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The Volunteer Review

AND MILITARY AND NAVAL GAZETTE.

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

VOL. VIII.

OTTAWA, (CANADA,) TUESDAY, JULY 28, 1874.

No. 30.

NEWS OF THE WEEK.

The Quebec City Council have voted one million dollars to the North Shore Railway.

A new well was struck at Petrolia on the 21st by Mr. Loney. It is pumping at the rate of 250 barrels per day.

Sixteen persons were fined at Port Rowan on the 21st for violating the Fishery Act during the close season.

Messrs. Bell and Hubertus, of the Parry Sound Railway expedition, were encamped at Brule Lake, near Frontenac Road on Sunday, July 19th. The examination of the route on foot has been carried fifty miles from Carleton Place, or about eighty miles West of Ottawa city.

On Friday the 10th inst., Sir Garnet Wolseley paid a visit to the Wimbledon camp, and was presented with an address by the Canadian Team. The names of the following Canadian marksmen appear in the scores issued by the Statistical Department, and published in the *Volunteer Service Gazette*: *Daily Telegraph* prize—200 yards, seven shots—highest number of points made 34, by two marksmen; Color Sergeant Baillie, 47th, Canada, 33 points; Capt. Church, Provisional Batt., 32 points; Capt. Layton, 18th Canada, 31 points; Ensign Wolfenden, Provincial Batt. Canada, 31 points.

In the "Extra Prizes" contest the highest number of points made was 34, Sergeant Sutherland of the Foot Guards, Canada, scored 32. In the highest scores in uncompleted competitions 32 was the best; Color Sergeant Baillie, of the 47th, Canada, scored 27.

The schooner *Annie Laurie*, twenty two tons, before reported as having sailed from St. John for Great Britain, has been totally lost near Halifax. The crew were saved.

A court martial is sitting on board H.M.S. *Doris*, upon the Captain and officers of the *Nobe*, for the loss of that vessel.

The Governor General and party met with a fair amount of success during their recent fishing excursion below Quebec. Some thirty salmon were killed, the largest of which weighed 26 pounds. It was hooked and landed by Lady Dufferin, after playing it for nearly an hour.

The steamer *Cumberland*, which left Colingwood on the 21st for Thunder Bay, had on board ten Armstrong field pieces for use in Manitoba and North-West.

The terrible calamity of a visitation of the grasshoppers has befallen the Prairie Province, and the people are greatly disheartened in consequence.

The colony of Menonites for Manitoba 330 in number, including fifty one families hailing from Katesha Stauffa, arrived in Montreal on Saturday the 18th en route for Manitoba. Three children died during the passage in the steamship *Austrian* from Liverpool to Halifax, and two were born. The party (which brings out \$45,985 in gold and drafts) proceed by rail to Sarnia and take the Dawson route to Manitoba.

A special telegram from New Brunswick says that the appeal to the Privy Council against the existing school Law has been dismissed. This is another victory for the New Brunswick Government.

The annual meeting of the Kingston Rifle Association will be held on the 25th of August and following days. Prizes in money will be competed for. A successful meeting is anticipated.

A terrific thunderstorm visited Ottawa and Hull on Sunday night the 19th inst. Several houses and telegraph poles were struck, and the crops in the surrounding country were considerably damaged. In Hull the women became panic stricken, and ran about the streets in their terror.

News reaches us from Manitoba of an assault of a peculiarly ferocious character perpetrated in St. Paul, Minn., on the person of ex-Attorney General Clarke. As it appears that the brutal injuries were inflicted upon the unfortunate gentleman in revenge for his official acts in his own Province, it is possible the outrage may be made an international grievance. Mr. Clarke has long been in very delicate health, so the effects of such a shock to his system may be very serious indeed.

A New gun, the invention of James P. Taylor, of Knoxville, Tenn, is being tried at Colt's armoury, Hartford, Conn. The *Springfield Republican* says: It is claimed that it will discharge 800 balls a minute, and has been known to discharge 1,000. There are 24 barrels in the outer circle and eight inside. They do not revolve, but are all convergent, so that at 500 yards the balls would strike within a circle of one foot. Arrangements are in progress for their manufacture at Colt's.

The New Brunswick Brigade of Garrison Artillery and 62nd Battalion of infantry, went into camp at St. John, July 23rd on Barrack Square. Adjutant General Maunsell is in command.

The *Times* Paris special says the Committee of Thirty agreed to the Electoral Bill, fixing the age of voters at twenty five, providing for elections by arrondissements instead of departments, and giving an additional member to every 50,000 inhabitants.

A suggestion in a Madrid newspaper for a union of Spain and Portugal, has been received with great disfavour in Lisbon.

France will support England in her refusal to allow naval affairs to form part of the discussion at the forthcoming international congress at Brussels.

Brady the hero who took charge of the steamship *Pennsylvania*, when during a storm she lost all her officers, has been awarded only \$4,000 salvage.

Dr. Thirwall, the eminent English historian, has resigned his position of Bishop of St. David's which he has held since 1840. His father said of him, that "at a very early age he read English so well that at the age of three years he was taught Latin, and at four he read Greek with an ease and fluency which astonished all who heard him." His subsequent career was worthy of this extraordinary precocity.

An alarming outbreak of small pox has occurred at Newmarket England. Upwards of sixty cases are already reported. The authorities of the town have asked the Jockey Club to convert their grand stand into a hospital where effected persons may be quartered.

The Lord Mayor of London gave a banquet on the 22nd to Her Majesty's Ministers at the Mansion House.

The Lord Mayor of London, Mr. Andrew Lusk, has been created a Baronet.

The *North German Gazette* says in reference to the recent outrages by the Carlists, "Germany, in behalf of outraged European civilization, will seek and find means to teach the Carlists that the murder of a captured German shall not remain unpunished."

It is stated that Seniors Castellar and Serrioll are preparing to act in concert for the definite establishment of a Conservative Republic.

The extreme Republican theories only divided them from the Liberals, who were their best allies.

Senor Sanz has been appointed Minister of Spain to Mexico.

The Carlists shot every tenth man of the volunteer battalions captured at Cuenca.

General Dominiquez is in command of the Republican army in Catalonia.

General Ravia will soon take the field in central Spain with 14,000 men and 30 guns.

The Carlists shot 160 Republicans at Olot.

The Government has ordered contributions to be levied on the partizans of Don Carlos.

The property of the Carlists resident in Cuenca has been seized to indemnify the relatives of the Republicans killed during the siege.

ANNUAL REPORT ON THE STATE OF THE MILITIA FOR 1873.

APPENDIX No. I

(Continued from Page. 339)

MILITARY DISTRICT NO. 10.

FORT GARRY, January 2nd, 1873.

Sir,—In forwarding to you my report for the past year on the state of the Militia in this Province, I have, so far as the local corps are concerned, little or no change to note.

The nominal and actual strengths remain as reported by me in January last, viz :

Corps authorized, 36 officers and 660 non-commissioned officers and men.

Corps actually raised, 18 officers and 330 non-commissioned officers and men. Of these the "Headingley" Troop of mounted Rifles is organized, but not yet equipped or uniformed.

The "Field Battery" of Winnipeg is organized, and partially uniformed, and equipped for purposes of drill, with two 7 pounder mountain howitzers.

The "Winnipeg Rifle Company" is uniformed, but not yet officially inspected, and is not armed.

The "Lisgar" Rifle Company, the "Mapleton" Rifle Company, and "Poplar Point" Rifle Company are complete in organization, uniform and equipment. These companies, with the exception of the "Mapleton Company" which has gone through a portion of it, have not as yet performed the drill for the year ending June 30th 1874 : but since my last report performed and were inspected for the annual drill of 1872 73, and with the following strengths.

	Officers.	N. C. O.	& Men.
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"Lisgar" Rifle Co.....	3	55
"Mapleton" " ".....	2	30
"Poplar Point" " ".....	2	44

These three are fine companies, and give promise of great efficiency.

The Winnipeg Field Battery consists of a superior class of young men, and if fully equipped, and that arrangements for horsing the Battery were made, would be a useful corps.

Circumstances have delayed the complete organization and equipment of the Winnipeg Rifle Company ; but from a late communication with the commanding officer I am led to believe that it will soon be on a satisfactory footing.

With regard to the various other corps authorized in 1871, in the Province, none have organized, and can be considered, but paper companies. My special report called for from the Adjutant General's office, on the 18th of June last, will have fully informed you on this subject ; and in connection with my various previous reports, have placed you in possession of my views as to a more satisfactory organization of the militia in this Province, than has as yet been found practicable.

I would, however, respectfully suggest, that instead of the desultory system of drill as at present authorized, that the annual drills be consecutive, and, when practicable without any considerable expense, that the local companies should perform such drill in camp attached to the Provisional Battalion on service here, in such manner as may be deemed advisable.

By this means the force on service here, in addition to its other duties, may be utilized as a valuable training school for local corps.

I have also respectfully to recommend that a School of Instruction, at which officers of the Local Active Force may be enabled to obtain certificates in this Province, may be established.

In the Dominion Forces serving here, there has been a considerable change in organization since my last report, the Department of Artillery having been increased to the strength and constitution of a Battery ; and the Provisional Battalion proportionately reduced, in order that the Force may come within the prescribed strength, which at the present date is returned as follows :

	Officers	N. C. O.
		& Men.

Battery of Artillery.....	3	80
Provisional Battalion of Infantry—including in Regimental Staff the Surgeon and Paymaster, acting for both corps.....	17	244

The duties and discipline of those corps are carried on as in H. M. Regular Service.

A considerable amount of extra duty has fallen on these corps during the past year in consequence of requisitions in aid of the civil power. The principal occasions on which such services were given, being, first in March last, when at the time of the prorogation of the Provincial Legislature, it was considered necessary to maintain an officers' guard in the Parliament Buildings, as well as strong inlying pickets in barracks. Again, on the 2nd of July last, a detachment of fifty men had to be despatched by night to White Horse Plains, to repress riots, and to aid in effecting the capture of rioters, a duty which was satisfactorily accomplished.

Immediately after this occurrence, the services of the troops were required for a special guard, which was maintained for some time over the building in Fort Garry used as a prison, in which a party of men from the United States were confined, awaiting trial on a serious criminal charge.

Subsequently, fresh requisitions occasioned extra guards and a strong inlying picket in aid of the civil power, whilst one Lepine was in custody on charge of murder.

On all those occasions, proper legal requisitions were required, and obtained by me from the proper authorities ; and the use of the troops was strictly confined to such purposes as are prescribed in the militia and Defence Act.

In accordance with our orders, a company of the provisional Battalion of Infantry was detached to the North West Angle of the Lake of the Woods, as an escort and guard for His Honor the Lieutenant Governor, during the negotiations for a treaty with the Ojibbewa Indians. This duty, which occupied about three weeks, was satisfactorily performed ; the party returning to headquarters on the 9th October.

On the night of the 3rd of December, a fire which totally destroyed the Legislative Buildings, occurred in the Town of Winnipeg. The exertions of a strong party of Infantry and Artillery, who I thought it proper to employ for the purpose, mainly prevented the fire spreading to adjacent buildings, where large quantities of powder and coal oil were stored, and which, if ignited, would have caused the destruction of the greater portion of the town.

As already specially reported to you, the services of the troops on this occasion procured them the thanks, by Minute of Council, of His Honor the Lieutenant Governor, and the Provincial Government.

The general health of the troops has been good, although the sick returns have been greater than in previous years ; this may be in a great measure attributed to the fact that of the drafts from Nova Scotia and New Brunswick, numbering one hundred men, who replaced the time expired men, were growing lads whose physique was not sufficiently established to fit them for hardships which service in this country necessarily entails. It is right, however, that I should add, that in the soldierlike qualities of zeal for service, and amenability to discipline which distinguished our Dominion Forces, these young levies from the Maritime Provinces are in no wise inferior to the troops that they have replaced.

I would respectfully suggest that, unless under exceptional circumstances, no men should be engaged for service in the North West under twenty years of age.

It is with satisfaction that I am enabled to report to you that the whole of the troops are comfortably quartered in the new barrack huts, lately erected, and of which full reports, plans, &c., will be forwarded to you by an early mail.

I have the honor to be, Sir,

Your most obedient servant,

W. OSBORNE SMITH, Lt. Col.

D. A. G., Commanding,

Military District, No. 10.

The Acting Adjt. General,
Ottawa.

REPORT ON THE ARTILLERY OF THE PROVINCE OF ONTARIO.

Kingston, November, 1873.

Sir,—The following batteries of Field Artillery have performed their drill for the year 1873-74, and have been inspected by me viz :—

The Ottawa Field Battery ; Kingston Field Battery ; Toronto Field Battery ; Hamilton Field Battery ; and Wellington Field Battery.

The London Field Battery will probably carry on its annual drill in the month of June next ; the Welland Canal Field Battery in March or April next, and the Durham and Gananoque Field Batteries, being still without the guns or equipment, it is difficult to say when they are likely to turn out.

The Ottawa Field Battery performed its annual training in eight consecutive days in September, being encamped at Ottawa. The weather was very unfavourable, and the rain greatly injured the harness and saddlery. I think it would be well for the future to issue to each battery going into camp a couple of extra tents for harness ; as, not alone is it very annoying to the men having so much extra work thrown on them by having to remove daily a quantity of rust from the iron work of the harness, but the policy of allowing harness worth \$2,000 to be injured rather than issue a couple of extra tents, worth about \$20 apiece, is very questionable.

Notwithstanding the difficulties this battery had to encounter, both as regards the weather and being short of officers, I am happy to inform you that the non-commissioned officers and gunners were efficient at gun drill, and the drivers at driving.

Captain Stewart can instruct well at gun drill and field manoeuvres.

Owing to very few of the officers, non-commissioned officers, or men of the battery having attended the School of Gunnery, there is not as great a knowledge of the use and application of artillery projectiles and stores as I should desire. This remark also applies to the Hamilton Field Battery.

The Kingston Field Battery was inspected by me on the 22nd September.

The Battery was rather short of men during the training, and but little gun drill had been carried out. The greater portion of the drill was devoted to driving and field manoeuvres, and consequently the battery was very efficient therein. The battery was very well horsed.

I inspected the Toronto Field Battery on the 30th September. The turn out, whether of men, horses, harness or guns, left little to be desired.

The gun drill and field manoeuvres were remarkably well done. This battery has sent a large number of non-commissioned officers and men to the School of Gunnery at different times.

The officers are exceptionally good.

Lieutenant General Haly, C.B., commanding the troops in British North America, was present on the occasion of the inspection. He was agreeably astonished at the ready way the battery manoeuvred. The annexed letter (A) which he was kind enough to write to me a short time afterwards, expresses more fully his opinion on this matter.

I inspected the Wellington Field Battery on the 30th September.

A sergeant-instructor from the School of Gunnery, was present with the battery during the whole training. This was only the second turn out of this battery since its formation. It progress has been remarkable, and I think will probably be still more so, as all ranks shew the greatest zeal for their work.

The Hamilton Field Battery performed its annual training in the early part of Oct. This Battery was particularly well horsed. The harness was in excellent order. The men were well up in gun drill.

Capt. Smith performed field manoeuvres very well.

At the Niagara Camp, in 1871, I gave a small prize to the cleanest set of harness, and I am glad to say, that in most of the batteries the hint has been taken up, and the officers offer small prizes for the cleanest harness; as nearly all the drivers endeavour to obtain a prize, the general effect on the appearance of the battery may readily be imagined.

I have frequently pointed out no provision has been made for a Government prize for drivers. I think it hard, that as a class, they should be debarred from all Government prizes.

A badge of crossed whips, and \$10 to the best driver of each battery, would not appreciably affect the Military expenditure.

GARRISON ARTILLERY.

Of the Garrison Batteries shown on the Inspection State, the Toronto, Collingwood, Garnaia, Napanee, and Nos. 3 and 5 Batteries of the Ottawa Brigade Garrison Artillery, performed the annual drill in eight consecutive days; the Goderich and Cobourg batteries in sixteen day, drilling at various times.

The particulars connected with the above batteries, will be seen on reference to the Inspection State.

The Toronto, Napanee and Cobourg Batteries turned out very creditably, and were well up in Garrison gun drill. The Colling-

wood and Goderich Batteries were fairly efficient but the two batteries of the Ottawa Brigade Garrison Artillery gave me anything but satisfaction.

These batteries were encamped at Ottawa; their appearance on parade was not particularly good, and with the concurrence of the acting Deputy Adjutant-General, several names were struck from the Muster Roll, as the individuals were quite unfit for service, several of them being boys of fourteen and sixteen years of age.

I inspected several detachments at gun drill, but was not at all favourably impressed I have reason to believe that the discipline maintained or attempted to be maintained, was of a very loose kind.

Unless Garrison Batteries are brought into forts and instructed at garrison gun drill, mortar drill, &c, under properly qualified instructors, I doubt very much if there is any advantage in retaining them on the strength of the force as *Garrison Artillery*.

In the Field Artillery of the Province there is much greater *esprit de corps* than in the Garrison. I would however, even in the case of Field Batteries, recommend that the annual training be carried on in the District camps, under proper supervision, and with the assistance of the staff of instructors from the School of Gunnery.

As I shall probably have no future opportunity of bringing forward any recommendations with reference to the artillery warlike stores of the Dominion, I beg to submit the following matters, most of which I have previously recommended:—

1st. The appointment of a Major to each Field Battery.

2nd. The increase of the establishment of a Field Battery to 100 non-commissioned officers and men.

3rd. The enrolment of draught horses for Field Batteries.

4th. The simplification of the drill of Field Batteries, by manoeuvring with the guns independently of the wagons.

5th. Granting prizes to drivers for proficiency in their own particular line.

6th. The removal of Garrison Batteries from their own headquarters to the most convenient forts and batteries for the annual training.

7th. The appointment of a Battery Sergeant Major to each Garrison Battery.

8th. Extension of the period of annual drill for both Field and Garrison Batteries.

9th. The manufacture of small-arm ammunition, and other warlike stores in the Dominion.

10. The encouragement of the manufacture of large grain gunpowder, by purchasing the powder required for annual practice in the Dominion.

11. The annual inspection of all warlike stores by competent officers.

12. The adoption of some fixed policy with reference to the fortifications and their armaments, as they are rapidly going to ruin.

Having, during the last three years, been brought much in contact with the Artillery of the Dominion, (but more particularly of Ontario), it gives me great pleasure in being able to testify that during all that time, I have ever been treated with the greatest kindness and consideration by all ranks, and I would respectfully request that I may be allowed through the medium of your report to return my sincere thanks to the officers, non-commissioned officers and men of the Militia Artillery generally, and particularly to Lieut Colonel Shanly, of London; Capt. Gray, Toronto; Captain Macdonald, Guelph;

Major Kirkpatrick, Kingston; Lieut. Colonel Mackay, of Montreal, and Lieut. Colonel Jago, of St. John, New Brunswick, hoping that during the period of my connection with the Artillery of the Dominion, I have generally conducted my duties to the satisfaction of the officers commanding the Militia of the Dominion.

I have the honor to be, Sir,

Your most obedient servant.

G. A. FRENCH, Lieut.-Col.

Inspector of Artillery,
and Warlike Stores,
Dominion of Canada.

The Acting Adjt. Gen. of Militia,
Ottawa.

(A)

CITADEL, QUEBEC, 14th Oct. 1873.

My Dear Colonel,—It was a great satisfaction to me during my tour, in the upper Provinces, having the opportunity which you so kindly afforded me of seeing unofficially your batteries of the Dominion Artillery at Toronto, and at Kingston. As I verbally expressed myself on those occasions I was very much pleased with what I saw of those troops. The Field Batteries of four guns, which, I saw on parade at Toronto; efficiently horsed and commanded by a smart and intelligent officer, gave most satisfactory evidence of the manner in which field artillery can be raised and formed, for which the Province of Ontario appears to me to possess special capabilities, both in men and horses. The manner in which that battery moved, evidences the zeal and intelligence with which it has been trained and instructed, and the turn out on parade of both men and horses was highly creditable to yourself, and those officers and soldiers serving under your command.

The battery and detachment at Kingston appeared equally efficient and well appointed. I was impressed with the feeling that both your officers, non-commissioned officers, and soldiers, appeared to be animated with a zealous and soldier-like spirit and bearing, and can only hope that increased opportunity and facilities may be offered these troops of attaining to the highest degrees of efficiency commensurate with Imperial and Dominion military interests. Wishing yourself and them every success, believe me,

Sincerely yours,

(Signed,)

W. O. G. HALY,
Lieut. General

(To be continued.)

MILITIA INSPECTION.—On Thursday evening at 7, the New Westminster Rifles mustered in their Drill Shed—36 being present—and marched out to the Cricket Ground, to be inspected by Lieut.-Col. Houghton, Deputy Adjutant General. After inspection of arms &c., various evolutions were performed in a very creditable manner. Colonel Houghton then addressed the men in very complimentary terms, expressing his satisfaction at the progress made by the company and referring in terms of special praise to the good muster (40 is the full strength of the company), and to the fact that the New Westminster Rifles numbered among them three or four of the best shots in the Province. Colonel Houghton urged the men to make fresh efforts to maintain and improve the standing they had acquired, both on the Parade Ground and at the Butts.—*Dominion Pacific Herald*.

DOMINION OF CANADA.



MILITIA GENERAL ORDERS.

HEAD QUARTERS,

Ottawa, 24th July, 1874.

GENERAL ORDERS (20).

No. 1.

ACTIVE MILITIA.

ANNUAL DRILL.

Adverting to No. 3 of General Orders (13) 2nd June, 1874, the following Corps are removed from the List of Corps not entitled to pay on completion of the Annual Drill for 1874-75 :

Mil Dist.

No. 5.—No. 7 Co'y. (St. Chrysostome) 51st Batt., Captain Livingston.

2 " (Clarenceville) 60th Batt. Capt. Jameson.

3 " (Durham) 60th Batt. Capt. Robinson.

Provisional Battalion of Infantry on Service in Manitoba.

To be Ensign :

Charles R. F. Twining, Gentleman, vice Joseph Taillefer whose resignation is hereby accepted.

PROVINCE OF ONTARIO.

Gananoque Field Battery of Artillery.

To be 1st Lieutenant :

2nd Lieutenant Charles Edwin Britton, G. S., vice John Brown Haig whose resignation is hereby accepted.

To be 2nd Lieutenant, provisionally :

James Alexander McCammon, Gentleman, vice Britton, promoted.

1st Battalion, Governor General's Foot Guards.

To be Lieutenant :

Ensign Horace Gerald Dunlevie, V.B., vice Charles E. Laumann, whose resignation is hereby accepted.

Captain Richard John Wicksteed, is hereby permitted to retire retaining rank.

30th "Wellington" Battalion of Rifles.

To be Paymaster :

Quarter Master Edmund Harvey, vice Honorary Major Malcolm O. MacGregor,

who is hereby permitted to retire retaining his honorary rank.

To be Quarter Master with Honorary Rank of Captain :

H. H. Swinford, formerly Captain of No. 6 Company, vice Harvey, promoted.

41st "Brockville" Battalion of Rifles.

To be Paymaster :

Honorary Captain and Quartermaster David B. Jones, vice Honorary Major Herbert S. McDonald, who is hereby permitted to retire retaining his honorary rank.

To be Quarter Master :

Quarter Master Sergeant Elkinah Kihcaid, vice Jones, promoted.

77th Wentworth Battalion of Infantry.

No. 1 Company, Dundas.

To be Lieutenant :

Ensign Alexander Bertram, M.S., vice Ogg promoted.

To be Lieutenant, specially and provisionally :

Charles Cornelius Greening, Gentleman, vice Bertram promoted.

CONFIRMATION OF RANK.

Lieutenant John F. Smart, V.B., 1st Class, 59th Battalion, is hereby confirmed as Adjutant from 3rd July 1874.

Cornet John Stewart, Ottawa Troop of Cavalry, from 2nd July 1874.

BREVET.

To be Major from 15th January, 1874.

Captain John F. Hollinger, M.S., No. 10 Company, 30th Battalion.

PROVINCE OF QUEBEC.

"B" Battery, School of Gunnery.

In addition to Lieutenant and Captain Charles John Short, from Sherbrooke Battery of Garrison Artillery, who retains the rank of Captain, the following Officers, Lieutenants in "B" Battery, will also hereby have the rank of Captain in the Militia, from 10th July, 1874.

Lieutenant Maurice E. J. Duchesnay.

do Oscar Prevost.

do Charles Auguste LaRue.

1st Battalion of Rifles, or "Prince of Wales" Regiment.

To be Captain :

Lieutenant Robert Ward Shepherd, V.B., vice Robinson resigned.

To be Lieutenant :

Ensign Alexander Robertson, V.B., vice Watt, promoted.

55th "Mégantic" Battalion of Infantry.

To be Major, from 10th July, 1874 :

Captain and Brevet Major Robert Stewart, M.S., from No. 2 Company, vice King, promoted.

No. 2 Company, Inverness.

To be Captain, from 10th July, 1874 :

Lieutenant Thomas McKenzie, M.S., vice Stewart promoted.

76th Battalion of Infantry, or "Voltigeurs de Chateauguay."

To be Quarter Master, from 4th July, 1874 :

Ensign Cyprien Durocher, from No. 2 Company, vice Pierre Dupuis, left limits.

No. 6 Company, Chateauguay.

The resignation of Captain J. Antoine Reid, is hereby accepted.

79th "Shefford" Battalion of Infantry, or "Highlanders,"

To be Quarter Master :

Peter Albert Martin, Gentleman, vice E. B. Hodge, left limits.

No. 4 Company, South Roxton.

To be Lieutenant, provisionally :

John H. Bartlett, Gentleman, vice George Edward Savage, left limits.

Ensign Lyman Savage having left limits, his name is hereby removed from the list of Officers of the Active Militia.

No. 6 Company, North Ely.

To be Lieutenant :

Robert Hackwell, Gentleman, M. S., vice Hodge, appointed Quarter-Master.

Ensign Pierre Paul Bissonette, having left limits his name is hereby removed from the list of Officers of the Active Militia.

Temiscouata Provisional Battalion of Infantry.

No. 2 Company, Trois Pistoles.

This company having become disorganized is hereby removed from the list of Corps of the Active Militia, and the Officers thereof are also hereby removed from the list of Officers of the Active Militia.

No. 3 Company, St. George de Cacouna.

To be Lieutenant :

David Trève, Gentleman, M. S. vice Auguste H. Jean, left limits.

No. 5 Company, Isle Verte.

To be Captain :

Ensign Alexis Dumas, M. S., from No. 3 Company, vice Alexis Frazer, left limits.

To be Lieutenants :

George DeFoy, Gentleman, M. S., vice P. R. Dubé, left limits.

Ensign J. B. Raymond having left limits his name is hereby removed from the list of Officers of the Active Militia.

Portneuf Provisional Battalion of Infantry.

Assistant Surgeon Thomas Geddron, having disobeyed Orders to attend Brigade Camp, his name is hereby removed from the list of Officers of the Active Militia.

PROVINCE OF NOVA SCOTIA.

69th Annapolis Battalion of Infantry.

To be Adjutant:

Ensign Osbert Marshall, M.S., from No. 4 Company, vice Malcolm U. Bent, deceased.

CONFIRMATION OF RANK.

Ensign William F. Rogers, M. S., 66th Battalion, from 25th Juno, 1874.

No. 2

CERTIFICATES.

SCHOOLS OF MILITARY INSTRUCTION.

Certificates received from Commandants of Schools of Military Instruction.

PROVINCE OF NOVA SCOTIA.

FIRST CLASS CERTIFICATES.

Regimental Division.	Name.
Halifax City.	—Ensign Arthur Edward Curren, 66th Batt.
do	—Sergeant D. S. Stewart, 2nd Halifax Brigade Garrison Artillery.

SECOND CLASS CERTIFICATES.

Regimental Divisions.	Names.
Halifax City.	—Ensign William F. Rogers, 66th Batt.
do County.	—Corporal W.H. Stevens, 66th.
do City.	—Gunner H. Gammon, 2nd Halifax B. G. A.
do	—Gunner M. Mahoney, 2nd Halifax B. G. A.
do	—Private J. N. Crane, 63rd Batt.
do	—Private T. M. Cutler, 63rd Batt.
do	—Private A. G. Cunningham, 63rd Batt.

BOARDS OF EXAMINERS.

PROVINCE OF ONTARIO.

FIRST CLASS CERTIFICATES.

Lieutenant John F. Smart, 59th Battalion.

Lieutenant Edward Hull Sheffield, No. 1 Company, 41st Battalion.

PROVINCE OF NOVA SCOTIA.

FIRST CLASS CERTIFICATES.

Captain John D. Cummins, 63rd Battalion.

By Command of his Excellency the Governor General.

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

The *Madras Times* gives particulars of the establishment of a Mountain Train Battery with elephants at Tonghoo. The battery will consist solely of elephants, the provision of bearers for the carriage of the guns and a certain number of rounds of ammunition, in addition to elephants, not being essential. If at any time it should be found necessary to move the guns by hand into any peculiarly difficult position where the elephants could not be used, there would, it is supposed, be no difficulty in moving them by means of the troops and followers. The normal load of an elephant in the plains of India is about fifteen maunds, (a Madras maund is 25lbs.) but in the course of the Looshai Expedition, it was found that on very difficult ground the elephants, though picked, were unable at times to move along with more than five or six maunds burden. It has therefore been decided that in the Tonghoo battery the elephant loads should consist of four boxes only of ammunition, of the approximate weight of seven maunds, and that cradles be made to carry six boxes, with which number the load will be raised to about nine maunds, whereby fewer elephants with suitable loads for ordinary country will suffice for the transport of a somewhat larger quantity of ammunition. The cradles are to be constructed so as to carry only six boxes, because, whatever the loads carried by the elephants, there must be a separate establishment for taking the guns and ammunition into action, for elephants have not been found to go into or stand under fire. In the heavy field batteries of this Presidency, and whenever guns are transported by means of elephants, an establishment of bullocks is maintained for fighting the batteries, and in this case also there must needs be an establishment for the same purpose, and therefore it is not necessary to restrict their loads to what may possibly be carried over the most difficult and impracticable kind of country. The number of rounds per gun will be 150. The ammunition boxes are to be of teak instead of leather because wood is the most durable in a damp climate, where leather imbibes moisture and gets mildewed and rotten.

Advices from India represent that cholera has broken out among 50,000 pilgrims assembled at Poonah for the Juggernaut festival.

The floods in the North of India have subsided. Southern districts are still without rain. The little that has fallen in some sections has done no good.

Servia has sent concluding proposals to Constantinople. It is said the Porte is negotiating with the Khedive for auxiliary troops in case of an emergency.

RIFLE COMPETITION.

To the Editor of the VOLUNTEER REVIEW.

DEAR SIR,—The following is an account of No. 1 Company (P.W.R.) annual rifle match held yesterday at Point St. Charles ranges. I may say that the great drawback to rifle matches is the very meagre allowance of ammunition by Government.

Yours truly,

E. W. Morden, Capt.

OPENING MATCH.

Ranges—200, 500, and 600 yards; five shots at each.

	Points.
1st Prize \$12 Sergt Jones...	36
2nd " 8 " Murphy...	28
3rd " 8 Pvt. Larkin...	28
4th " 3 " Elliott...	20
5th " 3 Corp'l Malin...	19

CONSOLATION.

Ranges—200 and 500 yards; five shots at each.

1st Prize \$5 Pvt. Thom.
2nd " 3 " Stewart.

Montreal, 23rd July, 1874.

The *Castalia*, called the "twin ship," the invention of Capt. W. T. Dickey, late master attendant of the port of Calcutta, has been launched in England. She is 290 ft. long, and consists of two half hulls, divided lengthways, each 17 ft. beam, built 26 ft. apart, and joined by strong girders, which form the framework of a superior structure 133 ft. long and 60 ft. wide, extending to the outside of either hull, and affording ample space for saloons and other accommodations. The engines are of 260 horse power (nominal); one will be placed in each hull, the paddles working in the intermediate space between them. Both ends of the steamer are alike, and fitted with double rudders, thus obviating the necessity of turning in harbor. The main object of Capt. Dickey's invention is to prevent the rolling motion which is the principal cause of sea-sickness.

THE CROPS.—The *Indianapolis Journal* states that the wheat harvest is in great progress in the southern counties of Indiana and the reports in almost every instance indicate the crop to be of more than usual yield and quality. The *Chicago Tribune* has reports from 165 stations in Illinois, thirty-two in Iowa, twenty in Michigan, and two in Indiana, along the lines of the Chicago, Burlington Quincy, Alton, St. Louis, Illinois Central, and Michigan central railroads, giving the latest information as to the state of the crops. From these reports it appears that there will be a large increase in the corn crop over that of 1873. The wheat promises well, and will yield an average crop. Oats will probably fall slightly below the average yield. Other grains are doing well and will afford an average yield.

The *Provinzial Correspondenz*, a semi-official organ, congratulates King Louis on the establishment of the most cordial relations between Bavaria and the other States of the German Empire.

Algerian papers fear trouble with the natives is impending, having heard that 10,000 muskets and 500 cwt. of powder are imported across the Tunisian frontier weekly.

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The Volunteer Review,
AND
MILITARY AND NAVAL GAZETTE.

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

OTTAWA, TUESDAY, JULY 28, 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.

In a recent issue we called the attention of our readers to an article in the *Edinburgh Review* for April, on the "Hydraulics of Great Rivers." We now propose to give such extracts from that article as will enable them to appreciate the magnitude of the water system so elaborately described in M. REYR's memoir; as well as to decide on the claims which that gentleman may have to the honor claimed for him by the *Review*, of throwing a flood of light on what it holds to be an obscure subject. Of the Parana the review says. "Second only to that *regina fluviorum* the Amazon, the Parana and its affluents from the main outfall of a

vast triangular area bounded by the Andes on the West, by the Southern water shed of the basin of the Amazon on the North, and by the Mountain chains and ridges that flank the Atlantic coast of South America on the East. From the Delta of the Amazon to that of the Plata, a range of thirty-five degrees of latitude, the rivers that enter the Atlantic derive their waters from a succession of broken and interrupted versants (the total area of which is but small compared to the great Central district with its numerous ramifications), the unevaporated rainfall of which tends to the estuary of the Plata. The basin of the Amazon, with its embouchure lying on the equator itself attracts a heavier rainfall than that which visits any other portion of the surface of our planet. But its area is inferior to that of the watersheds conveying on the Plata. It is the greater depth of the equatorial rainfall that the superiority of the volume of the Amazon, as compared with that of its Southern sister, must be principally attributed."

The *Review* proceeds to give some description of the regime of the main river and its affluents, from which we learn that "the estuary of the Rio de la Plata is nearly seventy geographical miles wider at Monte Video. Trending from the North West in a distance of 150 miles it narrows irregularly to a width of about thirty miles. At this point the broad, deep channel of the Unogay lying on the Meridian makes a far more imposing show, as far as the map is concerned, than do the two less variable streams, or rather river mouths, by which, under the names of Parana Guazau and the Parana de las Palmas, the mighty central flood stealing through its own delta for a distance of sixty miles enters the common firth."

The Uruguay, however, appears to be a colossal torrent. It is lowest in December. At 200 miles above its mouth it passes through a natural canal known as "the Corralito." At this point it is 145 feet wide, has a current of six feet deep, flowing at the rate of five miles per hour. High water occurs in September and October, and it attains an elevation of forty five to fifty feet above low water.

Vessels drawing fifteen feet of water can ascend the Parana to the town of Rosario, about 350 miles above the junction of the La Plata with the Atlantic. The section of the river thirteen miles below the town show a width of 4787 feet at low water, the depth gradually increases to seventy-two feet at a distance of 1,100ft. from the right bank; thence it rapidly shallows to about twelve feet and rises gradually to the foot of a vertical cliff forming the right bank of the river. The flood rise is ordinarily twelve feet, and the area of cross section is 243,000 square feet, the low water 184,858; at times of exceptional rise the depth of high water has been increased to twenty-four feet over low water.

The *Review* now claims for M. REYR the discovery of what it is pleased to call "a new aspect of the great hydraulic law of the proportion of current to depth," and "that this rate is at all events approximately represented in this instance by the ratio of the squares of the depth." Further on he says, "We labor under the disadvantage that the most important discovery made by M. REYR in the pursuit of his very elaborate survey, that of the law of the relation of depths and currents, was arrived at late in the course of his observations. The observations are sufficient to show the inaccuracy of the ordinary mode of calculation, and thus to prevent us from attempting to gauge the flow of a river by taking any per centage of the surface velocity as the mean velocity of the stream. Unfortunately, however, they are not accompanied by those measurements of the bottom current which their very experience shows to be so needful. It is therefore only approximately that we can estimate from the details before us the low water flow of the Parana at six hundred times that of the Uruguay."

It is very evident from the above that the survey of the Parana was the first river on which M. REYR's talents were exercised because, in the first place, there has been a well known rule deduced from careful experiments and confirmed by all authorities on hydraulics, by which having the *observed superficial velocity of a stream the bottom velocity can be calculated and the mean velocity deduced*. As we presume from this that all the velocities given are merely superficial, we shall show in the second place that if the velocity per mile of the Parana had been stated, as it has been in the case of the Uruguay, no difficulty could have been experienced in getting at the exact comparison of the volume of both rivers. At the Corralito, the latter river is said to be 145 feet wider, 6 feet deep, flowing at the rate of five miles per hour, or 440 feet per minute. Then the bottom velocity must be 396 feet per minute, the mean velocity 418 feet, and the discharge through the Corralito 383 660 (three hundred and eighty three thousand six hundred and sixty) cubic feet per minute. Six hundred times that amount would give for the Parana 230,196,000 (two hundred and thirty million one hundred and ninety six thousand) cubic feet per minute, and taking its sectional area at 184,858 superficial feet its mean velocity must be over 1245 per minute, or more than fourteen miles per hour. Astounding as those results appear they are nothing in comparison to the following: "We have before seen that the volume of the Uruguay in its ordinary annual flood is more than five fold its summer volume. But the increase of velocity according to M. REYR's measurements will be in a ratio of more than 70 to 1. The movement of water line indicated is appreciably greater than that of the ordinary flow of the Parana." Uruguay has an ordinary velocity at the

Corralito of five miles per hour, its velocity at Hood is therefore 350 miles per hour—that is if velocity means the rate at which water flows in a river.

At this rate the Uruguay may well be called a great torrent as it flows at the rate of 30,800 feet per minute, whereas water rushing over the Niagara Falls attain a rate of only 3,000 feet per minute. Certainly South America is a land of wonders. One more extract and we have done with the descriptive part of what is quite as wonderful a book as the natural phenomena it describes: "The first great affluent of the Parana above its confluence with the Paraguay is the Y-Guazu, a great river of the first order which falls into the former in latitude 25 degrees

0 minutes South. Nearly 400 miles further North the Rio Pardo, another great river is an affluent, and beyond little is accurately known. We must take leave of this noble stream by a reference to the falls of Guaira, about 700 miles above Corrientes, which are of a character calculated to inspire even the Spanish American visitant with wonder and with awe. The width of the Parana above the falls is about 4,500 yards. This great width is suddenly contracted into a narrow channel of from seventy to eighty yards, bounded by vertical walls of granite, against which the current breaks with indescribable fury. There is no vertical fall (as at Niagara), but a descent of about fifty feet, down which the river rushes on a plane inclined from fifty degrees to the horizon. The concussion of the water against these walls and against rocks which project in the middle of channel form volumes of vapor which can be seen for many leagues, and on which according to the position of the sun and of the spectator, numerous rainbows become visible. A continuous rain from the condensation of the up borne spray falls in the neighborhood. The thunder of the cataract is heard at a distance of thirty miles. At three miles distant it is difficult to hear the human voice. Nearer to the fall it is impossible to distinguish any sound except that caused by terrific concussion of the waves. The earth trembles, and the vicinity is desolated by the terror of the scene. Settlements in the neighborhood having been abandoned in consequence of the deafness that was occasioned in the whole population by the constant thunder of the river."

We copy today an article from the *Volunteer News* (English) of 10th June, entitled "Our Recruiting Makeshift Fallacies"—in which the whole question of Army Organization is ably handled, as well in its political, economical, as its social aspects. Our contemporary tells his countrymen a few salutary truths, that all the Pharasaical cant or political economical humbug the world has yet seen cannot alter, and it will be well for the future not only of Great Britain but of her great dependencies that her people will awake from slumbering in the fools par-

adise to which they have been lured by Peace Societies and their cognate humbugs.

In only one essential particular does the picture drawn suit us, it is that we do not pay the soldier the full value of his service; but as our military force is not absolutely abstracted from the labour market, this error, for it is nothing else, will be eliminated from what is otherwise a complete organization, in conception at least. The whole article however is one which should be studied with the attention its importance deserves.

His Majesty the CZAR and His Majesty the KAISER have each a "manifest destiny," founded on a traditional policy, to work out—in the furtherance thereof they are not particular as to the means, provided the end is accomplished. An "International Congress" has been called at Brussels by some of those goody-goodies whose absurd and mischievous interference with political developments they could not possibly understand, has been productive of such mischief already; and for Great Britain at least, promises to be so disastrous in the future. Their plan on the present occasion is the sentimental cry of humanity; but it has leaked out that the CZAR and KAISER are the real projectors of the movement, and are using their tools in order to neutralize any advantage England might derive from her wealth and mechanical power in the coming contest, for which both parties are prepared; and the English Premier declares to be nearer than is anticipated.

The ostensible object is to prevent the use of explosive projectiles in small arms; but in reality it is to tie the hands of the greatest manufacturing power in the world, while those amiable monarchs and their slaves parcel it out as they think fit.

It appears by recent discussion in the Imperial Parliament that the little game is understood, and no concession of the kind will be made.

The *Borsenzeitung* says it is feared in military circles at Berlin that the forthcoming International Congress at Brussels, England will not be disposed to make any important concession as to the use of explosive projectiles in time of war. It has been ascertained that, in 1863, when a similar meeting was held at St. Petersburg, the English Government instructed its representative to be very careful in avoiding any measure which would be calculated to hinder the improvement of weapons used in warfare, adding that England cannot forego the advantages it has hitherto derived from her superior mechanical skill and inventive spirit in this respect. At the same time reference was made to a statistical report prepared in the French War Department, from which it appeared that the losses of armies in battle since the introduction of arms of precision and long range guns have been relatively much less than when the old-fashioned artillery and muskets were in use. In the battle of Friedland, for instance, the losses of the French were fourteen per cent., and of the Russians thirty per cent. of their respective troops; at Wagram, the French

lost thirteen per cent., and the Austrians fourteen per cent.; at Moskova, the French thirty three per cent., and the Russians forty-four per cent.; and at Waterloo, the French thirty-six per cent., and the Allies thirty per cent. Forty years later, when the new arms had been introduced, the loss of the French and Austrians was seven per cent. each only; while at Solferino, the losses of the French and Sardinians were ten per cent., and of the Austrians eight per cent."

The following valuable article on the subject of the advantages of military drill is taken from the *United States Army and Navy Journal* of the 4th July. It deserves careful consideration, and as a rule a measure of drill should be adopted in all public school as a part of the gymnastic exercises necessary for the proper training of children.

"The subject of military drill in colleges is up at present for discussion, the newly awakened attention being caused mainly by the recent revolt at Bowdoin. In view of this fact the report of a select committee, which consisted of the Hon. Alexander H. Rice, John Cummings, and Edward Atkinson, has just made a report, earnestly recommending the continuance of the system of infantry drill, but saying that the artillery and cavalry practice, however desirable in an institution thoroughly military, and necessary to the professional soldier, are not compatible with the appointments of the institution, nor consistent with its purposes and objects. The report says:

"In the opinion of your committee, the value of military instruction and discipline is by no means to be estimated alone by their possible relations to a state of war, when the citizen is transferred into the soldier. Such instruction has great and peculiar value as an educational and disciplinary agency, and as a sanitary exercise of the highest type. It cultivates habits of neatness, order, precision, quickness of thought, and action, and absolute obedience with those must first learn who are afterwards fit to command. It inspires a manly and chivalric spirit, gives ease of carriage and movement, develops muscular energy and endurance, and stimulates the intellectual powers by kindling all the vital forces into healthy activity. If, therefore, education be interpreted as a process of developing the intellectual faculties, as well as a mode of receiving and classifying knowledge, it is believed that military tactics compare most favorably as a branch of study with certain other studies which especially engender habits of concentration and persistent application. Military practice is certainly superior to either in the particular that it blends recreation with acquisition. If we mistake not, the course of study in the national military academies are as difficult of accomplishment as are those in the average of American colleges, and yet they completed in as many months as the college courses, notwithstanding students in the former are subjected to frequent and protracted military exercises daily. And testimony is abundant to prove that the time employed in the military drill is more than accounted for in the increased mental activity and energy which it produces. In a letter to the chairman of this committee, Rear Admiral Worden, Superintendent of the United States Naval Academy, says

"The average time assigned to the drill of each student during the academic year (eight months) is seven hours per week. This includes the time occupied by all seamanship, great guns, field artillery, boat howitzers, infantry, fencing and boxing exercises and dress parades. Besides these exercises, those members of the Fourth Class, who enter in June, are practised in gymnastics during the summer months, three hours every week, and in swimming every morning. The third class has instruction in gymnastics about three hours per month; and all the classes are invited and encouraged to use the gymnasium for exercise during recreation hours. The average time assigned to drill in infantry tactics does not exceed two hours per week throughout the academic year. . . . As to the amount of drill which can be profitably employed in such a school as the Massachusetts Institute of Technology, for the purposes of exercise, discipline &c., I am of opinion that one hour per day could be so appropriated with great advantage to the physical culture and mental development of the students. . . . I have always been strongly impressed with the necessity of bodily culture as the true complement of mental development; and I know of no readier and more congenial method of obtaining a good result than the practice of military exercises, in the full meaning of that term. For in that sense what is called military training—a kind of training which is but a small part of a military education, and which ought to be common and not peculiar to soldiers and sailors—is to be valued not only in a muscular point of view, but as generating habits of just subordination, of manly self-control, and of neatness and good order in person and personal property."

"Admiral Worden also refers in his valuable letter to an elaborate article on "Physical and Military Exercise in Public Schools—a National Necessity," contributed by Gen. Edward L. Mollineux of New York, to Barnard's "Military Systems of Education," first published in 1862, and revised in 1872. In this article we find the following suggestions:

"The influence of health upon the faculties of the mind is acknowledged by all, and yet how few in this country devote attention to those important exercises which are necessary to the preservation of health, and without which intellectual power cannot be applied to its highest use. The talents, the experience of our best educators of youth are taxed to devise exercise to develop the mental faculties, forgetting that too close application to study is detrimental to the growth of the body. . . . What, then, is the most simple, feasible, and useful plan to adopt for physical exercise in our colleges, normal, and public schools? We unhesitatingly reply that the only successful, orderly, and systematic method is to engraft them upon the course of studies during school hours, and to carry it out under strict military discipline; the exercise being such as are best suited to the ages, strength and capabilities of the pupils, namely, calisthenics and walking for the girls and younger children, and military exercises for the elder boys."

High English authority is cited in support not only of the practice of infantry tactics in schools, but even of cavalry drill for the middle and higher grades. The Vice Chancellor of Oxford testifies that the institution of the systematized exercise of the volunteer drill in the mental labors, and of the whole of the order and discipline, as well as of the health of the university. Hon.

Joseph White, the present experienced Secretary of the Massachusetts Board of Education, and also a member, on the part of the Commonwealth, of the corporation of this institute, says:

"Let the drill be regular and compulsory, taking the place of the very irregular and insufficient physical exercises now taken, and our colleges would be vastly improved in their educational power, and the Commonwealth would, in a short time, have a numerous body of educated men, well skilled in military science and art, who will become teachers in our lower grades of schools, and in our military companies and associations, and competent when the alarm is sounded, to lead our citizen soldiers to the field."

The following official report is the embodiment of the opinions of the United States "Board of Engineers for Fortifications" on the official report of the Board of Officers appointed by S. G. O. No. 108, H. C. O., May 21, 1873, a Gatling Guns of large calibre for flank defences," which has appeared in former issues. This last is copied from United States Army and Navy Journal of the 4th July.

OFFICE BOARD OF ENGINEERS FOR FORTIFICATIONS, ARMY BUILDING, NEW YORK }
Feb. 3, 1874.

GENERAL:

The Board of Engineers for Fortifications having examined the report referred to them by your endorsement of January 23, 1874, of a special Board of officers upon the introduction of the Gatling gun for flank defence in fortification, have the honor to submit the following views thereon. The experiment firings with the Gatling gun compared with those of the 8inch howitzer and 24pounder Napoleon are clearly set forth and fully discussed by the officers conducting these firings, and this board concur generally in their deductions and conclusions. While a good flank defence of most of our forts may not require the introduction of the Gatling gun, its use as an auxiliary in special cases may be desirable.

The fire of canister, 440 bullets at once, has the effect of a volley, and the first discharge may completely break an assaulting column. This volley effect of the howitzer is in part made up by the continuity of fire of the Gatling, and the combination of the two, the latter filling up the intervals between the volleys, would seem to be superior to either singly, unless the howitzers gives a rapidity of fire approaching continuity.

The Gatling requires fewer gunners for its service, and there are some small works where the garrisons may be quite limited on the breaking out of war necessitating the economy of men in the service of the pieces. These guns on the ramparts in such works, would supply the place of a large number of soldiers. In many of our works the strength is so abundant, and either system of flank defence will doubtless be sufficient. Before determining to what extent the Gatling may be introduced as an auxiliary it will be necessary to take up our permanent work *seriatim* and discuss the probabilities and nature of the attack, and decide therefrom if any change in the flank guns will be required. From their position and strength many forts will need no change. In the more exposed works, especially in the cases noted by the

board, the Gatling will doubtless aid flank defence.

2d. This board give it as their opinion that a number of Gatling guns may be effectually used on the parapet of works, as being more accurate in their fire at a distance upon reconnoitring parties, both by land and water than field artillery, or pieces in position, or even musketry, and they can be served with less exposure. Many of the barbette-batteries that have been recommended by this board are isolated and unsupported by permanent works. Some small keeps will probably be built to protect them. The Gatling gun will be found efficient in these keeps to clear the advanced batteries if attacked by boat or store parties with a view to spiking the guns, and will sweep the approaches to such batteries. Further, the Gatling gun will prove very serviceable in firing into the embrasures of ironclad ships that approach within 1,000 or 1,200 yards of a fort. For these various purposes it will be perceived that each fort may use judiciously a number of Gatling guns, and their utility may be further developed when once introduced into service. The study of each fortified position should be made before determining, even in a general manner, the number of such guns needed.

Though concurring generally in the deductions of the special board as to the utility of the Gatling gun in many positions, a thorough discussion of our forts may show, as before stated, that only a limited portion of them will need the auxiliary assistance of the Gatling gun for an efficient flank defence. Its efficiency in field works, not only for flank but for direct fire, seems unquestionable.

The report of the board on Gatling guns, with letter of transmittal, are herewith returned, (in separate package, by mail).

Respectfully submitted.

J. G. BANARD,
Col. of Eng and Bvt. Major Gen.
Z. B. TOWER,
Lt. Col. of Eng and Bvt. Major Gen.
H. G. WRIGHT,
Lt. Col. of Eng and Bvt. Major Gen.
Brig. Gen. A. A. HUMPHREYS,
Chief of Engineers, U. S. A., Wash-
ington, D. C.

The Prefect of Cuenca announces that thirty-four bodies of Republicans, murdered by the Carist, have been found in a house in that town, mutilated so horribly, as to be unrecognisable.

The *Epaca* says that Don Carlos invited Cabreera to accept a position in his army, and that Cabreera replied that he would never make common cause with cannibals and fanatics.

The *Imparcial* says that Senor Camacho, Minister of Finance, has informed the Council of Ministers that he has sufficient funds on hand to arm 125,000 reserves, and to meet the ordinary requirements of the State until next September.

The Imperial Parliament has voted a yearly pension of \$757,000 to Prince Leopold, youngest son of Her Majesty.

The *Times* correspondent telegraphs from Paris, that the Marquis of Castellara will move for the prorogation of the Assembly to day, and that the motion will probably be carried, as the Government will accept it.

A special despatch from Berlin to the *Times* says, the Prussian Government have sent eight detectives to Kissengen to protect Bismarck.

CORRESPONDENCE.

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

To the Editor of the VOLUNTEER REVIEW.

Sir,—The marksmen of New Brunswick desire to know how the "Wimbledon Team" were selected this year. It appears that Ontario and Quebec have represented the whole Dominion, and New Brunswick and Nova Scotia have been ignored. Take the average shooting of the Teams that have gone Wimbledon and you will find New Brunswick far ahead of any other Province. When the marksmen were elected by competitive shooting, New Brunswick always placed four on the Team. Our marksmen were practicing all spring in anticipation of a match, and have been greatly disappointed by the way they were treated.

MARKSMAN.

Mount Fordham, July 15th, 1874.

In reference to the above we have only to say that, the Secretary of the Dominion of Canada Rifle Association, Lieut. Col. STUART, sent to the President of each Provincial Rifle Association throughout the Dominion a Circular, embodying the Resolutions passed at the last annual meeting, which we here transcribe:—

RESOLUTION No. 1.—That the Presidents of the Provincial Rifle Associations be requested to send in each, a list of names to the Secretary of the Dominion Rifle Association, from which the selection of 20 marksmen to represent the Dominion Rifle Association at Wimbledon, next July, is to be made. The list to be sent in not later than the 24th day of May next, to contain the names, distances, dates, and places of matches, with scores made in 1873; also rank, occupation, and status of each competitor, and his assent to go to Wimbledon if selected. The list to be signed by the Secretary of each Provincial Association, and countersigned by the President. Said list to contain not more than 18 names from each Province.

RESOLUTION No. 2.—That for the present year one member for the Wimbledon Team shall be selected from British Columbia, and one from Manitoba, and only eighteen from the remaining Provinces. The selection from British Columbia and Manitoba to be made upon the recommendation of the Provincial Associations of these Provinces.

RESOLUTION No. 3 FOR SELECTION OF WIMBLEDON TEAM NEXT YEAR.—Unanimously Resolved, that the Presidents of the Provincial Rifle Associations be requested to arrange for a competition match of three days, for the selection of marksmen from whom the twenty to be sent to Wimbledon are to be chosen, and that the Secretary of each Provincial Rifle Association sends to the Secretary of the Dominion Rifle Association at Ottawa, the names of eighteen competitors with their scores made at Wimbledon ranges and targets, seven shots without sighting shots, each day, at each range. The list to be accompanied by a Certificate from the President of the Provincial Rifle Association, and to contain in addition to the names and scores, the date of meeting, rank, occupation and status of each, with the assent of each competitor, that if selected he will be ready to go on the date to be named.

The List to be sent to the Secretary of the Dominion Rifle Association not later than the 31st December.

In accordance with Resolution No. 1 the President of the New Brunswick Rifle Association was requested to send in to the Secretary, by the 24th of May last, the names of eighteen of the best shots in New Brunswick but only ten names were returned and out of these two only were found eligible, namely, Captain ARNOLD and Corporal PALLAN.

OUR RECRUITING MAKESHIFTS—FALLACIES.

The absolute failure to maintain the regular army from the want of recruits, notwithstanding the repeated attempts of the War Office to deny or gloss it over, is again forcing itself upon our military authorities and on parliament. The enormous increase which has taken place in the standing armies of Europe within the last fifteen years, renders it necessary that, along with our spinning and mining, we should provide some of our population to keep watch and ward, while others build up the national fortunes. It is unwise, and far from economical, to fold our arms and sneer at the "trade of war." As well discarded our policemen, and throw our most sacred treasures open, without bolt or bar, to the tender mercies of the scoundrel and the plunderer. Nations have ever risen to eminence and maintained their position in proportion to the power and courage they had to win and protect their conquests, whether in the stricken field of war or industry. The world has not changed a whit in character through all the ages of blood and battle and the cycles of commercial activity that have dawned and passed away among the nations. The sling and stone may have given way to the bow and arrow, and these again may have become playthings in the presence of modern rifles and 80 ton guns, but the spirit that directs the necessity for such alternatives has only become intensified and enlarged by the advancement of science and the progress of mankind in material comforts. We fear—in fact, we may as well say, we know—that our military impotency, so far as it exists, is due to a set of puling humanitarians, who, for upwards of a generation, have swarmed among us, and who dreamed dreams of ease and comfort without struggle, and wealth without the conquest of hard labour, and all to be maintained and enjoyed without the fear of deprivation, or put in jeopardy by the greedy eye of covetousness. War was to cease—but, strange to say, as to the army was left despised, hated, and neglected by these goody goodists, they burdened the people with hosts of constables, as if they had discovered that the evil spirit of nations had taken refuge among the civic body politic. Mechanics' institutions were to reform the world, and the abstruseness of newspaper studies was to usher in the millennium. The arts of production were elevated as emanating from the divine standard, and the science of making money was held to be the first and all-absorbing worship fit for the deity. Of course almsgiving was enjoined in the way of taxes, and poor rates as the sublimest piety, while the great end of man—and eke of women too—was to vote for members of parliament. The world rolled on, and the earth-quake of war rumbled in far-off regions, and the dream grew into a nightmare of trades' unions and miners' strikes, and the servant pitted against master, and masters howling at the ingratitude of servants. The noble spirit of self sacrifice—or performance of duty even at risk and loss—which had animated preceding generations, produced those heroic and chivalric deeds which glorify the history of our race, was laughed to scorn as weakness, and banished from among us as the unprofitable work of fools. No wonder that men would not serve their country but for a bribe; but it

has actually taken more than one generation to emasculate our people, for even yet there is among us a martial and energetic spirit which only requires to be let loose in the proper direction to save all still. It is not, however, to be expected that our youth, after such teachings, will enter the list of our national defenders for thirteenthence a day, when a collier's boy may drink champagne, and defy the wishes of the nation for warmth and heat. The makers of personal wealth should not forget that, while they increase their own store, those who labour with and for them have a fair right to a due share; and if that claim is not satisfied, it will be demanded by strikes and other social and industrial dislocations. The immediate workman has managed to make himself heard and our soldiers can only do so by ceasing to be—but the pressure of the scarcity of military labour can only be felt when our regiments cease to be maintained, and young men turn away, in the spirit of the age, to more profitable sources of employment. Our enlistment system is radically defective, take it as you may and it may now be a very difficult thing to keep up a sufficient military force for the emergencies of war under the old system. We hold that, whether the army is supplied by compulsory service or by our present nondescript plan of enlistment, it matters little in the end to the nation at large in a monetary point of view. One hundred thousand men's labour in the army is abstracted from the ranks of industry, whether by enforcement or enlistment, and the value of that labour is exactly the same, by whatever means it is acquired; so that all the raving about the loss to industry and so forth is only the purest bomb. We firmly believe that we are approaching a new era of military service in this country, apart from that of our present system. The question has been moving Parliament, and Lord Sandhurst, on Monday week, referred to the falling off in the obtaining of proper recruits, and moved for the returns on the subject, which were granted. The sages of the Military Departments have turned eager looks to the Militia to help them out of their difficulty, and even have tried to mesmerise them into the Army by various incantations. All, however, will not do; and the only result has been to increase the evil, by actually placing the Militia service in the recruiting field as an opposition to the Army. Make the Militia what it constitutionally at the moment is—a service of the people and from the people—retain the Volunteer force on its present constitutional basis, and the Militia will become what our military statesmen have failed otherwise to make it—a freeder to the Army, and that too of a better class than they now obtain, while the expense to the nation, either in coin or the withdrawal of men from industry, will not be one whit increased. A more manly and courageous spirit will be developed among our whole population; and by a wholesome acquaintance with military discipline and system in their youth, our population will become as loyal, and true, and patriotic, as ever was exemplified by this or any other nation of modern or of ancient times. We have again and again referred to this question of recruiting, and the persistence of the military authorities in jumping from plan to plan, and regulation to regulation, to fill the ranks of the Army with men or boys, has ever been to us a proof that every attempt to temporise with a question of such moment will only lead to graver aspects.—*The Volunteer News*, June 10th.

THE RUBY AND THE ROSE.

He was the lord of Merlinton tower,
And I was but of low degree;
She had her beauty for her dower,
Nor other treasure needed she;
He came, when hawk-horns were a-flower,
And strove to steal my love from me.

Oh! she was sweeter than the wind
That bloweth o'er Indian isles;
As April bright, than June more kind,
Fawn-wild, and full of winsome wiles.
And I, alas, had learned to find
My only life beneath her smiles.

He sent my love a ruby rare,
That might have graced imperial brows.
Nogorn and I. To deck her hair
I sent her—but a simple rose
And prayed her, on a night to wear
The gift of him whose love she chose.

"Come, queen of all my heart's desire!
Crown me or slay! My soul is stirred
To challenge fate. My pulses fire
Of fear's chill tremour. Slings the bird
Of hope for him who dares aspire?"
A lover's scroll, and wild of word.

We watched her coming, he and I,
With utter dread my heart stood still.
The moon's wan oresent waned on high,
The nightingale had sung his fill,
In the dim distance seemed to die
To echo of his latest thrill.

The flower-trailed gate, our trust of old,
Gleamed dully white beneath the clustering bloom
Of the dusk-starring jasmine. Cold
His shadow fell, a ghastly gloom
Lurked where it lay. "Oh heart o'er bold!
Hast thou but hastened utter doom?"

As still cold smile slept on his face,
That all my hope to anguish froze
Then, in the silence of the place,
We heard her flower-pied porch unclose,
And—in her hair's silk-soft embrace,
There nestled warm a ripe-red rose!

All the Year Round.

ARMY ORGANIZATION.

(By General George B. McClellan.)

(Continued from page 317.)

In the German service the composition of a company of infantry is as follows:

	Peace Footing.	War Footing.
Captain.....	1	1
First Lieutenant.....	1	1
Second Lieutenant.....	1	1
Feldwebel (orderly Sergeant).....	1	1
Porte-epée Fabrich (non-commissioned officer in the line of promotion to 2nd lieutenant).....	1	1
Sergeants.....	4	4
Under-Officers (corporals).....	14	14
Musicians.....	4	4
Lance-Corporals & re-enlisted men.....	12	24
Hospital Steward.....	1	1
Artificers.....	3	3
Privates.....	93	202
Aggregate, including com'ed off'rs.....	136	
Total, not including com'ed officers.....	132	

The organization of a company of infantry in the French army does not differ materially from that of the United States service, except that there are eight corporals, and that the privates are divided into two classes.

The company of English infantry is substantially like our own.

On the war footing the company of infantry in the United States service generally consists of one captain, one first and one second lieutenant, six sergeants, four corporals, two musicians, one wagoner, and about eighty five privates; but we have no fixed organization, as every thing depends upon the caprice of each Congress, and nothing with regard to our army can be regarded as fixed and stable.

In another connection will be explained the interior arrangements of the company for the purposes of discipline and administration, as well as the systems of tactics applied to the large and small companies respectively.

The Battalion.—As already stated, this is the next higher tactical unit to the company, and is made up of from four to ten companies. The average war strength of a battalion is about 1000 men, although it is in some cases as low as 600. In the German army the battalion consists of four companies of about 250 each; in the Russian, of five companies of 180 each, making the strength of the battalion 900 men; in the Italian army, of four companies of 150 each; in the Austrian army, of 930 men, in four companies; with the French, eight companies for the infantry of the line, and ten for the battalions of chasseurs; with the English, and in our own army, of ten companies each. In regiments consisting of more than one battalion, each is commanded by a field officer of lower rank than a colonel, i.e., sometimes by a lieutenant colonel, generally by a major, and in the French service by a "chief of battalion." There is always attached to the battalion commander a staff officer, designated as battalion adjutant, who is usually a lieutenant, but in the French army a captain. As will hereafter be explained, it is the especial duty of the adjutant to keep the records, make the various details for duty, and transmit the orders of his chief. In the German army one or more supernumerary officers (captains or lieutenants) are some times attached to the battalion staff, and there is also a paymaster, two or three surgeons, and an armorer.

In all services there is a battalion sergeant major, who is the assistant of the adjutant, and generally a chief of the battalion field music.

Subject to the conditions already mentioned when treating of the strength of the company, it is quite certain that, for all the purposes of discipline and of service in campaigns, the battalion of four strong companies is far preferable to that made up of eight or ten weak companies. The battalion commander has only four subordinates to whom it is necessary to give direct orders, and explain his wishes and intentions, so that there is far less danger of misunderstanding and confusion; and it is so much easier for him to exercise the proper supervision that the battalion is much more easily handled, and becomes far more effective. With this organization the battalion resolves itself readily into the natural division of one company as the advance, two as the main body, and one as the reserve.

In most European services the so-called rifles, or foot chasseurs, have no higher organization than that of the battalion. Now that all the infantry are armed with rifled weapons, the denomination of "rifles" has ceased to be distinctive. These troops now consist of men selected for their activity, intelligence, and skill as marksmen, and are employed in preference for the work of skirmishing, and any service requiring peculiar endurance, activity, and marksmanship. But as rifled breech loaders are now in general use by all the infantry, and as the tendency of the times is to instruct them in all target practice and gymnastic exercises, and to employ a loose or skirmishing order of formation very extensively, the distinctive rifle battalions are no longer so important as formerly, and it is not unreasonable to suppose that their number

will be decreased, and that in many services they may disappear entirely. In armies, however, where the mass of the infantry are lacking in intelligence and education, and in the qualities which are needed to form good light troops, there will still be a demand for battalions of picked riflemen. The rifle companies are in some services a little stronger than those of the line, and in that case have a few more non-commissioned officers. In the French army the rifle battalions have ten companies instead of eight; in the German army they have four companies.

While on this subject it may be said that the progress of the present is toward simplification in all parts of an army. The numerous subdivisions of infantry into guards, grenadiers, fusiliers, musketeers, voltigeurs, light infantry, rifles, etc., are rapidly disappearing, although in many cases the names are still preserved, without involving any essential difference in organization, arms, or equipment. The Prussian Guards, for example, are still composed of picked men, and have a stronger peace organization than the rest of the army, but their arms, etc., do not differ from those of the other infantry regiments. The distinction of regiments as grenadiers, fusiliers, and musketeers in the German army is simply nominal. The value of a corps d'élite, with picked men and glorious traditions, will always be felt in battle, but it must never be forgotten that these magnificent corps, such as the old Imperial Guard of the First Empire, have too often been formed at the expense of fatal injury to the other corps, by depriving them of their best soldiers, so that, in the opinion of many competent judges, such organizations are productive of far more harm than benefit. In the present state of the military science, and with the modern weapons, it seems undeniable that corps d'élite are objectionable, and that the wisest course is to elevate the condition of the army in general by a better education and more thorough military instruction. It is probable that in the not distant future the infantry in all armies will be composed of regiments precisely alike in organization, equipment, armament, and instruction.

The Regiment.—This is composed of from one to six battalions. In the United States service the regiment has but one battalion; in the English army, up to a comparatively recent period, the majority of the regiments had but one battalion, but at the present time a large number, and perhaps all, of the regiments have two battalions; in the German army the regiment consists of three battalions; in France certain regiments of the Guard had four battalions, while the regiments of the line had three; in Austria the regiments have four field battalions in peace, and five in war; in Italy the regiments consist of four battalions. The regiment is always commanded by a colonel, assisted by a lieutenant colonel, and sometimes, as in France, by a major also; he has also a regimental adjutant, paymaster, surgeon, and a suitable number of non-commissioned officers, mechanics, etc. The experience of Continental armies has very clearly proved the great advantages of regiments composed of about three battalions, both as respects service in the field and the ordinary duties in peace. A regiment of three thousand men, organized in three battalions, is readily handled by the colonel in battle, and forms a powerful unit, capable of accomplishing important work and producing decisive results. It is, of course, to be understood that the command of such a regiment as this demands the possession of

high qualities and thorough knowledge of his work on the part of the colonel. If this fact should be advanced as a reason against the adoption of such an organization, it might be said in reply that an army that could not provide such colonels does not deserve the name of an army, and the sooner it is disbanded the better. The data already given will enable the reader to satisfy himself of the fact that the German organization is by far the most economical in regard to number of officers and noncommissioned officers; but, at the risk of repetition, it must again be stated that the German system involves the necessity of having highly instructed officers and intelligent and thoroughly disciplined private soldiers.

The Brigade.—This unit is composed of two or more regiments, depending upon the strength of the latter. In the German army it consists of two regiments, or six battalions. In the other Continental services also it consists of two regiments. In the English service and our own there is no invariable rule for the organization of the brigade, which usually consists of four or more regiments. This very important unit is commanded by a general officer who is provided with one or more aides-de-camp, an adjutant general, quartermaster, etc.

Before passing to the division organization, which involves in its composition other arms than the infantry, it is advisable to explain briefly the chief points of difference between the organization of the infantry and that of the other arms of service.

(To be Continued)

OUR FISHERIES.

The report of the Department of Marine and Fisheries, which has just been issued, is a book of 770 pages, full of the most valuable information in regard to the important subjects of which it treats. There is no departmental report which we are accustomed to read with more pleasure and profit than that of the Marine and Fisheries, and we are happy to say that the present one is fully equal, and in some respects superior, to any of its predecessors in point of information and interest. The Fisheries branch of the report, although it occupies the second place in it, we shall deal with the first, as being more within the grasp of a single article than that which relates to the Marine branch. It is very gratifying to note that our fisheries are steadily increasing in value and importance year by year. The harvest which we glean from the sea annually grows larger, and it grows larger, too, without detriment or injury to the fishing grounds themselves. Our river fisheries, by means of careful preservation, are also growing more valuable and profitable.

During the year 1873 the fish products of the Dominion, of which the department received statistics, amounted to \$11,794,975. This included the Province of Nova Scotia, New Brunswick, Quebec, Ontario, and Prince Edward Island, but did not include the catch of Manitoba, the North West territories and British Columbia. Of this amount \$10,722,725 represented the value of the fish products for foreign export and domestic commerce, exclusive of local consumption. In addition to this it may be stated that it is computed United States fishermen have also caught on the coasts of Canada, during the year from six to eight million dollars. The following table shows the progressive increase in the value of the

fisheries of Canada for the last four years:—

	Years.			
	1870.	1871.	1872.	1873.
Nova Scotia ..	\$1,019,423	6,570,759	6,018,835	5,577,086
N. Brunswick ..	1,131,435	1,578,025	1,965,469	2,285,661
Quebec ..	1,101,551	1,092,012	1,520,189	1,301,661
Ontario ..	231,982	213,177	267,653	293,091
P. E. Island ..				207,605
Totals ..	\$6,577,392	9,455,223	9,570,116	10,754,997

It will be observed that the fish products of Nova Scotia last year were more than 50 per cent. greater than in 1870, and equal to that of the whole Dominion in that year; that the yield of New Brunswick in 1873 was more than double what it was 1870, and increased \$320,000 between 1872 and 1873; that Quebec continues to exhibit a steady increase, and the Dominion as a whole has made gigantic strides in its fishing industries since 1870:—

The descriptions and value of the fish taken in New Brunswick in 1873 as compared with 1872 were as follows:—

	1872.	1873.
Codfish,	\$346,035	\$338,699
Mackerel,	32,728	32,290
Herring,	496,628	376,596
Salmon, pickled,		18,846
" fresh in ice,		214,978
" smoked,	207,767	13,192
" preserved,		280,296
Alowives,		108,514
Cod tongues & sounds		25,235
Pollock,		64,296
Hake,		90,065
Haddock,		15,850
Halibut,		7,644
Shad,		23,168
Bass,		25,462
Trout,	882,301	6,598
Smelts,		41,851
Eels,		32,868
Oysters,		45,480
Lobsters,		346,925
Oil,		37,674
Fish guano,		7,237
Fish for manure,		3,894
	\$1,965,459	\$2,285,661

A great improvement will be noticed in the returns of the Department from an examination of the above table. In previous years only codfish, mackerel, herring and salmon were detailed in the returns, all other fish being grouped together. Now the return of each sort of fish is given separately. It will be seen that while the yield, both of codfish and herring, was smaller 1st year than the year previous, there was an enormous increase in the product of salmon, and it is not a little singular that the increase of the salmon fishery of 1873 over that of 1872, amounting to \$320,000 was precisely the amount of the total increase of all the New Brunswick fisheries for the same period. New Brunswick caught nearly twice as many salmon as all the other provinces combined. The immense product of the lobster fishery, amounting to \$350,000, will, no doubt, surprise many people, who have been unaware of the rapid development of this special branch of the fisheries. The return from smelts, a fish regarded a few years ago as of no commercial value, is likewise remarkable. The return from our oyster beds, though considerable, is small compared with what it ought to be.

Perhaps the most notable feature of the growth of our fishing interests is the large business which has lately sprung up in New Brunswick and Nova Scotia in the canning of lobsters. The lobster catch of 1873 in these two Provinces amounted to \$1,214,749. About 50,000 tons of raw material were used and about 20,000 tons of canned

lobsters exported to the United States markets alone. The attention of the Government has been called to the possibility of this fishery being overdone, and regulations made with reference to it which, it is hoped, will prevent the lobster fisheries of Canada being destroyed, as they have been in the North Eastern States. A good deal of attention has been paid to artificial fish breeding, and the operations at Newcastle, Ontario, last year were very successful. Salmon breeding establishments have been started at Tadousac, Ganpe, Miramichi and Restigouche, with every prospect of success. At the Moisie River, on the north shore of the St. Lawrence, a private undertaking by the lessee of the salmon fishery, has resulted in the reproduction, by artificial means, of a great number of salmon and augmented the yield of the estuary fishings. It is intended, also, to bestow some attention on establishments for the breeding of coarser fish, such as shad, alewives and bass, on an extensive scale, and a fish breeding establishment for the reproduction of white fish is to be started in the Detroit River. The United States are expected to join in this last undertaking. The pains which have been taken by the department to increase the productiveness of the rivers of Canada, and prevent them from being destroyed by illegal fishing, have had the best results, and many rivers which had been absolutely fished out are now frequented by salmon. Valuable as our fisheries are now, there is reason to believe that in a few years they will become infinitely more so, and continue to be, under wise regulation, a source of increasing wealth to the country.—*St. John Telegraph.*

SIoux MASSACRE.—Intelligence has just come to hand of the massacre of four persons by a party of American Sioux on the Pembina river, not far from St. Joe. The victims are a brother and nephew of Pierre Delorme, Esq., member for St. Norbert, and a man named Baptiste Morin and his wife. We have not been able to glean any further particulars of the atrocity, but believe that Col. Yard with a detachment of U. S. troops has gone in pursuit of the murderers. We also understand that Col. French has offered the services of a detachment of Mounted Police, but are not in a position to say whether his offer has been accepted. We trust, however, that the blood thirsty cut-throats may be speedily brought to justice, and that no harbor of refuge may be found for them on our side of the border.—*Manitoba Gazette.*

The *Derjava*, in which the emperor of Russia made the voyage to England, was launched only two years ago, and this was her first voyage of any length. She is entirely Russian built, and cost £450,000, the engines and steam launches being built at the Government ironworks at Colpina. Her designer compared the lines of the *Victoria* and *Albert* to the *L'Aigle* (once the Empress Eugenie's yacht), the *Mahroussa* (the Victory of Egypt's swift and splendid steamer), and the *Standard*, (the Czar's former yacht), and endeavored to combine the good points of these vessels in one hull. The *Derjava*, it is said, steams, well enough, though not very swiftly; she has a somewhat lumbering look, and scarcely seems to sit upon the water with the grace of the *Victoria* and *Albert*, nevertheless, she is a splendid vessel, and is beautifully fitted up with wood carving and stuffs of old Russian style and patterns. She is commanded by Captain Golosatchoff.

THE WIMBLEDON TEAM.

THE VOYAGE—ARRIVAL AT LIVERPOOL—
MATCHES AT ALTCAR.

HIGHTOWN, 2nd July, 1874.

On Saturday, the 20th of June, the Canadian Team mustered on board the *Circassian* at Quebec. Lieut. Col. Macpherson was present on behalf of the Dominion Rifle Association, and, in a brief address, formally handed over the command to Lieut. Col. Gilmor. At 10.20 the steamer moved slowly away from the wharf, the band of B Battery playing "Auld Lang Syne" from the ramparts of the *Catadel* in compliment to Major Montizambert, second in command.

The voyage passed very pleasantly until Monday morning, when we encountered the worst fog Captain Wylie had ever experienced. It lasted without a break for sixteen hundred miles, and from Sunday to Saturday the officers were unable to take an observation. When it commenced we were near Cape Race, on the coast of Newfoundland, and being in the direct track of inward bound vessels, there was great danger of collision with some of them. Until we passed the Banks the whistle sounded every few minutes and the lead was kept constantly going. For four days and nights Captain Wylie never had his boots off and spent almost the entire time on the bridge. Once we passed a vessel so close that the voices of the sailors shouting to each other could be distinctly heard, but she herself was quite invisible. Fortunately no accident occurred, and the only result was a loss of about twenty hours. In every other respect the passage was as pleasant as it possibly could be, and at ten o'clock on Wednesday morning, the Team disembarked at Liverpool.

Immediately on arrival the following challenge was placed in the hands of Col. Gilmor:

"CASTLE ST., LIVERPOOL,
29th June, 1874.

"DEAR SIR,—I am requested by the Shooting Committee of the Liverpool Rifle Brigade to ask for the pleasure of a friendly match with the Canadian Team for Wimbledon under your charge during their stay at Altcar—twenty men a side and at Queen's ranges. I do not know whether a sufficient number of targets could be got of the new Wimbledon pattern, but I shall be at Altcar on Wednesday, and this part of the programme could then be arranged. I propose Friday evening for the match, as I understand that the 1st Lancashire Rifles wish to have a match with the Team on Thursday. I may add that my regiment has had a similar match with each of the previous teams.

"I am, dear sir, yours faithfully,
"WILLIAM COOPER,

"Captain,
"Hon. Sec. Shooting Committee,
"Liverpool Rifle Brigade."

The Team left for Hightown by the 12.35 train, arriving about 12.55. Hightown consists of the railway station and the hotel. The latter is kept by Abraham Thomas, and is as nice a little place as one could desire to stop at. From the bay window of the dining room can be seen a charming piece of English country scenery, with the farm houses, fields of waving grain, cattle, hedges, &c., and the spires and domes of Liverpool in the distance. The landlord and his buxom wife similed a welcome at the door, and soon the Team were told off to

their rooms and engaged in donning their uniform for the first practice, Col. Gilmor and Major Montizambert having gone ahead to the ranges to make the necessary arrangements.

Upon the return of the officers all sat down to a genuine English dinner of roast beef and plum pudding, digestion being aided by a glass of "bitter." Before the first course was removed a messenger was announced as desiring to see Col. Gilmor. On being ushered in, he handed the following challenge:

"BIRKENHEAD, July 1, 1874.

"To the Officers Commanding Team of Canadian Volunteers.

"DEAR SIR,—On behalf of the 1st Battalion Cheshire Rifle Volunteers, who have had the pleasure of shooting a match with their brother Volunteers from Canada for the past three years, I have to ask that if possible you will again meet us at Altcar before going to Wimbledon for a match at Queen's Ranges. If you will arrange with bearer and accept your ammunition from us you will much oblige.

"Yours faithfully,
"WILLIAM LOWE,

"Captain 1st Cheshire R. V."

The matter was taken into consideration by the Whole Team, and it being the unanimous opinion that one day at least was necessary to lose the motion of the ship and get into something like form, and, therefore, no challenges should be accepted for Thursday, the messenger was informed that the Canadians would be happy to shoot the 1st Cheshire at any time on Friday, previous to the match with the Rifle Brigade, or would shoot them at Wimbledon, scores in Queen's prizes to count, or simultaneously with the Rifle Brigade, provided that the latter had no objection. He intimated that he thought the latter proposition would be most acceptable, and left promising to send an answer to day.

By way of making the practices more interesting, matches were made up on board ship. It was found that there, were ten officers and ten s. o. o. and men, ten men over five feet ten and ten under, ten over one hundred and sixty pounds' weight and ten under, ten smokers and ten non smokers, &c., and as the men were looked upon as pretty nearly equal, the results were looked forward to with interest.

The first fire was between the officers and the rest of the Team, and resulted in a victory for the officers by fifty eight points, the score standing 621 to 563. On the winning side the highest scores were made by Mason, Morgan, and Macnachten, who got 78, 77, 74 respectively. For the losers Pallen, Bailho and Disher made 76, 65 63. The next was between the heavy and light weights, and resulted in the heavy fellows winning by 36 points, the best scores for the winners being made by Disher, Macpherson and Sutherland, who got 77, 69, 65, respectively, and for the others, Pain made 61, Gibson 66, Wolfenden 60. In the afternoon the short men beat the tall by nearly the same points, the score standing 639 to 504.

According to the new style of marking a bull's eye counts 5, a centro 4, an inner 3, and an outer 2. The inner is signalled by a black and white disc, the others remain as before. Although a point has been added to the value of the centro and bull's eye they have been reduced so much in size that a score does not run up so rapidly as might be thought, as will be seen by the following comparison:

	200 yards.	
	Old marking.	New marking.
Bull's eye....	8 in. square...	8 in. circle,
Centre.....	2 feet	16
Inner.....	None.....	28
Outer.....	6 ft. by 4 feet.	40

	500 YARDS.	
	Old marking.	New marking.
Bull's eye....	2 ft. square....	22 in. circle.
Centre.....	4	38
Inner.....	None.....	54
Outer.....	6 ft. square. . .	70

The differences will be more perceptible by comparison of areas, which is as follows:

	200 YARDS.	
	Old marking.	New marking.
	ft. in.	ft. in.
Bull's eye	61	Bull's eye.. 50
Centre	4.	Centre.... 1. 57
Inner	Inner.... 4. 39
Outer.....	24.	Outer... 8. 104

	500 YARDS.	
	Old marking.	New marking:
Bull's eye.	4.	Bull's eye. 2. 90
Centre.....	16.	Centre.... 7. 126
Inner.....	..	Inner..... 15. 130
Outer.....	36.	Outer.... 26. 104

From this it will be seen that the centre is not one-half as large as it was before, and that an inner is about as good as a centre was, while the whole target has been reduced about two-thirds at 200 yards, and one-third at 500 yards.

The targets here are of the old kind, with the new rings painted on them. At Wimbledon they will be canvas covered with paper.

It is felt by the Team that too short a time is allowed for practice at Altcar. After so long a sea voyage and want of proper exercise it requires a few days to get into their old form, and it is a matter worthy of being considered by the Council of the Dominion Rifle Association whether future teams should not be sent a steamer earlier than has been customary. The men would have time to recover themselves, and a few friendly matches with the battalions in this neighbourhood would put them on their mettle and send them up to Wimbledon in the best of trim.

I have just heard that the match with the Rifle Battalion and the 1st Cheshire has been satisfactorily arranged for tomorrow afternoon. I will give full particulars in my next.—*Toronto Mail*.

Madrid, 22nd.—General Z. G. G. has sent eight battalions of troops to reinforce the Republicans in the Province of Cuencá. The Carlists are in strong force in the province of Aloria, between Miranda and Vittoria.

Brig. General Pinta has defeated a detachment of Don Alfonso's army at Salván, etc., in the province of Cuencá, delivering 700 of the prisoners taken by the Carlists at Cuencá, and capturing eight officers of Alfonso's staff, with a considerable quantity of arms and baggage. The Carlist loss of killed, wounded and prisoners, was heavy.