upon the crowded transports, boats, and landing parties, sufficiently hot to make the operation of landing an exceedingly difficult if not impossible one. In the support of the batteries and occupation of the earthworks, the Volunteers would have a good field for showing all those qualities they are said to possess, on ground, too, which they might be specially trained to defend. Of course it would be apparent that, without very complete arrangements for the action of the local forces and for supporting them when threatened, the best arrangements of coast batteries would be neutralised, and to make any scheme of defence effective, it required to be taken up earnestly and carried out with completeness. The possibility of withstanding the attack of very powerful artillery was the one condition which made the whole scheme practicable. As long as it was possible for naval batteries to silence, or even to keep down the fire of land batteries, the process of disembarkation remained comparatively easy; but as soon, however, as the land batteries were capable of maintaining their fire in presence of the ships, the enemy is exposed to the chances of disaster at a most critical moment, when his numerical strength would actually be an element of weakness. The lecturer then concluded by hinting to those who, for financial reasons, would stint a reasonable expenditure for security, that even the threat of an invasion of England lessens our sense of security, and thereby affects the monetary stability of the country, and that a serious or permanent threat of the kind might partly remove the great market to another centre.

Capt. H. Brackenbury criticised the scheme as one that must tend to the dispersion of the forces instead of concentration, as it would be necessary to defend each point where it was probably an enemy might land, whereas the whole art of war was the discovery how to concentrate rapidly. With respect to a place where landing might be effected with ease he stated that Gortschakoff had spoken of the River Crouch, near

Shoeburyness, as a spot where a descent might be made without any trouble.

Captain Colomb was inclined to place greater faith in gun-boats than in such a number of batteries, and cited the authority of Sir John Burgoyne in support of the opinion that the erection of coast batteries fostered a feeling of careless security in the public—as, once erected, it was taken for granted the batteries were a security in themselves and no thought was given their manning or armament.

Two or three other speakers made a few remarks, and the proceedings terminated with the customary votes of thanks.

RECONNAISSANCE OF THE NORTH WEST PROVINCES AND INDIAN TERRITORIES OF THE DOMINION OF CANADA.

(Concluded from Page 269.)

If it be in harmony, therefore, with the policy of the Government to do so, I would recommend the establishment of Military Posts at the following places, strength as below:

1. At Portage de la Prairie	70	Mt Riflemen
2. " Fort Ellice	50	"
3. " Carlton	50	"
4. " Pitt	50	"
5. " Victoria	50	"
6. " Edmonton	100	"
7. " Porcupine Hill	150	"
Total	500	

With a proportion of officers and non-commissioned officers.

If no permanent Custom House and Military Post is established at the Porcupine Hills, then the strength of the force at Edmonton should be 250, of which 150 men should be encamped during the summer months at the Porcupine Hills, or at the junction of the Bow and Belly Rivers, returning to Edmonton for the winter; but the establishment of a Custom House and Military Post at Porcupine Hills, is of far more importance and would have a much better general effect towards securing the peaceful settlement of the country than at any other place named. During the summer months a detachment of 50 men from this post might with advantage be employed in improving the communication across the mountains with the Kootenay District of British Columbia.

It would be necessary that each of the companies of mounted riflemen should be made as far as possible self supporting communities, provided with a few carts, intrenching tools, agricultural implements, seed for raising corn, and some cattle. These military posts would partake of the character of military settlements, in the vicinity of which many settlers would ere long establish themselves.

It would be very desirable moreover that a medical officer should be appointed to each military post, and his duties are not confined to the medical charge of the military only, but extended to all the Indians in the vicinity.

Last experience has proved that no measure is better calculated to secure the confidence and attachment of the Indian tribes than by attending to their wants in time of sickness, and supplying medical aid.

The men to compose the corps should be enlisted to serve for three years, receiving on the termination of the engagement, (provided they have performed their duties in a satisfactory manner,) the same amount of

land as is granted on discharge to the men of the Militia in Manitoba; I would recommend that the corps be raised by volunteers out of the active militia. It would be desirable to attach to the military force at each post three or four half-breeds, or Indians, as scouts, who could serve as interpreters and usually carry the mail.

At the places indicated for military posts no great difficulty would be experienced, or expenses incurred in hutting the men, they themselves performing the work, or an arrangement might be more easily made with the Hudson's Bay Company to provide barrack accommodation, and rations at the different posts for the number of men required.

In the event of this proposed arrangement meeting with the views of Government, I have the honour to state the probable expense that would be incurred for the establishment and maintenance of the militia force proposed, would be about \$300,000 annually.

I would further beg to suggest, if it be decided to establish any chain of military posts, that for the first year the soldiers be employed in laying down a telegraph wire from Manitoba towards British Columbia, if not required to hut themselves.

From my own knowledge and observation of the country, I think that if proper energy be used, the very desirable work of establishing telegraphic communication from Fort Garry through Dominion Territory, with British Columbia, could be carried out by the soldiers in one or two seasons. I would further observe that no time should be lost in making the preliminary arrangements. The men and horses should if possible, be concentrated at Fort Garry in the month of May or June, their equipment forwarded sooner, and the companies despatched without delay.

An easy and agreeable march of a few weeks duration would suffice to establish them in their respective posts of occupation.

BRITISH COLUMBIA.

With regard to the organization of the militia in British Columbia it is recommended that one staff officer as Deputy Adjutant General of Militia be appointed for the province, as soon as the Government finds it convenient to do so. It is not necessary at present to appoint any Brigade Majors.

The formation of two companies of riflemen (volunteer militia) in Victoria, and one at Nanaimo, is recommended, also the formation of one company of riflemen at New Westminster, another at Burrard's Inlet, on the mainland, and that the New Westminster Battery of Garrison Artillery be reorganized.

The total white population of the province is only as yet about 12,000. There are about 4,000 half-breeds and 45,000 Indians—the latter mainly dwelling along the coast. The Indians dwelling in the interior of British Columbia are not numerous, the policy of treating them much in the same manner as if they were settlers, appears to have succeeded admirably.

The following amount of military stores have recently been despatched, by order of the Dominion Government, from England direct by sea to Victoria, for the equipment of the Militia of the Province:—

1,000 Snider Enfield Rifles.
1,000 Sets of Accoutrements.
1,000 Rifle Uniforms.
1,000 Great Coats.
30,000 Rounds of Ammunition.
60 Tents.

20 Targets complete, with flags.
100 Camp Kettles.
1,000 Knapsacks complete, with Mess-Tins and straps.

It is very desirable with a view to ultimate economy as well as present efficiency that some building be acquired in Victoria to serve as an Armoury and Storeroom, and that a storekeeper be appointed to the charge of this public property without delay.

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

P. ROBERTSON ROSS, Colonel,
Commanding the Militia of Canada.
and Adjutant General of Militia.

Head Quarters,
Ottawa, 17th March, 1873.

The *Jahrbuch für die Deutsche Armee und Marine*, in a notice of the Swiss federal army, furnishes the annexed particulars: The new Swiss bronze breech-loading field gun is 8.4 centimetres in calibre, and weighs 433 kilogrammes; the ordinary changes is 840 grammes. The weights of the projectiles are as follows: Shells, 5.53 kilogrammes; shrapnel, 15.61 kilogrammes; canister 5.43 kilogrammes. The gun is mounted on an iron field carriage, provided with side boxes. The limbers is also of iron. Both are fitted for practice with wooden wheels. With forty rounds in the limber boxes, and a team of six horses, the total draught of the piece is 1,600 kilogrammes or with a detachment of five men mounted on the gun and limber boxes, 2,000 kilogrammes. The range and accuracy of fire are very favorably reported of. The terminal velocity of the shell was found to be 356 metres, at a range of 500 metres with an elevation of 0 deg. 45 min; 239 metres at a range of 1,500 metres with an elevation of 7 deg.; and 195 metres at a range of 3,500 metres, with an elevation of 11 deg. 30 min. The fuses used with the shells are a modification of the Prussian fuse. The shrapnels are an improvement on the Boxer shrapnel. They are of wrought iron, with cast iron ends the bursting charge being contained in a central brass tube. The charge consists of 130 bullets of sixteen millimetres, twenty of them being of zinc, weighing twelve grammes each, and the remaining 110 of hardened lead weighing 22 grammes each. This compound consists of four parts by weight of lead and one of antimony. Shrapnels of like pattern are used with the steel 10 centimetre and the bronze 12 centimetre guns for artillery of position. The canister shot consists of tin cases fitted with wooden bottoms, and filled with hardened leaden bullets of 21.5 millimetres diameter, weighing 75 grammes.

The Austrian war authorities have discarded the white tunic as a working dress for the army, and have adopted in its stead a blue blouse; under the blouse a waistcoat with sleeves is worn.