





# 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. VIII.

OTTAWA, (CANADA,) TUESDAY, JUNE 9, 1874.

No. 23.

### NEWS OF THE WEEK.

As we anticipated the Queen's Birthday has been universally observed throughout Canada, and in no place with more eclat than at Sault Ste. Marie, the Company of Volunteer Rifles under the command of Captain Wilson firing the usual Royal salute.

The Corner Stone of the New Collegiate Institution, was laid by his Excellency the Governor General on the 4th inst. The pupils of the Central Schools and the Collegiate Institution, to the number of about 400 were present. Also the representatives of the Separate School Board.

Lieut. Col. Jackson, D. A. G., M. D. No. 4, accompanied by Adjutant Mowatt visited the proprietors of the fields to the south of the Rideau Rifle Range with a view to obtaining their consent to allow them to be used as camping ground. We understand leave has been granted and four battalions will turn out on the 22nd. inst. to put in their annual drill.

The Kingston *Whig* says: The following corps have signified, through their commanding officers, their preference for a camp here on June 18th to drilling in the winter season at their respective headquarters:—Battalion: 14th, Kingston; 47th, Frontenac; 15th, Belleville; 48th, Lunenburg and Addington, and 49th, Hastings, to be joined probably by the 16th, Prince Edward.—Batteries—Kingston Field and Trenton Garrison Cavalry—Frontenac Squadron and Napanee Troop.

The St. George's Society of Ottawa city are preparing for a grand picnic in McKay's Grove, Dominion Day.

Ven. Archdeacon McLean, of Manitoba, has been consecrated at Lambeth Palace, by the Archbishop of Canterbury, Bishop of Saskatchewan.

The first spruce ship ever built in Quebec was launched from M. E. W. Sewell's ship yard on Saturday morning.

Vice Chancellor Strong has been appointed Senior Justice of the Ontario Court of Error and Appeal.

It is said the surveyors have found an accessible and excellent harbor at the mouth of French River.

The Gull light-house, near Port Hope, was destroyed by fire on the 1st inst.

Lieut. Colonel Goodwin, Military Store Keeper at the Old Fort, Toronto, celebrated his 80th birthday on the 5th by entertaining the young ladies of Miss Stubbs' seminary.

Brockville is to have a grand celebration on Dominion Day, the grandest ever seen in that town.

Mr. G. L. Walke, editor of the *Perth Courier*, died on the 1st instant, from typhoid fever.

A painter upon one of the bridges near Goat Island, just above Niagara Falls, on the 1st, fell from it into the rapids and was carried down some distance. Fortunately he was able to reach a rock, to which he clung until rescued by a heroic young man named Conroy, who, at the risk of his own life, handed McCullough a rope, whereby he was secured from destruction.

The steamer *Faraday* arrived at Berry Bealton Bay on 30th ult and landed the shore end of the new cable on Sunday morning, and proceeded to Rye Beach, N.H., on Sunday afternoon.

A report of the crops in the Western States published by the *Chicago Times* shows a highly favourable record.

Letters from Lieutenant Hynes, of the British party of explorers that were on the British ship *Challenger*, to Dr. Hayes of New York, states that the *Challenger* in its researches in the Antarctic ocean failed to discover the so-called Antarctic continent, said to have been discovered by Wilkes' American exploring expedition some years ago. The *Challenger* went within 1,400 miles of the South Pole, and 120 miles further south than Wilkes went.

Lieut. Col. C. T. Gilmour, 2nd Queen's Own Rifles, Toronto, as been selected by the Dominion Rifle association to command the Wimbledon Team this year.

Captain John Horn, jr., of Detroit, has received a gold medal from President Grant for rescuing at different times, at the risk of his own life, over one hundred women and children from drowning.

The congress of brewers in session at Boston, have passed resolutions asking the Government to remit the duty on barley imported from Canada, and not to increase the duty on imported hops.

A despatch from Washington says:—“Gen. William Wells, Collector of Customs at Burlington, Vt., and his deputy, Mr. Arthur, have effected a change in the Customs regulations of the Treasury Department governing trade between Canada and the United States, so that Canadian merchandise may be entered under a combined entry at Island Pond for exportation by way of either Portland or Boston. Other important changes have also been effected relative to the entry of merchandise at the frontier for consumption, tending to make Island Pond on the Grand Trunk Railway of more importance than heretofore.

The Hon. Antoine Aime Dorion, Minister of Justice of Canada, has been appointed Chief Justice of the Court of Queen's Bench in and for Lower Canada, now called the Province of Quebec, vice the Honorable Jean Francois J. Duval, resigned.

Negotiations for a Reciprocity Treaty with Canada have been almost completed. Great Britain has made a proposition for Reciprocity in regarding the granting of patent rights. It is now being considered. A lists of manufactured goods to be admitted to the Canadian ports, duty free, is also suggested.

A despatch from Halifax says that Her Majesty's ship *Niobe* is a total wreck at Cape Blanc, Miguelon. Her Majesty's ship *Woodlark* returned from the wreck Tuesday afternoon.

It is reported in Paris on good authority that Marshal Serrano will order a general election in Spain, and if the Monarchists are in the majority, he will propose the enthronement of the Prince of Asturias, under his own regency.

A serious riot occurred in Limerick on Sunday, the 31st inst. A mob of a thousand persons attacked a party of Militia. The police defended the latter, and were stoned by the rioters. Reinforcements arrived from the stations, and the riot was finally suppressed after a considerable number of persons had been injured.

The Derby was won by Cartwright's *George Frederick* with Lord Roseberry's *Couronne de Fer* second, and Lord Falmouth's *Atlantic* third. Great excitement prevailed. The weather was fine and the attendance immense. Twenty Horses started.

A European Congress, to consider the subject of international rights in time of war, will be convened in the city of Brussels on the 27th of July next.

The German authorities have prohibited the circulation of the Paris *Dix Neufieme*, and *Siecle* newspapers in Alsace and Lorraine.

The ship *British Admiral*, bound from Liverpool to Melbourne, has been lost on King's Island, seventy lives being lost.

The *Times* contradicts the reports of the complete withdrawal of the Cunard steamers from Boston because of the scarcity of freight and states that the only change to be made is that some of the steamers which go to Boston will return by way of New York.

The National line will establish a weekly service to Boston on a similar plan.

The Khedive has entered upon negotiations of commercial treaties with foreign powers, independent of the Sublime Porte,

ANNUAL REPORT ON THE STATE OF  
THE MILITIA FOR 1873.

APPENDIX No. 1

(Continued from Page. 256)

The Brigade Major from Cobourg accompanied the Force to the camp at Peterborough, and remained there to assist the officer commanding during the period of the annual drill. But there was no recognised Staff Officer authorised to take charge of the equipment, as was done in the Camps of 1872-73, consequently we cannot now tell to which Corps the missing articles were addressed. And to prevent loss to the Militia Department, I beg to recommend that the damages when assessed by competent officers, shall be charged proportionately amongst all the Corps interested.

I append a report (A) from Lt.-Col. Boulton upon the conduct of the camp, and would also remark that the system of forming large camps for the annual drill each year, with a properly organized staff should be continued, this being the most popular and effectual method of inducing the men to turn out, and of imparting to them the necessary instruction.

The only complaint made to me officially is one (B) by Lt.-Col. James Brown, M. P., commanding the 49th Hastings Battalion of Rifles, at Belleville, with regard to the state of the medicine chest issued in the corps under his command, from the District Stores at Kingston. I enclose the letter of complaint, supported by the certificate of the medical officer, of the battalion. These medicine chests should be overlooked by a competent medical officer, employed for that purpose by the Militia Department, after each time of issue, and their contents replenished before they are again required for active service.

The batteries of artillery, which performed the annual drill, were inspected by the officer commanding the artillery in Ontario, at the same time that the general inspection and muster took place by the District Staff Officers. His report, I presume, will be forwarded direct to head Quarters, as it has not been sent to me.

I observed in most of the infantry corps inspected, a number of rifles in bad order, some of them quite useless as arms of precision, for want of needful repairs to the locks, sights and barrels, and there are no means at hand to make such repairs nor are there any skilled armourers attached to the Active Force for this purpose. It is generally understood that a certain number of small-arm armourers from England are now in Canada, paid and subsisted by the Dominion Government, but not under the orders or control of the active Militia. It would appear desirable that these armourers should be utilized in repairing the damaged rifles, of which there must be now a great number throughout the country.

I have the honor to be, Sir,  
Your most obedient Servant,

S. P. JARVIS, Lt.-Col.

D. A. G. Commanding

Military District No. 3.

The Acting Adjt. General of Militia,  
Head Quarters Ottawa.

[A]

Cobourg, Sept., 1873.

Lt. Colonel Jarvis,

Deputy Adjt.-General, Kingston.

DEAR SIR,—Having taken advantage of the permission granted to perform the annual drill at Peterboro' simultaneously with the infantry of this division, as senior officer of the brigade in command, I beg to submit a report of the camp.

The corps present were the Northumberland and Durham Squadron, and the Peterboro' troop of cavalry. The 40th, 45th, 46th, and 57th Battalions of Infantry.

The camp was laid out and conducted in strict accord with the regulations for drill, guards, target practice, &c. The Brigade field movements were very creditably performed.

The conduct of the force in camp was good. The situation was spacious and well selected by Colonel Poole, of the 57th, upon the side of the Otonabee river, three miles from the town.

As this was the first Brigade muster under the Militia Officers of the Brigade Division, it affords me pleasure to be able to report satisfactorily in every respect, and to add that arrangements, commissariat and otherwise, were satisfactory to officers and men alike.

The cavalry marched to and from camp without accident. The Infantry arranged for their own transport.

The muster in Brigade was more approved by the several corps than separate regimental musters at the head quarters of the various corps, and the feeling was generally expressed of a desire to continue next year the same system.

It was impossible to fire 40 rounds of ball practice without dispensing with all drill. Each corps fired as much as the time would permit and dispensed 10 rounds each.

Brigade Major Smith joined camp, and was the only staff officer present. I have no casualties to mention.

I have the honor to be, Sir,

Your most obedient servant,

D. E. ROLTON,

Lt.-Col. Commanding.

[B]

HEAD QUARTERS, 49TH BATTALION,

BELLEVILLE, Sept. 30th 1873.

SIR,—I have the honor herewith to enclose (C) the Medical Report of the Battalion while in camp, and also to add that the sending of a medicine chest, for actual use, in such a condition is simply disgraceful, and reflects strongly on the officer in charge of this department, (see account of medicine at foot of report, and order a remittance.)

The Battalion which consisted of Nos. 1, 2, 3, and 5 companies mustered 203 rank and file, with 16 officers. No. 4 Company, (Madoc), declined to turn out in accordance with Battalion orders. The camp was formed on the 8th inst. and broke up on the 16th, and on the 15th was inspected by Lt.-Col. Jarvis, D. A. General, who made a thorough and close examination of the men, the clothing, accoutrements, and camp, and had great pleasure in stating that the conduct of the men throughout was highly creditable. No body of men could have behaved better during the period of drill. I beg to state, however, that 40 rounds per man to be fired at target practice is in my opinion

altogether too much, as in the space of 8 days there is not sufficient time left for instruction in the use of the rifle. The target practice returns accompany this report, duly certified.

I have also to report that the clothing of the battalion having served the allotted time, has now become almost inserviceable.

I have the honor to be, Sir,

Your obedient servant,

JAMES BROWN, Lt.-Col.

The Brigade-Major, Kingston,

(C)

FRONT OF SIDNEY, Sept. 16, 1873.

Report of State of Health of the 49th Battalion while in Camp.

The health of the men was good, no doubt owing to the position of the camp, and the temperate habits of the men. I attended three cases of intermittent fever, for which I had to purchase quinine, the medicine chest had not that or any drug in it. In fact it might as well have been in the store at Kingston, it not having been refilled since last year's camp. I hope this will be remedied in the future, quinine being such a necessary drug in a camp.

ROBERT TRACY, Assistant Surgeon.

49th Battalion,

Dr. to R. Tracy, M. D.

To quinine purchased for use of men \$1,50

MILITARY DISTRICT, No. 4.

BROCKVILLE, 1st Nov. 1873.

SIR,—I have the honor to submit this my report on the operations of the Militia in Military District No. 4, during the past four months, viz: from 1st July last, to date.

June seems to be the most favourable month for the great majority of the corps in the district to perform the annual drill, consequently, as the general orders authorizing the drill for 1873-74 did not permit the same to commence before the 1st July, there was but one troop and one company which availed themselves of it, previous to the harvest.

I would here mention that, if corps could be allowed to commence the annual drill, say about the 15th June, for the year following, it would, I think, be largely availed of, and would also give plenty of time to wind up the year's operations, without hurry just at the close.

Owing to the uncertain date at which the harvest is gathered, together with the short days and cold nights after the 1st September, there is a general aversion to going into camp during the autumn, hence the desirability of allowing the drill to be performed as before suggested.

In addition to the "Tabular Inspection Returns" and "Abstract Target Practice Returns" herewith enclosed, permit me to report on the several corps in order of seniority—firstly, on those which have performed the drill, and secondly those which purpose doing so by the end of June, 1874.

Prescott Troop of Cavalry.

The Prescott Troop of Cavalry—Major Walsh—mustering three officers, forty-two non commissioned officers and troopers, and thirty nine horses, by special permission from head quarters, went into camp at Prescott on the second July, and performed

the drill and target practice in eight clear days. I may add that, in twenty four hours after the authority was received, this troop was under canvas, which speaks volumes for the energy of the officers, and the zeal of the men.

I inspected the troop on the 10th July, when I found everything to my entire satisfaction. The horses were very fair; the men, both in physique, appearance and cleanliness, were unobjectionable; and the drill as detailed in the tabular return, most creditably performed.

*Ottawa Troop of Cavalry.*

The Ottawa Troop of Cavalry—Captain Nicholas Sparks—mustering two officers, forty non-commissioned officers and troopers and forty-two horses, went into camp with other corps at Ottawa, on the 9th September, and performed the drill in eight clear days. I inspected this troop on the 15th September. The horses were very good, the men clean and soldierly, and paraded most creditably, showing marked improvement since last year. The drill as detailed in tabular return, was very fairly performed. The day being exceedingly wet, and pouring rain during the inspection, the troop had not a fair chance to show all, or what they really could do. Owing to the repairs which were going on at the rifle ranges, preparatory to the meeting of the "Dominion of Canada Rifle Association," this troop had not an opportunity of performing the prescribed course of target practice. The day after my inspection, I saw the men being practiced at dismounted skirmishing drill, with blank ammunition. They are of a superior class, and the troop reflects much credit upon all connected with it.

Before leaving the cavalry, I would remark that, it is a very popular arm of the service, and as a rule, filled by the yeomanry of the country, who ride their own horses, and as it appears to be very desirous to secure the services of this class of our population, I beg to again urge that permission may be given to organize a sufficient number of troops in this district to form a regiment.

*Ottawa Field Battery of Artillery.*

The Ottawa Field Battery—Captain John Stewart—mustering three officers, sixty nine non-commissioned officers, and gunners and drivers, with fifty horses, went into camp with other corps at Ottawa, on the 9th September, and performed the drill in eight clear days. Accompanied by Lt. Colonel French, Inspector of Artillery, I inspected this battery on the 16th September. When I say that the corps more than maintained its former reputation, is perhaps all that need be said. The driving, the field movements and standing gun drill as detailed in tabular return, together with the route marching over rough ground, was most creditable, while the shot and shell practice returns, show the men equally efficient.

I may hear state that, the authorized number of horses are not considered sufficient to work a battery of this description.

*Ottawa Brigade of Garrison Artillery.*

Nos. 3 and 5 Batteries of the O.B.G. Artillery, being rural corps, were, by special permission, allowed to perform their drill in camp at Ottawa, with other corps. The other five batteries of this brigade, being city corps, are performing the drill at head quarters, and will probably not have completed before the end of June next.

These two batteries went into camp on the 9th September, under the command of Major Egleson, whose staff was composed of Captain Cluff, Acting Adjutant, the assistant Surgeon, and three Staff Sergeants.

(To be continued.)

DOMINION OF CANADA.



MILITIA GENERAL ORDERS.

HEAD QUARTERS.

Ottawa, 2nd June, 1874.

GENERAL ORDERS (13).

No. 1.

ACTIVE MILITIA.

It having been decided to reduce the strength of the Active Militia Force to 20,000 Officers, Non-Commissioned Officers and men for purposes of drill and pay for the year 1874-75, the following corps, gazetted but not yet equipped, are hereby removed from the list of the Active Militia :

- No. 5 Troop (Bayfield) 1st Regt. of Cav'y (l).
- No. 6 " (Stratford) do do do O.
- Colborne Troop of Cavalry.....O.
- Lakefield do.....O.
- Cornwall do.....O.
- Stormont do.....O.
- Kingston Engineer Company.....O.
- No. 3 Troop, Quebec Squadron of Cavalry, Q.
- Beauce Field Battery of Artillery,....Q.
- Bonaventure Marine Company.....Q.
- New Carlisle do.....Q.
- No. 9 Company (Peel) 67th Battalion of Light Infantry.....N.B.
- No. 10 Company (Wilmot) 67th Battalion of Light Infantry.....N.B.
- Winnipeg Rifle Company.....Man.
- Headingley do.....Man.

And the officers of these corps are also hereby removed from the list of officers of the Active Militia.

No. 2.

The following Corps reported disorganized are removed from the List of those entitled to drill for the year 1874-75. The Deputy Adjutant General of the District interested, will take immediate steps for the return of the arms, accoutrements, and other articles of equipment in possession of those Corps into District Stores :

- Infantry Company, St. Placide, Q., Captain Routhier.
- do St. Benoit, Q., Captain Dumouchel.
- do St. Eustache, Q., Captain De Bellefeuille.
- No. 2 Co'y (Trois Pistoles) Temiscouata, Prov. Battalion, Q., Capt. Légaré.
- " 2 " (St. Jérôme de Matane) Rimouski Pro. Batt., Q., Cap. Larochelle.

No. 3.

The following Corps which were under 30 non Commissioned Officers and men at the drill of the current year, 1873-74, are hereby removed from the List of the Corps entitled to pay on completion of the Annual Drill for 1874-75.

Mil. Dist.

- No. 1 Goderich Battery Garrison Artillery. Capt. Thompson.
- No. 1 Co'y. (Southampton) 32nd Batt. Capt. Bigger.
- " 2 " (Kincairdine) 32nd Batt. Capt. Barker.
- " 3 " (Lucknow) 32nd Battal'n, Capt. Sellery.
- " 2 " (Wingham) 33rd Batt. Capt. Willson.
- " 4 " (Clinton) 33rd Battalion, Capt. Murray.
- " 9 " (Dungannon) 33rd Batt'n, Capt. Mallough.
- No. 2 No. 5 Co'y (Sutton) 12th Battalion, Capt. Wyndham.
- " 7 " (Milton) 20th Battalion, Capt. Rixon.
- " 3 " (Caledonia) 37th Batt'n, Capt. Thorburn.
- " 4 " (Hagarville) 37th Batt'n, Capt. Glenn.
- " 7 " (Galadonia) 37th Batt'n, Capt. Whidden.
- " 8 " (Mount Healy) 37th Batt. Capt. Musson.
- No. 3 No. 4 Co'y (Kingston) 14th Batt'n,
- " 1 " (Cobourg) 40th Battal'n, Capt. Gravely.
- " 5 " (Coldsprings) 40th Batt'n, Capt. Gifford.
- " 4 " (Portsmouth) 47th Batt'n Capt. H. R. Smith.
- No. 4 No. 1 Co'y (Hazledean) 43rd Batt'n, Capt. Kemp.
- " 2 " (Huntly) 43rd Battalion, Capt. Homes.
- " 7 " (Manotick) 43rd Battalion, Capt. Cook.
- " 9 " (Vernon) 43rd Battalion, Capt. McGregor.
- " 3 " (Burrill's Rapids) 56th Batt. Bt. Major Campbell.
- " 5 " (Ottawa) 56th Battalion, Capt. McCuaig.
- " 6 " (North Augusta) 56th Batt. Capt. Checkley.
- No. 5 No. 4 Co'y (Lachute) 11th Battalion, Capt. Simpson.
- " 2 " (Huntingdon) 50th Batt'n. Capt. McDonald.
- " 4 " (Durham) 50th Battalion, Capt. Cairns.
- " 5 " (Atheleston) 50th Batt'n, Capt. Anderson.
- " 7 " (St. Jean Chrysostom) 51st Batt., Capt. Livingston
- " 6 " (Bolton) 52nd Battalion, Capt. Mooney

No. 5	No. 1 Co'y (Danville) 54th Battalion.
	Capt. McKenzie.
" 2	" (Melbourne) 54th Batt'n,
	Capt. Williamson.
" 2	" (Clarenceville) 60th Batt'n
	Capt. Jameson
" 3	" (Durham) 60th Battalion,
	Capt. Robinson.
" 5	" (Stanbridge) 60th Batt'n,
	Capt. Bockus.
" 2	" (Waterloo) 79th Batt'n,
	Capt. Maynes.
" 3	" (Waterloo) 79th Batt'n,
	Capt. Codd.
" 4	" (South Roxton) 79th Batt.
	Capt. Galbraith.
" 5	" (Roxton Falls) 79th Batt.,
	Capt. Wood.
" 6	" (North Ely) 79th Batt'n,
	Capt. Smith.
" 7	" (Lawrenceville) 79th Batt.
	Capt. Brown.
" 8	" (Waterloo) 79th Battalion,
	Lieut. Brooks.
	Drummondville Infantry Company,
	Capt. Watts.
	Eardly Infantry Company,
	Capt. Lawlor.
No. 8	No. 3 Co'y. (Richmond) 67 Battalion,
	Capt. Hoyt.
" 6	" (St. John) 62nd Battalion,
	Capt. Likely.
" 5	" (Black River) 73rd Batt'n,
	Capt. Templeton.
No. 9	No. 3 Battery (Richmond) 2nd Halifax Brigade, Garrison Art'y.
	Capt. Macpherson.

## No. 4.

The several Corps composing the Grand Trunk Railway Brigade are hereby removed from the List of Corps entitled to pay on completion of drill authorized for the year 1874-75.

By Command of His Excellency the Governor General,

WALKER POWELL, Lieut. Colonel,  
Acting Adjutant-General of Militia,  
Canada.

## HEAD-QUARTERS,

Ottawa, 3rd June, 1874.

## GENERAL ORDERS (14).

## ACTIVE MILITIA.

REGULATIONS FOR THE ANNUAL DRILL OF  
1874-75 DOMINION OF CANADA,

I. Having reference to General Orders (13) under date of 2nd June, 1874, reducing the number of corps, and in order to keep the expenditure for drill and training within the appropriation made by Parliament, as well as to permit all corps remaining on the strength of the active militia force to perform drill, the corps mentioned in Nos. 2 and 3 of said General Orders (13) excepted,

the nominal strength of each Troop of Cavalry, Garrison Battery of Artillery, Company of Rifles, Infantry and Engineers, is not to exceed forty non-commissioned officers and men, with the addition of two per company for staff-sergeants and band.

Such corps as have not already completed the drill for 1873-74, and who may be required to go into Brigade Camp for the drill of 1874-75, are not to perform the drill for 1873-74.

The annual drill for 1874-75 will be carried out, so far as the same may be practicable in Brigade Camps of exercise, at which the Cavalry, Field Artillery and Infantry corps within the Brigade Division, who may be authorized to attend such camps will be concentrated for twelve days drill and training.

The officers, non-commissioned officers and men will be paid, to the extent authorized above, only for the days they are actually present in camp, as follows: The officers and non-commissioned officers the pay of their rank, the men sixty cents per diem; for horses of mounted officers, and for Troops of Cavalry and Field Batteries of Artillery, one dollar per diem; in addition to free rations for the officers, non-commissioned officers, and men, and free forage for the horses.

The time actually and necessarily occupied going to camp in the first instance, and returning to their homes after completion of the annual drill, to be counted as part of the twelve days in camp.

## PAY.

2. The following are the established net rates of pay per diem for corps in Brigade Camp:—

Lt.-Col in command of a Battalion ..	\$ 87
Majors .....	3 90
Captain .....	2 82
Lieutenant .....	1 58
Ensign, 2nd Lieutenant or Cornet ..	1 28
Adjutant, with rank of Lieutenant ..	2 44
do do Ensign .....	2 13
Paymaster .....	3 05
Surgeon .....	3 65
Assistant-Surgeon .....	2 43
Quarter-Master .....	1 94
Sergeant-Major .....	1 00
Quarter-Master Sergeant .....	90
Paymaster's Clerk .....	90
Orderly Room Clerk .....	90
Hospital Sergeant .....	90
Pay Sergeants .....	80
Sergeants .....	70
Corporals .....	60
Buglers and Trumpeters .....	60
Privates .....	60

Officers must bear in mind that in all cases of leave of absence from camp, no pay is to be drawn for the day or days any officer or man is absent on such leave.

Regimental officers who may be required to act temporarily in a higher regimental position than their regimental rank, will only receive the pay of their actual rank.

No mounted officer will be allowed for more than one horse, actually used by him.

The pay for horses to cover any expense incurred for shoeing while at drill.

## RATIONS.

3. The daily scale of ration for each officer, non-commissioned officer and man at Brigade camps of exercise will be as follows:—

1 1/2 lb. of bread.
1 lb. of meat.
1 lb. of potatoes.
2 oz. of sugar.
1/2 oz. of coffee.
1/2 oz. of tea.
1/2 oz. of salt.
1 oz. of pepper.
2 oz. of cheese.
1 oz. pearl barley.

## FORAGE.

10 lbs. oats, and
15 lbs. hay for each horse.

Every Troop, Company or Corps attending Brigade Camps, will bring with them their own camp kettles, tins, or cooking utensils, and in consideration thereof a special allowance of \$6 per Troop or Company who actually perform the drill in Camp will be allowed, and may be charged at the end of the Acquittance Rolls, on a certificate from the Commanding Officer at the end of the Roll, that they have been provided by the Troop, Company, or Corps.

## SUPPLY REGULATIONS.

4. When the formation of a Camp of Exercise is authorized at any place under the above regulations the Deputy Adjutant-General of the District within which such Brigade Camp may be formed will call for tenders from tradesmen in the locality by advertisement in some local newspaper, and by causing handbills to be posted prior to the date of assembly in camp, for supplies of food, fuel, wood, and forage required for issue during the continuance of the camp. Tenders for approval of the Minister of Militia and Defence, to be sent in on blank form, with printed conditions thereon as supplied by the Department—and some known person residing in the locality of the proposed camp should be named in the advertisement and handbill, from whom persons desirous of tendering for supplies may obtain the necessary blank forms to enable them to do so.

Previous to the Assembly of the corps in camp a supply officer will be named, who will be under the immediate direction of the officer commanding the camp, and whose duty will be to receive supplies from the several contractors, see that they are strictly in accordance with contract, and, when approved, to issue the same on ration returns, or requisitions to the several corps in camp entitled to receive them. It will also

be his duty, immediately after the breaking up of camp, to make up his accounts of receipts and issues, and certify the accounts of contractors in accordance therewith,—also to send through Officer Commanding Camp, for District Paymaster an abstract of receipts and issues, with the original Ration Returns and requisitions as vouchers for the accounts to be paid.

As each corps will provide itself with cooked rations for the first day appointed for Brigade Camp, the issue of Rations in such camps will commence on the morning of the second day.

Rations will be drawn for use by the several Corps upon daily Ration Returns. The necessary printed forms will be supplied by the Department.

The commanding officer of any corps is allowed to draw rations only for the actual number of officers, non-commissioned officers and men of his corps present in camp for the day such rations are required.

The officer commanding the camp will make requisition upon the supply officer, for such rations as may be required for the Brigade Staff doing duty in camp.

The daily supply of rations for battalions to be asked for and received from issuing officer in bulk—the distribution to companies therein will be made by the battalion quartermaster.

The same form to be used by troops, batteries and companies, and the Ration Returns, when received by the quartermaster from the several companies in battalion, will form the basis for his demand upon the issuing officer for the rations in bulk required for the day for his battalion. The accuracy of this return, No. 176, can be checked by the Daily Parade State No. 164, of the corps or battalion, and should any excess of rations be drawn by any corps, the same will be made good by such corps.

On the breaking up of every camp, arrangements according to circumstances must be made by the Deputy Adjutant General of the District for the care, preservation, and return of all equipments; tents must be dry before being packed, and the value of all damages and deficiencies must be deducted from the drill pay before the corps leave camp. Officers commanding corps will be careful to make this known to all under their command.

No writing, printing or defacement of any kind upon any tent issued for use at any camp, is to be permitted.

#### TRANSPORT.

5. Local arrangements for transport of all corps proceeding to and from the Annual Camps of exercise by rail or steamboat, will be made by Deputy Adjutants General Commanding Military Districts. The transport of corps to be by those railway and steamboat lines whose tenders have been approved of at head quarters.

As Railway Companies agree to a reduced rate for the double journey, requisitions should be to cover the journey both ways for all corps proceeding and returning by the same conveyance.

Officers and men proceeding from camp on leave of absence, are under no circumstances to be furnished with transports at the public expense.

All requisitions for transport to be signed by the Deputy Adjutant General of the District.

Accounts for transport in any district are to be sent in the first instance to the Deputy Adjutant General of the district for examination and certificate, before transmission to headquarters for payment.

In cases where the same railway or steamboat company performs transport service in different Military Districts, the account for such transport are to be made separately for each district so as to facilitate examination. All transport is to be charged for at the rate per mile named in the contract, and a column is to be ruled in each account, wherein the number of miles travelled in each instance is to be clearly shown.

When railway or water communication is not available for the whole journey, and corps are not marching by road to camps of exercise, an allowance in lieu of transport for such portion of the distance necessarily travelled over ordinary roads at the rate of six cents. per mile for each officer, and three per mile for each non-commissioned officer and man, whose corps or company head quarters are distant more than three miles from the place of encampment, will be allowed proceeding to camp—the same rate to be allowed for the return journey, and the amount is to be added to the company pay lists and paid to the captain before leaving camp.

Officers commanding Infantry companies or corps will require each man to provide himself before leaving home, with a sufficient quantity of cooked rations for the day proceeding to camp, and for which a sum of 25 cents. will be allowed.

#### MEDICAL REGULATIONS.

6. The Medical arrangements for every battalion and corps will be carried out regimentally. A portable medicine chest, with the requisite supply of medicine, &c., will be furnished by Government to every battalion of infantry, field battery of Artillery, and Regiment of cavalry, on the breaking up of camp these medicine chests will be returned into the district military store.

A medical inspection of every officer, non-commissioned officer and man will be made, if possible, before the men leave the corps or company head-quarters; when that is not possible, then the medical examination must be made immediately after the concentration of the corps or battalion.

This inspection is with a view of ascertaining 1st. Whether the man is laboring under disease of any kind at the time, such as rheumatic affections; diseases of lungs or heart; or any of the viscera of the abdomen; or under any form of syphilitic disease; or is short sighted; or has any disease or injuries of any of the joints; or badly shod feet or overlapping toes which would prevent his marching; 2nd, of ascertaining if the man has any predisposition to any of the above diseases, or has recently suffered from any of them, or if he has any other disqualification which may render him unfit for service, or predispose him to become inefficient from exposure.

Such men, if any be found, are not to be permitted to go or remain in camp, as well for their own sakes, as to prevent claims for compensation being made upon the public on account of illness on the part of the men who are not fit for service.

The Medical Officer of each Corps or Battalion will make out a sick report every morning, and transmit a copy to the Commanding Officer of the battalion.

The Surgeon of each Battalion will keep an admission and discharge Book, of all cases taken into Hospital according to Form B.

Every Surgeon will give a receipt for all articles of medical equipment which may be issued to him for the use of his Corps or Battalion, for the care and proper expenditure of which he will be responsible; and on being relieved from duty he will return all medical stores, articles of equipment and medicine remaining unexpended into the District Stores, with a list of the materials which have been expended by him, on complying with which his receipt will be returned to him.

Such wine or spiritous liquor, as may be prescribed for use in cases of illness must, if procured, be paid for by the person requiring the same. The attention of medical officers of corps is especially called to paragraphs 133, 140, and 141 of the Orders and Regulations of the Active Militia.

No expense to be incurred by medical officers on account of Government without previous authority for such being obtained.

In any case of serious illness or accident, the medical officer shall, in conjunction with the commanding officer of the corps, make such immediate arrangements as may be necessary, sending the Patient, if possible, at once to his home or the nearest hospital; he will make a minute report to head quarters of all circumstances connected with the case.

The nature and cause of all accidents or injuries which occur to either men or horses while in camp, are to be fully investigated at the time by a board of officers, and a special report on each case sent to head quarters.

(For Continuation see Page 273.)

## CONTENTS OF No. 22, VOL. VIII.

## POETRY.—

William and Susan..... 232

## EDITORIAL:—

Torpedo Attack and Defence ..... 258  
 Electrical Warfare..... 258  
 Military Bridges..... 259  
 Queen's Birth Day Celebration In Ottawa..... 259  
 The News of the Week..... 251

## CORRESPONDENCE:—

Captain R. Y. Ellis..... 257

## RIFLE COMPETITION:—

Ingersoll Rifle Association..... 257

## SELECTIONS:—

Annual Report on the State of the Militia  
 for 1873..... 251  
 Electric Torpedoes..... 251  
 Royal Engineers..... 257  
 Talbot, Earl of Shrovesbury..... 257  
 Lecture on the Connection between the Or-  
 dinary Work of Soldiers, &c., by Lieut.  
 Maurice, R.A..... 262  
 REVIEWS..... 263



## The Volunteer Review,

AND

## MILITARY AND NAVAL GAZETTE.

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

OTTAWA, TUESDAY, JUNE 9, 1874.

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 at 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.

LIEUT. J. B. VINTER, of Victoria, is our authorised Agent for Vancouver Island, British Columbia. As is also Captain H. V. EDMONDS for New Westminster and adjacent country.

Owing to the illness of the Proprietor of the REVIEW last week, who was confined to his bed during the entire week, several errors occur in the General Orders, which were not detected until the entire edition was worked off. We have therefore, deemed it advisable to republish them in a corrected form—they will be found on 12th page of to-day's paper.

Below will be found the translation from *Revue D'Artillerie*, October 1873, of a "Note upon recent experiments with

the *Vasseur* Rib-rifled Gun and the *Woolwich* steel gun carried out by the Bourges Commission."

The *Vasseur* gun is not grooved—it is ribbed; the projectile shot or shell is grooved so as to fit the projections or ribs on the inside of the bore accurately, the object being to give the projectile the necessary rotation demanded by the physical laws which govern its flight.

As is well known the *Woolwich* gun is grooved—the centering of the projectile and its rotation is attempted to be secured by studs of soft metal which fit the grooves. There is a third system proposed by Captain SCOTT, R.N., in which the projectile is ribbed. In the present experiments the *Vasseur* gun has proved itself inferior to the *Woolwich* gun in one essential particular—both are muzzle-loading guns—and it appears that the *Vasseur* is more difficult to load than the *Woolwich*, a very material difference indeed, and one for which no accuracy or length of range would compensate; nor does it appear there is any likelihood of this evil being obviated except by the introduction of another evil of corresponding magnitude—i.e. increasing the windage—as the theory of value of rifled artillery over smooth bore depends altogether on the total elimination of windage, it follows that the *Vasseur* gun is so far a failure as indeed is also the *Woolwich* system in the same particular, and all muzzle loading rifled cannon using projectiles that cannot be forced home by the rammer partakes of the same fatal defect. There is very little to be heard about the Scott system lately but it must inherit the same constitutional and radical defect from which there appears to be no escape except a return to the breech loading system devised by Sir W. ARMSTRONG.

It would appear as if that system had been too hastily abandoned—its defects seem to have been a tendency to strip the leaded sabot of the projectile and the rifling was faulty in design. It is reasonable to suppose that such comparatively trivial defects would be rectified while the main features of a system so applicable to the requirements of Modern Ordnance should be preserved, especially as subsequent experience has proved that in order to obtain the greatest possible effect from gunpowder in propelling rifled projectiles the chase or barrel of the gun must be abnormally long, and to such an extent must that feature be carried, that in the latest improvement of the iron clad fleet of Great Britain arrangements have to be made for loading the gun on the outside of its port which is not only a defect but a source of weakness as well as serious danger. As the improvements in gun carriage by Major MONCRIEF and Capt. SCOTT, R.N., have diminished or totally absorbed recoil, it is very evident that in either ship or fortress the gunners will have less labor and less men as well as machinery will be required to train and fire a breech-loading than a muzzle load-

ing gun, therefore *Armstrong's* systems is first in point of material economy—its defects are merely mechanical, and there can be little doubt but patient perseverance would entirely obviate them; indeed the system adopted in its stead has quite as many radical defects and has the further disadvantage of employing the maximum of manual and mechanical power wholly exposed—whereas in the breech-loading system nothing should be exposed save the muzzle of the gun.

"Note upon recent experiments with the *Vasseur* Rib rifled gun, and the *Woolwich* steel gun, carried out by the Bourges Commission. Translation from '*Revue d'Artillerie*,' October 1873, p.p. 81 to 88.

The experiments previously made with the *Vasseur* rib rifled gun, firing projectiles of 12lb., and the *Woolwich* gun of the same calibre, fired with projectiles of 9lb., suggested the idea to Mr. Vasseur of making the comparison more conclusive by firing the two guns with the same projectiles. For this purpose Mr. Vasseur altered, in order to adapt them for his rib-rifled gun, 200 *Woolwich* shells already fired, by turning off the buttons, and forming grooves in the cylindrical part suitable for the ribs of the gun to go in.

The Bourges Commission has tried these new projectiles, together with the 12lb. shells previously used in the rib rifled gun and the ordinary *Woolwich* shells (fired from a steel gun), with three different charges of English powder, R.L.G., viz.:

1 lb. 12 oz service charge for the *Woolwich* gun.

2 lb. charge adopted by Mr. Vasseur; and 2 lb. 3½ oz. (1 kilo).

It has been determined that the altered *Woolwich* shells should, in the practice, receive the same bursting charge as ordinary *Woolwich* shells. From the mean weight found for the empty projectiles they have been filled to weigh 8lb. 10½oz. including a wooden plug to represent a Boxer time-fuze. As in the previous experiment, the *Woolwich* shells were filled to weigh 9lb. including a similar wooden plug, and the *Vasseur* shells to 11lb. 4½oz., including a metal plug.

The results ascertained from taking the velocity, from the firing, and from the examination of injuries and enlargements caused in both guns have allowed of:—

- 1st. The determination of suitable service charges for the *Vasseur* rib-rifled gun and the *Woolwich* steel gun.
- 2nd. The comparison between the two guns firing the same projectiles, viz. 9lb., with the same charge, viz. 2lb.
- 3rd. The comparison in the rib-rifled gun between the modified *Woolwich* shells and those of the pattern first adopted by Mr. Vasseur.

I. It has been found that the service charge suitable for the rib-rifled gun is 2lb., the same as that adopted by the manufacturer.

This charge gives with the modified *Woolwich* shells an increased initial velocity of 82 feet per second, an increase of 284 yards in range at 14° elevation as compared with the charge of 1lb. 12oz. The accuracy is rather greater with 2lb. than 1lb. 12oz.

The advantages of the 2lb. charges are therefore very marked. The gun seems as if it would stand a very great number of rounds with the 2lb. charge. It is advisable

however, not to exceed this charge so as not to injure the bore too much and too rapidly, around the seat of the projectile.

The service charge adopted for the Woolwich steel gun is 1lb. 12oz. There is obtained with a 2lb. charge an increase of 65 feet in the initial velocity, and of 164 yards in range at 14° elevation. With equal range of about 4,400 yards the angle of elevation is diminished by about 1° and the angle of descent by 1° 30'. The accuracy in range is rather greater; the accuracy in height improves both by the greater accuracy in range and the diminution of the angle of descent.

It seems, therefore, that there would be a manifest advantage in employing the 2lb. charge, and this because the bore is not thereby enlarged, and is but very slightly injured; the carriage also stands well, and the length of recoil (6ft 7in. with 1lb. 12oz., and 8ft. 3in with 2lb.) is still not so great as to become inconvenient. The gun and carriage would support a still larger charge; but beyond 2lb. initial velocity increases slowly, and the increase in useful effect would not be proportionate to the greater strain put upon the gun. It seems, therefore, to be undesirable to exceed the 2lb. limit.

11. It was desired to make the comparison between the Vasseur rib rifled gun and the Woolwich steel gun more conclusively by firing both pieces with the same projectiles (those of Woolwich). The comparison will be still better established by using the same charge, viz., 2lb. It would not be just to allow the 2lb. charge for the rib-rifled and that of 1lb. 12oz. only for the Woolwich gun, since the latter piece supports the 2lb. charge at least as well as the rib rifled gun.

The initial velocities may be estimated at 1,460 feet per second for the altered Woolwich shell in the rib-rifled gun, and at 1,444 feet per second for the common shell in the Woolwich steel gun.

The ranges and elements of accuracy are shown in the following tables—the figures therein being obtained by adjustment and expansion of the results of the firing.

RANGES.

Angle of Elevation.	Woolwich Gun	Vasseur rib-rifled Gun.
	Charge, 2lb.	Shell altered. Charge, 2lb.
	Yards.	Yards.
5°	2312	2372
10°	3598	3707
15°	4561	4714
20°	5316	5501
25°	5906	6113

MEAN DIFFERENCE OF RANGE.

Range.	Woolwich Gun.	Vasseur Gun.
Yards.	Yards.	Yards.
2187	17.4	17.3
2734	20.9	20.8
3281	26.9	26.3
3828	34.1	33.0
4375	42.2	40.8
4921	51.8	49.0
5468	60.0	56.9

MEAN REDUCED DEFLECTION.

Range.	Woolwich Gun.	Vasseur Gun.
Yards.	Yards.	Yards.
2187	3.7	1.6
2734	5.1	2.2
3281	6.7	2.9
3828	8.5	3.7
4375	10.6	4.6
4921	13.0	5.6
5468	15.9	6.8

MEAN VARIATION IN HEIGHT.

Range.	Woolwich Gun.	Vasseur Gun.
Yards.	Yards.	Yards.
2187	2.1	2.0
2734	3.5	3.1
3281	6.1	5.8
3828	10.5	9.6
4375	16.9	15.2
4921	25.8	23.0
5468	38.2	33.3

Probable number of shells per 1000 which would strike a target 656 feet high and of unlimited breadth.

Range.	Woolwich Gun.	Vasseur Gun.
Yards.	Shells per 1000.	Shells per 1000.
2187	305	336
2734	197	225
3281	115	121
3828	70	75
4375	43	48
4921	28	32
5468	19	22

It is shown from the first table that the increase in range of the altered Woolwich shell rises gradually from 60 yards at 5° elevation to 207 yards at 25° elevation. The initial velocity being very nearly the same in both cases, the increased range is due to the less resistance of the air to the motion of the projectiles, which, instead of having projecting studs, have grooves sunk in them.

On comparing the second and third tables it is seen that the rib rifled gun, while maintaining its superiority as regards the accuracy in direction, becomes as accurate, and even slightly more so, in range and in height than the Woolwich gun.

The rib-system is therefore superior to the groove system from a ballistic point of view.

This superiority is attained at an inconvenience which we must now point out.

In the Woolwich guns, ease in loading is rendered certain with a windage of 0.0197 in. and even of 0.0157 in. in diameter in the grooves, but any difficulties which may arise are always overcome by using the rammers.

The projectiles in the rib-rifled gun with the same windage of 0.0197 in. in diameter and in width, have nearly all given very great difficulty in loading: in fact two projectiles jammed in the middle of the bore, and it was absolutely impossible to make them go in any further. Loading became easy after increasing the windage in diameter and in width to 0.0315. The rib-system

Recent experiments show that it is only necessary to increase the windage in the width of the groove to .03 inch, and that a windage in diameter of 0.2 inch is ample to ensure easy loading.

A 7-in. gun rifled on this system has been fired 25 rounds. On three occasions 25 rounds were fired as quickly as the gun could be served, and no difficulty occurred loading at any one round. The windage allowed in this gun was the same as in the English service, viz., .08 over the body of the projectile, and .07 over the ribs, and any difficulty in loading inherent to the system would be much more apparent with a 7-in. gun than with a 12-pounder.

In the previous experiments the windage allowed was .015 inch in diameter, and the same in the width of groove; notwithstanding this the Committee state as follows: "Comparaux Canons de Woolwich, le Canon Vasseur a des saillies et une un peu plus de portee et justesse en direction, mais moins de justesse en hauteur et une probabilité de tir contre les troupes plus faible." This superior uniformity of range of the Woolwich gun is entirely due to the superior uniformity of the projectiles, they being turned exact to gauge, a difference in diameter of only .02 inch being allowed. Referring to page 6 of the Report we find the Vasseur projectiles were not turned, and variations in diameter amounted to .063 inch, more than three times that allowed with the Woolwich projectiles.

At pages 72 and 75 we find that an enlargement of the bore of the Woolwich bronze gun of .016 inch made a difference of 25 feet in the velocity of the projectile; four times this difference in the diameters of the projectiles would therefore make a notable difference of 25 feet in the regularity of the ranges.

thus requires more windage than the groove system.

But, on the other hand, as too much freedom of the projectile in the bore would diminish not only the range and accuracy, but would be still more fatal to the durability of the piece than in the groove system, we may say that the windage should be kept within very narrow limits, and that the rib system necessitates more precision in the manufacture of the projectiles and more care in inspecting them than the groove system. Without such care and precision, but which may be sometimes neglected in hurried manufacture in time of war, there might be in the lumber boxes of a battery projectiles which would jam in the bore, and would have to be fired at random with range very much diminished and quite unknown, a very serious inconvenience with guns of long range which have often to fire over friendly troops.

111. The comparative trials have shown that with 14° elevation the modified Woolwich shells have a mean range greater by 131 yards than the 12lb. shell of Mr. Vasseur's first pattern. This increase of range becomes greater as the elevation becomes lower, and becomes less as the elevation increases. Both projectiles have the same maximum range, 6780 yards or 6890 yards at about 35°; it is chiefly in the considerably increased accuracy that the superiority of the modified Woolwich shells consists.

This is due to better centring, consequent upon more careful manufacture, and also to better distribution of the weight through better regulated thickness, and to turning the body of the projectile. But does the reduction in the weight of the projectile tell favorably upon the accuracy? In the experiments with three bronze canons de 4, Olry's system (see 'Revue d'Artillerie,' June 1873), the Calais Commission fired in a gun of 3in calibre shells weighted to 9lb. 15oz., 10lb. 9oz., 11lb. 4oz., and 11lb. 14oz. It was found that by increasing the weights of the projectile, the mean variation in direction diminishes slightly, whilst the mean variation in range appears to increase. The mean variation in height follows very closely the mean variation in range. Should this be the fact, we should prefer, in the case before us for a muzzle loader of 3in. calibre, a projectile weighing nearly 9lb. to one weighing nearly 11lb., because with equal elevation and up to the limit of fighting distances, the range of the lighter projectile is decidedly greater, its accuracy in range and height is rather greater; again, its destructive effects are sufficient for a divisional piece, and, for an equal number of rounds carried the weight of the lumber boxes is less.

In support of this view, we cite the fact that the English gun of 8 cwt. and 3in. bore was at first intended to fire 12lb. projectiles, but it was afterwards decided to adopt 9lb. projectiles.

VASSEUR'S NEW ELEVATING GEAR.

Mr. Vasseur has presented a new elevating gear which has been found satisfactory, and which might be advantageously used in the service.

This apparatus consists of two screws, one attached to the cascable of the gun, the other attached to the carriage. These screws, one of which is right handed and the other left-handed, both take into the ends of one nut, suitably screwed to receive them. By giving one turn to the nut the screws are each caused either to go into or out of the nut by a distance equal to the pitch of its



thread, and consequently the breech of the gun is either lowered or raised through a space equal to the sum of the two pitches.

This apparatus is simple—it is worked easily and rapidly. It has stood 230 rounds without injury. On the *Vaccateur* carriages, where the pin which connects the gear to the under side of the carriage may occupy three positions in two plates having holes in them, the limits of the vertical field of fire are 7° depression and 25° elevation.

The apparatus could be adapted to breech-loading guns, if, instead of being attached to the oscule, it were connected to a forked piece hinged against the cheeks of the carriage near the trunnions, and supporting the breech.

(Signed) A. GODIN,

Chef d'escadron de l'Artillerie de la marine, Member of the Bourges Experimental Commission.

The attention of our readers is requested to the memorandum of the "Royal United Service Institution" following. It is a matter of regret that so very few of our volunteer officers are corresponding members of the noble institution, and it does not argue well for the enterprise of Canadian soldiers to find that they have not hitherto largely availed themselves of the advantages it offers to those desirous of obtaining a complete knowledge of the professional subjects of the day. We know that there are officers of the Canadian Army thoroughly capable of dealing with any military subject, and it is to be hoped that in this instance those gentlemen will be induced to compete for what may truly be called the Red Ribbon of the Institution—the *Gold Medal*.

#### MEMORANDUM

"The Council having decided that a Gold Medal be granted annually for the best Essay on a Naval or a Military subject, to be determination, each year, by the Council, make known the conditions of competition:—

- (1) The candidates must be officers on full or half-pay.
- (2) The Essays shall be on matters connected with the Army and Navy, alternately, commencing this year with a Military subject.
- (3) The Essays must not exceed 32 pages of the size and style of the "Journal."
- (4) The Essays must be forwarded to the Secretary, on or before the 1st December in each year.
- (5) The Essays must be strictly anonymous, but each to have a Motto, and be accompanied by a sealed envelope with the Motto written on the outside, and the name of the candidate inside.
- (6) The Essays will be submitted for decision to three Referees chosen by the Council.
- (7) The successful candidate will be presented with the Medal at the Anniversary Meeting, and his Essay will be printed in the "Journal."
- (8) The subject for the following year will be announced at each Anniversary Meeting.

The following is the subject for the Essay to be rendered on or before the 1st December, 1874—

'On the best mode of providing recruits, and forming Reserves, for the British Army; turning into consideration its varied duties in peace and war.'

By order,

B. BURGESS, Capt.,  
Secretary.

Whitehall Yard, London,  
3rd March, 1874.

We publish to-day the Syllabus of the Quebec School of Gunnery, under the command of Lieut. Colonel T. B. STRANGE, R.A., and from the general features of the system pursued at that school we should say it would bear a more than favorable comparison with any other similar institution that we know of.

The VOLUNTEER REVIEW has already published some of the examination papers of the officers under training at the School, and they have attracted the attention of Military Critics in Great Britain and the United States who have not been sparing in their commendation of the ability and technical knowledge displayed therein.

We have received a copy of a Report on the Military Academy at West Point, U. S. by Lieut. Col FLETCHER, Scots Fusilier Guards, and Military Secretary to His Excellency the Governor General of Canada. We will notice and republish this valuable work next week.

#### REVIEWS.

THE ALDINE FOR JUNE.—"On the Missisquoi," is the first full page picture, showing the rush and swirl of water, and the rocks and woods of this enchanting river. Another picture, the whole series being from the pencil of Thomas Moran, is "A Glimpse of the Missisquoi," as it winds through a peaceful valley, full of quiet beauty. A large full page picture gives the beholder "The Missisquoi at Sheldon Springs," a well known summer resort, noted for the romantic beauty of its scenery, "Mount Mansfield from Rice's Hill," is the last of this admirable series. A great panorama of some forty miles of the noble Green Mountains is shown in this picture. Arthur Parton contributes a full page "Scene on the Shenandoah," which depicts the grand and remarkable scenery near Harper's Ferry, where the waters of the Shenandoah unite with the Potomac, a point which charmed Jefferson. Other pictures in this number are "Almost a Dinner," after Guido von Maffei; a beautiful cut of a red deer, called "A hard run," after Specht; "A Turkish Court Yard Scene," in which a gypsy is dancing before a group of Turkish women; "Such a Shot!" by John S. Davis, a picture of real life, showing how, when boys, we went hunting, and met difficulties in the path; and a life like portrait of John Lester Wallack, the great actor, and the last of his names on the American stage. A better list of pictures, of greater variety, and more general interest could hardly have been selected. The literary contents of this number of *The Aldine* are of greater variety and extent than usual, but want of space prevents our particularising. James Sutton & Co., publishers, 58 Maiden Lane, New York City.

#### 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.  
Citadel, Quebec,  
22nd May, 1874.

SIR.—As you published in your last issue of the VOLUNTEER REVIEW, the curriculum of the Staff College of the British Army, it might interest some of your numerous readers to see the Syllabus (copies herewith) of instruction given at a Canadian Gunnery School, without any aid from a Staff of professors, and subject to the interruptions of Regimental duty and charge of Armaments &c., in a large fortress with an utterly inadequate Garrison. On a previous occasion you published some of the examination questions and answers, more of which are at your disposal if you desire to publish them.

I am, Sir,

Your obedient servant,

GEORGE STEWART Sergt.

"B" Battery Gunnery School, Quebec.

SYLLABUS OF OFFICERS' LONG COURSE GUNNERY SCHOOL QUEBEC.

To be able to instruct in

Gun drills } and Practice  
Mortar drill }  
Gyn  
Shifting Ordnance.

To have a good knowledge of

Infantry drill  
Riding drill and Stable studies  
Field Artillery movements and positions  
Artillery Material and stores  
Examination and Sighting Ordnance  
Laboratory Operations  
Construction of Siege batteries, riffs, and bridges  
Gunnery and applied Mathematics  
Fortification and Sieges  
Military surveying and Reconnaissance  
Tactics of all arms, Strategy, and Military History of one campaign  
Interior Economy, Regimental duty, and charge of Armament of the fortress  
Queen's and Militia regulations, and Articles of War as applied to Canadian Militia.

T. B. STRANGE, Lieut. Col.

Commandant S. G.

We have to thank the gallant Secretary of the "Royal United Service Institution" for an uncorrected proof of the very valuable lecture on "the Strategic Importance of the Military Harbors in the British Channel as constructed with defensive and offensive operations. As it is intended for private circulation only, we cannot review it till it has been published in the Journal of the Institution, but as we can assure our readers that it is a subject of great professional as well as political interest.

To CORRESPONDENTS.—We regret being under the necessity of leaving over to next issue VIEILLE MOUSTACHE 3rd letter.

(Continued from page 209.)

**CITY CORPS.**

7. Cases where local circumstances prevent city corps from going into Brigade camp with other corps in the same Brigade Division, such corps may be permitted to perform twelve days' drill at their local Headquarters on different days, as may be most convenient, subject to the approval of the Deputy Adjutant General of the District. In all such cases, no allowance will be made for rations or forage, and the pay will be for officers, one dollar and non commissioned officers and men, fifty cents, per diem.

**ISOLATED CORPS.**

8. In any Brigade Division where there is not more than one Battalion of Infantry, or where any Battalion is remote from the place appointed for the brigade camp, the drill of such corps is to be in camp at battalion headquarters. The pay of officers and non-commissioned officers will be same as fixed for brigade camps. Rations will not be issued by the public, but 25 cents per officer and man will be allowed to enable the Commanding Officer to arrange for such.

In any military district where there are rural companies not in battalion, such companies may be attached where practicable to a battalion in camp for purposes of drill; but where such cannot be conveniently arranged on account of distance, or any other proper cause, the corps may be permitted to drill at company headquarters under regulations provided for city corps as regards pay, but in such case neither rations, tents, nor blankets, nor any allowance therefor will be issued by the public.

**GARRISON ARTILLERY.**

9. Regulations relating to drill of Garrison Artillery will be published hereafter.

**GENERAL REGULATIONS.**

10. The course of drill and target practice of all corps is to be regulated by the Deputy Adjutant General in each district. He will arrange for the requisite staff for brigade camps, select the officers so far as practicable from those in the brigade division, and recommend the same to Headquarters for approval.

As the successful carrying out of the drill will, to a large extent, depend upon the action of the responsible staff officers it is expected that each will see that due care be taken to economize expenditure in his district, and to make the best use of the time allotted for drill.

In order that a full report may be made for Parliament on the drill and training for the fiscal year 1874-75, all drill for which payment will be made must be completed before the 1st day of December, 1874, and the reports of Deputy Adjutants General of

districts should be transmitted to headquarters not later than twenty days thereafter.

The reports relating to corps which have completed the drill for 1873-74 since 1st November last, are to be sent to Headquarters before the 1st July, proximo.

By Command of His Excellency the  
Governor General.

WALKER POWELL, Lieut. Col  
Acting Adjutant General of Militia,  
Canada.

**THE WIMBLEDON REPRESENTATIVES**

The Council of the Dominion Rifle Association has decided upon the following as comprising the Wimbledon Team for 1874:

Name.	Corps.	Province.
Capt. Adjt. Arnold.	71th Batt	N.B.
Col. Sergt. Baillie	47th "	O.
Pt. Brazeau	3rd "	Q.
Capt. E. Church	Cum'ld P. B.	N.S.
Pt. G. Disher	19th Batt.	O.
Major Gibson	13th "	O.
Corp. Hickey	63rd "	N.S.
Lieut. Maenachtan	Cobourg G.A.	O.
Capt. J. P. Macpheron	G.G.F.G.	O.
Capt. J. J. Mason	13th Batt.	O.
Pt. T. Mitchell	"	O.
Col. Sgt. Omand	"	O.
Pt. Pain	"	O.
Corp. Pallen	G. A.	N. B.
Segt. Sutherland	G.G.F.G.	O.
Capt. Thomas	51th Batt.	Q.
Lieut. Whitman	60th "	Q.
Ensign Wolfenden	1st C.R.V.	B.C.
Btry. Sgt. Major Wynne	G.A.M.	Q.
One (name not as yet received). Manitoba.		

**ANALYSIS.**

Ontario	10 competitors.
Quebec	4 "
New Brunswick	2 "
Nova Scotia	2 "
Manitoba	1 "
British Columbia	1 "
Total	20

The name from Manitoba has not yet been selected. The order of merit in the scores is being made up, and will be published in a few days.

**ARRIVAL OF THE PRINCE OF WALES RIFLES.**

—The non-commissioned officers and men of the Prince of Wales' Rifles, who determined to return the visit of the Guards to Montreal on the occasion of the late Sir Gen. E. Cartier's funeral, arrived by the steamer on Saturday night, and were met by the non commissioned officers of the G.G.F.G.'s with the band. On landing, the Montreal men were greeted with most hearty cheers not only by the military, but also by the immense crowd assembled to witness their debarkation, and they were heartily cheered in return. The men fell in, a green coat alongside of a Guardsman, and they marched up Sussex street, Sparks street, and Bank street to the camp, followed by a vast number of people, all of whom expressed their admiration of the stalwart, soldierly appearance of the Montreal men, who were frequently cheered along the route, every sign of a cordial welcome being manifested.—Free Press, May 26th.

**THE CANADIAN WEST POINT.**

The government have displayed a commendable spirit in bringing down a Militia Bill, and, in so far, have met the demand of the whole country, which imperatively requires that our volunteer force should be raised from the low estate into which it has been allowed to fall. While there was danger to our frontier, during the American civil war, and during the threats of Fenian invasion, our militia required no impetus to preserve its full members and general efficiency, but within the past five years from a variety of causes, there is no doubt that it has fast dwindled away, until hardly anything remains but the *cadres* and the names of the old regiments.

That the government should desire to promote the work of rehabilitation is, therefore, only right. But unfortunately they have hardly done more than signify their good intention. The Bill introduced by Mr. Ross is neither definite nor final, and Mr. MacKenzie has himself stated that the Ministers have not yet made up their minds as to the details of the management of our volunteers. At this late stage of the session, it is not to be expected, that they will come to any further decision, and we may therefore regard it as certain that no action will be taken in the matter until next year.

The two salient features of the Bill, as we understand it, are the appointment of a Major general of the British army to preside over the force, and the establishment of a military college, on the model of Sandhurst or West Point.

Of the first, it would be premature to speak, for the excellent reason that, beyond the bare announcement of the fact, the cabinet have given in no precise information as to their intentions.

With regard to the second, we pronounce the founding of a military college as a most excellent project, because it is the beginning of a thoroughly efficient staff. An army without trained officers is a motley rabble, and officers can be trained only by going through a scientifically graduated course of technical instruction. Experience proved, as was well stated by Mr. MacKenzie and Sir John A. MacDonald, in the course of the debate, on this subject, that the best officers, on both sides, during the American civil war, were those who had graduated from West Point.

The question of the locality, about which so much was said in Parliament, is a secondary one. It makes really no matter whether the site chosen for the proposed college, be Halifax, Quebec, Montreal, Kingston, Ottawa and Toronto. West Point is by no means a central point in the United States. A much more serious consideration is the obtaining a competent staff of instructors and the adoption of a thorough curriculum of study. At first, the number of pupils must needs be small—proportioned to the population and the military force required to be upheld in the country. Anything extravagant either in the size or architecture of the buildings, the number of professors, or the general outfit of the course, will be sure to lead to ridiculous failure. The expense at the lowest estimate will be heavy enough, especially for the salaries of professors who will have to be imported for the most part.

We trust that the government will devote adequate attention to this most important matter during the next year, so as to give the country a matured project of action when Parliament meet again.—St. John News, May 22nd.

## LAY ME LOW.

Lay me low, my work is done;  
I am weary, Lay me low,  
Where the will flowers woo the sun;  
Where the butterfly takes wing,  
Where the aspens drooping grow,  
Where the young birds chirp and sing,  
I am weary, let me go.

I have striven hard and long,  
In the world's unequal fight,  
Always to resist the wrong,  
Always to maintain the right;  
Always with a stubborn heart,  
Taking, giving blow for blow,  
Brother, I have played my part,  
And am weary, let me go.

Stern the world and bitter cold,  
Irk some, painful to endure;  
Everywhere a love or gold,  
Nowhere pity for the poor.  
Everywhere mistrust, disguise,  
Pride, hypocrisy and show,  
Draw the curtain, close mine eyes,  
I am weary, let me go.

Others' chance, when I am gone,  
May restore the battle call;  
Bravely lead a good cause on,  
Fighting in the which I fall.  
God may quicken some treason  
Here to take my place bel w  
In the heroes' minister-roll.  
I am weary, let me go.

Shield and buckler, hang them up,  
Drape the Standard on the wall,  
I have drained the mortal cup  
To the finish, dregs and all.  
When our work is done 'tis best,  
Brother, best that we should go,  
I am weary, let me rest,  
I am weary, lay me low.

## ELECTRIC TORPEDOES.

(Continued from page 253.)

The following points may be enumerated as the essential conditions of a torpedo system of Defence:—First, the torpedoes in themselves must be non-explosive and harmless, not liable to accidental discharge by percussion or carelessness. Second, the power of testing at all times the submarine or land circuits of the torpedoes without danger of explosion, and of speaking and telegraphing information and instructions through the charge without risk. Third, the power of igniting the mines at will, and of discharging several torpedoes in group with a single wire at distances exceeding that of the effective range of artillery, and that the explosions shall only take place when the vessel or vessels to be destroyed are within the area of destruction. Fourth, the power of discharging the mines, even should the enemy succeed in breaking one of the conducting wires, and of preventing the explosion of the mine by the enemy. Every torpedo in its complete form consists of three parts; the igniter, the charge, and the torpedo case or tank, with the necessary internal and external arrangement of electric connections and conductors giving the operator the entire control of the mine. The destructive power of both the land and sea torpedo will of necessity depend upon the amount of powder or charge placed within the mine, the conditions of the attack, the effect to be produced, and proper attention to the various important details connected with the electric circuits, laying down, testing, and ignition of the mine. When the necessary precautions are observed in connection with these details, all danger of involuntary explosion is removed, and accidents become impossible even in the hands of inexperienced officers. The power of testing the effective condition of the circuits and connections within the torpedoes, and of speaking through the mines without danger of ignition, so as to maintain telegraphic communications between the several outlying stations and

the centre of action, constitutes one of the main features of the Holmes and Maury system, developed by them in 1863 during the civil war in America.

The experience of the victories by the Prussian armies in Bohemia points to the great importance of maintaining telegraphic communication between the outposts, stations, and outlying divisions of the army in regulating the successful issue of their military manoeuvres, and the same rule applies equally to naval tactics. For instance, let it be supposed that the enemy's fleet is advancing up channel; with this system orders could be immediately transmitted from A station to B station, directing attention to such and such a group of mines under certain instructions to be given during the progress of the attack or the emergencies of the moment; and the transmission of such intelligence, while it places the whole field under the control of the commanding officers, at the same time points out the integrity of the several electric circuits. The recent Franco-Prussian war likewise affords a very instructive example, illustrative of the inefficiency of a divided attack or defence in the absence of special telegraphic communication. The well appointed and expensively maintained French naval force sent to the Baltic to carry out concerted operations by land and sea, to effect a diversion in favor of a land attack upon the enemy, was practically useless and inoperative from the absence of telegraphic communication from headquarters directing the manoeuvres and organizing the diversion. Thus a most valuable opportunity for an effective land attack along the Prussian frontier, coincident with a naval engagement off the southern shore of the Baltic, of immense importance to France at that critical time, was absolutely and entirely lost, and all joint and reciprocal action between the French army and naval forces completely frustrated.

The ignition of the electrical mine has next to be considered. The importance of accuracy and precision of ignition at sea will be understood by calculating the length of time the enemy remains in the line of vision. A vessel steaming, say, at the rate of nine knots an hour, will move through the water at the rate of 18 ft per second, and supposing her length to be 300 ft, she will remain in position to receive the effects of the blow only sixteen seconds, scarcely a quarter of a minute. The condition under which the defence is established also requires consideration. If by sea, the nature of the bottom on or over which the mines are to be placed, the depth of water, the set of the tides and currents, and the strategic positions to be defended. If by land, the probable nature of the enemy's attack and advance requires consideration, and the successive positions to be maintained. Hence, in every system of electric defence the attention and consideration, of the torpedo engineer should first be directed to obtain an accurate knowledge of the ground, whether rock, sand, or mud, the currents, depth of water, and rise and fall of the tide over the area in which it is intended to carry out a torpedo system. The importance of ascertaining the nature of the bottom is at once apparent, for, it found to be rocky, special arrangements must be carried out to secure the immovability of the mine in the position originally assigned to it, any deviation by reason of currents dragging over the bottom being absolutely fatal to the effective discharge of the mine for destructive purposes. Again

if the bottom is sandy, then careful investigation requires to be made as to the stability of the sand; should it prove to be of a shifting nature, every precaution must be taken to properly calculate the strength of the conductors so as to prevent breakage by undue pressure, either by the wires being silted over, or by being underswept by the action of the current and exposed to an unequal strain. Again, if the bed of the ocean or river should prove to be of a yielding nature, such as mud, the mine might become buried, and the calculations as regards the effective force of the explosion be materially diminished in relation to the column of water between the mine and the object of attack.

It must be borne in mind that these points are essential in every system, as torpedo mines may be months submerged before called into action. Such was the case with the James river mine, which lay thirteen months in the bed of the river before called upon to display its destructive properties. Again, a careful estimate of the strength and direction of the surface currents and tides is equally essential, because in charging a mine calculation has to be made for the swiftness of the motion of the vessel. When only seconds are allowed for the "effective shot," it is certainly a matter of moment for the operator to be well informed of her velocity, moving either with or against stream. The utmost nicety of calculation and manipulation is required to insure an accurate and decisive explosion. With the gun the action of the wind upon the flight of the projectile in relation to the strength of the charge enters into the elements of the calculation. With the torpedo engineer, the velocity of the current and the depth or cushion of water form an equally important feature in the effective manipulation of the mine. The depth at which torpedo mines are submerged below the surface is again of vast moment in relation to the strength of the charge and bursting power of the case, water being for all practical purposes considered as incompressible in every direction, it becomes evident that the effective action of the torpedo mine will always be that of the path of least resistance, or, in other words, in a vertical direction; but it does not always follow that this is practically the case, should the power of the charge and the *vis inertia* of the resistance be improperly calculated. It is on record that Admiral Chabannes, when trying some experiments with submerged electrical mines from the jetty at Toulon, found that the effective force of the mine was conveyed along the bed of the ocean, and the force of the explosion being thus transferred to the piles of the jetty, the operating party on the pier were knocked down, or rather hoisted by their own petard, while the surface of the ocean and the "area of destruction" over the mine remained perfectly tranquil and powerless to destroy the enemy supposed to be in position over it. In this instance the strength of the charge in relation to the depth of water or resistance to be overcome had been miscalculated in relation to the conducting or vibrating power of the bed of the sea upon which the mine was placed, its distance from the piles of the jetty had not been properly considered. In fact, the depth of water being too great for the charge, and the resistance of the intervening ground between the mine and the jetty being less, the effective power of the mine, taking the path of least resistance, found vent for its energy through the vibratory motion it communicated to

the ground, culminating in the discomfit of the Admiral and his party assembled on the Toulon jetty to witness the effect.

### COAST-DEFENCE VESSELS.

Perhaps it is scarcely necessary to remind our readers that the ships of the First Reserve which are employed for Coastguard duties are not, after all, in the strictest sense of the term, coast-defence vessels at all. They are sea going ships—at least, they are supposed to be such, although, unfortunately, few of them at present deserve the name—and are intended, in the event of war, to be capable of co-operating with the Channel Squadron. But by the expression, "Coast Defence vessels," we must now be understood to mean vessels which have been built specially for the purposes of coast defence, and which, from some feature in their design, or more or less incapable of proceeding to sea and remaining there for any length of time. It is, however, all the more important to remember this distinction, because, in view of the organization of Naval Volunteer Corps, now in progress, it is obvious that the sphere of duty of such corps should be entirely confined to coast defence vessels, and that the more strongly marked the distinction between a coast defence and a sea going war vessel the less obloquy will attach to those who man the former if they are unversed in the mysteries of seamanship and the wonders of the deep.

Now, when we consider how entirely the construction and fitting of a sea-going warship is influenced by the fact that she is intended to be capable of making the longest voyages, withstanding the heaviest weather, and engaging the enemy at any period during her commission, it is obvious that vessels designed exclusively for coast defence may be constructed on a far simpler model. Without entering into a disquisition on shipbuilding, it may be observed that there are two main requisites in a sea going vessel of any kind. She must, in the first place, be of considerable size—for various reasons—and then, secondly, there must be—also for various reasons—ap-  
pliances on board for propelling her through the water with considerable rapidity. As these are the two fundamental essentials of a sea going ship, in virtue of her being such, we can, as the mathematicians say, eliminate both these conditions from the designs of our coast defence vessels. That is to say, so far at least as only nautical requirements are concerned, we can have for coast defence purposes very small vessels, and vessels which can only be propelled very slowly through the water. But in thus limiting the sphere of operations of vessels to our coasts and harbours, we, on the other hand, introduce an element essential to be observed in their construction, namely, light draught. The next step in the inquiry is to superadd to the conclusions already obtained, the requirements necessary to make these useful war vessels. Now the only really absolutely essential condition from this point of view, is that the vessels must be capable of carrying very heavy guns. Armour plating is, as we shall see presently, not a primary essential; neither is speed. On this point, however, we may quote the following remark from the report of the Committee on Admiralty Designs:—  
"As a powerful armament, thick armour, speed, and light draught, cannot be combined in one ship, although all are needed for the defence of the country, there is no

alternative but to give the preponderance to each in turn, amongst different classes of ships which shall mutually supplement one another." Now there appears to us to be in this sentence what a late eminent Scotch divine said he liked to see; namely, "a grand idea looming through mist," which, however, we may, perhaps in some measure dispel by resuming the thread of our remarks.

As we have seen, the only essential requisites for a coast defence vessel are, from a shipbuilding and nautical point of view, light draught; and from a war standpoint, the capability of carrying heavy guns. Hence, from a consideration of the general principles already explained, we arrive at the conclusion, that our coast defence vessels may be as small, and may move as slowly, as is compatible with the war requirements for fighting heavy guns; but that in any case they must possess light draught. In a word coast defence vessels, so far as this country is concerned, are simply a means of manœuvring artillery on the comparatively shallow waters which encompass our shores. This, we believe, is the fundamental principle which should guide us in the construction of such vessels. Viewed from this artillery standpoint, the difficulties as to speed and armour plating rapidly disappear. For it will at once be observed that these are matters which depend on the way in which the artillery is to be handled; and by referring to artillery operations on land it will be perceived when these points come into play in the designing of coast defence vessels. It will suffice for present purposes to recognize simply three kinds of land artillery, namely, (1) garrison guns, which are not intended to be moved at all; (2) guns of position, which are only moved slowly and occasionally, and which, when used—as in siege operations and the defence of lines—are protected by works of some sort; (3) field guns, which are moved rapidly and frequently, and which, as a rule, are never protected in any way. Now—fanciful although the notion may perhaps appear to some—we believe that we shall not go very far wrong if we assume that the same general principles which govern the use of artillery on land also regulate its employment on water in coast defence vessels. With the first named kind of land artillery—fixed garrison guns—we have nothing to do in considering coast defence vessels simply as a means of moving artillery on water. But from a careful consideration of the peculiarities and modes of using the second and third named varieties—guns of position and field guns—it will be seen that we require two very distinct classes of coast defence vessels, namely, (1) vessels of considerable size, although necessarily of light draught, carrying a large, heavy, well protected battery, capable of being moved, albeit but slowly, to any point on the coast, like a land siege train or battery of position and (2) small unarmoured vessels possessing great mobility and considerable speed, which can be collectively manœuvred in the style of a field battery, and which therefore should carry only one gun each. The ideal of the former should be an armour plated fort, capable of propulsion at as low rate; that of the latter Neptune's flying artillery.

It is satisfactory to observe that this latter type has been definitely adopted by the Admiralty, and to learn that we shall ere long have a considerable fleet of small unarmoured screw gun boats, each carrying one heavy gun—in fact, mere floating gun carriages—which, possessing great mobility,

can be quickly massed on any part of the coast that may be threatened. Still, as was indicated last week in these columns, such gun boats are not in themselves sufficient adequately to defend our large mercantile ports. To do this, it is absolutely necessary for us to have some vessels of the "floating fort" class. Unfortunately, however, this type has not yet found favour with the Admiralty, the *Glaitton* and the *Cyclops* in the meantime representing their idea of a coast defence vessel. But although these vessels may be useful in their way, they are by no means of exactly the right stamp for the defence of a large mercantile seaport town. For one thing, their offensive power—their armament—is too small; and it should be remembered that after all the *Cyclops* class was not originally designed for coast defence, but for a totally different purpose. It was only on the outbreak of the recent Franco-German War that Government ordered four vessels to be built from the design, in order to provide some light draught ironclads, which are now to be regarded as coast defence vessels chiefly because it is found that they are not fit to go to sea. It is to be hoped, however, that the representatives of some of our great mercantile seaports will take up the question, and urge upon the new Parliament the importance of speedily providing some vessels of the "floating fort" type for the purpose of coast defence.—*Broad Arrow*, March 7 1874.

The *Invalide Russe* confirms the statement that an account of the late campaign in Khiva is about to be published, adding that the Emperor has approved of the project, which is to be carried out at the expense of the State under the superintendence of Aide-de-Camp General Kaufman, Governor General of Turkestan and commander in chief of the Khivan expedition, and under the immediate direction of Major General Trotsky, chief of the Staff of Turkestan. This "History of the Khivan Campaign of 1873" will be edited by officers of the staffs of the three expeditionary columns, assisted by several persons who had the charge of scientific observations during the expedition, and will be in four parts. The first part will comprise the history of Russian movements in Central Asia from their commencement to the submission of Khiva in 1873, and will contain a complete resume of Russian relations with Central Asia up to the date of the expedition; a strategic study of the Khanate of Khiva and its roads; an explanation of the motives which led to the campaign of 1873; the plan of the campaign; and an account of the formation of the operation of all the expeditionary corps up to the taking of Khiva. The second part will be an account of the occupation of Khiva up to the time of the return of the Russian troops. The third part will give an account of the return of the troops; it will conclude the military recital, and complete the account of the conclusions which may with advantage be drawn from this campaign with respect to a war on the steppes. The fourth part will contain the scientific explorations, giving an account of all such work performed during the campaign—topographical, botanical, geological, ethnographical, statistical, linguistic, and historical. The work will be illustrated with maps, itineraries, engravings, and official reports.

## DOMINION OF CANADA.



## MILITIA GENERAL ORDERS.

## HEAD QUARTERS,

Ottawa, 29th May, 1874.

GENERAL ORDERS (12).

No. 1.

## ACTIVE MILITIA.

## PROVINCE OF ONTARIO.

*London Field Battery of Artillery.*

To be 2nd Lieutenant, from 2nd August, 1873:

Sergeant Major John F. Williams, (formerly Brigade Sergeant-Major Royal Artillery) vice Brough.

*St. Catharines Battery of Garrison Artillery.*  
Captain Josiah Greenwood Holmes G. S. is hereby permitted to retire retaining rank.

*15th "Belleville" Battalion of Infantry.*

No. 6. Company.

Memo.—Adverting to G. O. 2nd April, 1869, instead of "vice H. A. F. McLeod, left limits," read "vice Captain Henry A. F. McLeod, V. B., who is hereby permitted to retire retaining rank.

*16th "Prince Edward" Battalion of Infantry.*

No. 4 Company Milford.

To be Captain:

Ensign Rodman Gill Ostrander, V. B., vice John C. Lake, who is hereby permitted to retire retaining rank.

No. 7 Company Ameliasburg.

To be Lieutenant, provisionally:

Sergeant Benjamin Rothwell, vice George E. Vandusen, whose resignation is hereby accepted.

*34th "Ontario" Battalion of Infantry*

No. 6 Company, Brooklin.

To be Lieutenant:

William H. Browne, Gentleman, M. S., vice William Batty, whose resignation is hereby accepted.

Ensign John Napier having left limits, his name is hereby removed from the list of Officers of the Active Militia,

## CONFIRMATION OF RANK.

Captain Alfred Wyndham, No 5 Company, 12th Battalion, from date of appointment: 28th September, 1866,—Captain Wyndham having been on active service as Lieutenant in a corps the service of which was similar to Her Majesty's regular army.

## PROVINCE OF QUEBEC.

*1st Montreal Company of Engineers.*

To be 2nd Lieutenant, provisionally:

St. George J. Boswell, Gentleman, vice Peter Nicholson, left limits.

## PROVINCE OF NEW BRUNSWICK.

*67th Battalion "The Carleton Light Infantry."*

No 6 Company Grand Falls.

To be Ensign, provisionally:

Private Francis Rice.

By Command of his Excellency the Governor General.

WALKER POWELL, Lieut. Col.  
Acting Adjutant General, of Militia,  
Canada.

REMITTANCES Received on Subscription to THE VOLUNTEER REVIEW up to Saturday the 6th Inst.

Truro, N.S.—Capt. G. A. Layton, to Aug. '74. \$1.00  
Shabencadic, N.S.—Ens. J. E. Fitch, to July '73. 40¢  
(Per Capt. L. J. Bland.)

Halifax, N.S.—Capt. J. Graham, to Aug. 1871. 40¢  
Lieut. J. E. Curran, to July " 2-0  
Capt. & Adj. G. T. Smithers, " 2-00  
Ens. Rogers, 63th Battalion,  
(omitted in previous list) 1.00

Quebec.—1st Col. Wallace for Capt. R. Hamill  
(to 1st January, 1873) 2.00  
Colborne, O.—Lt. Thos. P. Keller, to 1st June, '71 4.00

THIERS IN FAVOR OF PEACE.—ex President Thiers to day 3rd received a deputation of Frenchmen from Peru, and in reply to their address said he believed in the maintenance of peace, which was in accordance with the wishes of the people.

## FITS CURED FREE!!

Any person suffering from the above disease is requested to address DR. PRICE, and a trial bottle of medicine will be forwarded by Express,

FREE!

Dr. Price is a regular physician, and has made the treatment of

FITS OR EPILEPSY

a study for years, and he will warrant a cure by the use of his remedy.

Do not fail to send to him for trial bottle; it costs nothing, and he

WILL CURE YOU.

no matter of how long standing your case may be or how many other remedies may have failed.

Circulars and testimonials sent with

FREE TRIAL BOTTLE.

Address

DR. CHAS. T. PRICE,  
17-52 67 William Street, New York.

## Wanted to Purchase

A<sup>N</sup> Artillery Uniform, Lieutenant's Rank. State size. Address—LIEUTENANT at this Office. 23



## MILITIA SUPPLIES.

TENDERS will be received by the undersigned at his office, at Brockville, up to two p.m. on THURSDAY the 11th Inst., for the supply of such quantity of the undermentioned articles as may be required for 1,100 men, and 130 horses, more or less, for the period of about 12 days, during the encampment of the Active Militia at or near Ottawa, commencing on 2nd June, 1874:

Conditions of the Contractors, and forms of Tender can be obtained at the Printing Office of Mr. Woodburn, Elgin-st., Ottawa, (where samples of Groceries are to be left) or from the undersigned.

Bread, Fresh Meat, Potatoes, Groceries, Hard-wood for Fuel, Oats, Hay & Straw—in bundles of 15 lbs. each, and Water for cooking and drinking, and cartage of Stores to and from Camp.

The contractor for Forage will be required to furnish suitable storage for at least three days supply, which quantity should be always on hand.

The Fuel wood must contain 123 cubic feet to the cord.

The quarters of Beef must weigh not less than one hundred pounds, and the Suet, kidneys, neck, shank and hock-joints to be excluded, and Salt Pork or Mutton to be supplied if required, for three days of the period. The contractor to furnish necessary Saws, Choppers, Blocks and Scales.

The D.A.G. does not bind himself to accept the lowest or any tender.

The bona fide signatures of two responsible persons willing to become security for the due fulfilment of the contract to accompany each tender

W. H. JACKSON,

Lt.-Colonel, Dep. Adj. Gen., Mil. District No. 4.

Dep. Adj. Gen.'s Office,

Brockville, June 5, 1874.

83-3

## MILITARY TAILOR.



## UNIFORMS OF EVERY DESCRIPTION

MADE TO ORDER,

AND

EVERYTHING NECESSARY

TO AN

## OFFICER'S OUTFIT

SUPPLIED AT THE SHORTEST NOTICE.

TERMS CASH ON DELIVERY

Price List supplied on application.

N. McEACHREN.

Toronto, June 9th, 1874.

23-2