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# The Volunteer Review

## AND MILITARY AND NAVAL GAZETTE.

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

VOL. VII.

OTTAWA, (CANADA,) TUESDAY, JUNE 10, 1873.

No 23.

### NEWS OF THE WEEK.

Our English advices of the past will contain very little interesting matter.

Mr. Bradlaugh recently arrested by the Carlists have been released.

The explosion on 31st left in the colliery near Wigan, caused the instant death of six minners, and the destruction of much property.

It is reported that the ex-Empress Eugenie is in Paris, and has been there two days.

The *London Times* urges the immigration of the Chinese to east Africa as a means of bringing about the abolishing of the slave trade.

The *Pall Mall Gazette* publishes an appeal of the ex-Empress Eugenie to the people of France in favor of her son.

Special despatches to the *London Times* contradict the reports that there is less cordiality in the relations between the French and German Governments since the election of McMahon.

The *Times*, in an editorial, stigmatizes the proposed alteration of the Bank Act as an attack on the sanctity of contracts and an entire subversion of the cardinal principle which has hitherto been regarded as the key note of business.

Great preparations are making in the city for the reception of the Shah of Persia.

A memorial statue of the late Earl of Derby was unveiled at Preston on the 3rd and another of Peel was inaugurated at Huddersfield on the same day.

A strike of the carpenters of London is threatened.

The report that the Hong Kong and Shanghai Cable is broken is contradicted.

From Paris our advices state that the Orleanists in the Assembly are seeking an alliance with the Left Centre, having refused to form a coalition with the Legitimists and Bonapartists. The Left Centre however, decline to entertain their proposition.

The new government of France proposes to abandon the commercial treaty with England.

It is reported that the Bank of France

will advance funds necessary to complete the payment of the war indemnity, and the evacuation of territory by the German troops will follow immediately.

Vienna advices inform us under date of 4th inst. that the reports of the illness of the Emperor of Russia are wholly unfounded. He assisted at the review to day, and was present at the court banquet to-night.

One of the Dutch men-of-war cruising off the north coast of Sumatra, fired into three British merchant vessels as they were leaving the harbor of Atchene.

The Atchenese have sent messengers to this place, asking for assistance. The Coolies here are already enlisting in their service. If the Dutch persists in war they will meet with a stronger resistance than ever.

A despatch from Shanghai, giving some particulars of the capture by the Imperial Chinese forces of Talusoo, the Capital of a Mahommedan State in the Province in the Yunnan, South Western China, says most frightful scenes were witnessed in the conquered city upon the entry of the Emperors army.

The victorious forces fell upon their captives, and massacred thirty thousand of them. The Sultan poisoned himself, preferring death by his own hands, to falling into the power of his enemies.

The Carlists by continually interrupting communications between France and Spain, thus rendering it difficult to obtain authentic information, seek to make it appear that they have complete control of the frontier provinces. On the creation of this false impression abroad they have their hopes of successfully launching a loan of one hundred millions.

The Carlists appeared before Irun, and began an attack on that place. At last accounts they had taken four cabinets prisoners.

Emperor William is slightly ill. He was unable to attend the banquet yesterday in honor of the Shah of Persia.

The following delegates have been appointed to represent Germany at the World's convention of Evangelical Alliance, to be

held in New York next October. Messrs Colstantine, and Tisschendorf, the distinguished physiologist Kleinert, Christlob, Kraft, Vondergultz, Grundmann, Hoffman, Andrews, Von Bernstorff, son of the late Bernstorff.

The old Catholics have elected Professor Reekins as Bishop.

From Rome we learn that eighty-two heads of religious orders signed documents protesting against a bill for the suppression of religious corporations.

The Shah of Persia arrived here this afternoon (31st May.) He was received at the railway station by the Emperor William, several Imperial princes, and Prince Bismark. He was escorted to the palace assigned him during his sojourn in Berlin by a large body of troops, who made an imposing display at the depot, and on the streets through which the procession moved.

Captain Jack has at last been trapped and captured on the Lava beds, and the Mohawk war is a thing of the past. His band was at last reduced to two other warriors, five squaws and some children, and he was taken not by the whites, but by their Indian allies, thus setting a rogue to catch a rogue. He will probably be hanged. The result of a contest with the white man will always be the same, and the Indians will always come off second best. He is bound to pass away, no matter what treatment is meted out to him.

The Government has decided to authorize the Bank of England to increase its circulation six million pounds under restrictions not yet determined.

The officers of the Spanish army are preparing to pronounce against the Republic and to summon the old Cortes to reassemble.

The Prince and Princess of Wales opened the new town hall at Bolton, the 15th. Their Royal Highnesses were received by the inhabitants with the greatest enthusiasm, and were escorted to the town Hall by a procession three miles long.

The corporations of Edinburgh and Glasgow have resolved to invite the Shah of Persia to visit those cities.

ANNUAL REPORT ON THE STATE OF  
THE MILITIA FOR 1872.

(Continued from Page 243.)

"I have no doubt that next year Lieutenant Montizambert, having completed his short course of training with "B" Battery, will raise their efficiency to a very high standard, especially if I am permitted to send to Gross Isle a few stores for instructing in gun mounting &c. They could be spared from those in my charge, and be taken down by the Government steamer next summer without expense."

## T. JOHN'S BATTERY VOLUNTEER GARRISON ARTILLERY

"The St. John's Battery Volunteer Garrison Artillery, commanded by Major Drumm, was embodied at the Island of St. Helen's, where they went into camp."

"All enrolled for three years."

"The training of this battery was in every respect satisfactory, Lieutenant Short and his staff of sergeants acting as Gunnery Instructors. The energy and intelligence of officers, non commissioned officers and men, produced more favourable results than I thought possible in so short a time. They were instructed in foot and arm drill, gun and mortar drill, dismounting ordnance with or without a gun. They attended Lieutenant Short's lectures on ammunition, getting some knowledge on sighting ordnance from the ordnance armourer. "B" Battery who in their presence sighted the guns, with which they subsequently practised with good effect; also mortar practise. The physique and intelligence of the men was good, as their conduct was satisfactory."

"They would I believe, do good service in case of need, by manning the fort at Isle aux Noix, which, if re-armed from guns in store, and a detachment from "B" Battery placed in charge, would be valuable for obvious reasons, besides being a good school of instruction for the St. John's Battery."

"From the pressure of my numerous duties connected with the Gunnery School, and the fact of artillery and engineer corps being simultaneously under training, I did not think it advisable to remain with any one corps during its whole period of drill; very much of the instruction therefore devolved upon Lieutenant Short, who was ably seconded by the officers of the St. John's Battery. With his detachment from "B" Battery, he performed for the Volunteer Artillery services hitherto rendered by the Royal Artillery, viz: examining sighting, and reporting on ordnance, making up ammunition, placing targets, &c.

"I beg strongly to recommend this officer to your notice, for his energy and ability in the performance of duties as a rule entrusted only to Gunnery Instructors and Inspectors of War Stores of the Royal Artillery."

## SHERBROOKE BATTERY VOLUNTEER GARRISON ARTILLERY.

"The Sherbrooke Garrison Battery ordered to the Citadel of Quebec, was not able to turn out. I beg to submit for consideration whether it would not be advisable to change this corps into a field battery, which would be invaluable on the frontier, while the existence of a garrison battery, without works or guns, is somewhat of an anomaly. Lieut. Colonel King, Brigade Major of the District, is favourable to this change, and informed me that Captain Felton, the present commanding officer of this battery, wishes to

retire in favor of Lieutenant Short, the next senior, who to his other qualifications as an artillery officer, with a first class certificate "B" Battery Gunnery School, adds that of an excellent horseman, familiar with the frontier district of which he is a native. He served as a gunner, and subsequently as an officer of the Battery and adjutant during both Fenian raids."

"I need not remind you that the number of field batteries of this Province bears no adequate proportion to the other arms. And I beg to submit for your consideration whether it would not be advisable to follow the precedent of the Imperial service, by making the commanding officers of all field batteries regimental majors, in view of the fact that they command a tactical unit and incur considerable expense and responsibility. The same reasons do not apply to the commanding officers of garrison batteries of militia who only command fifty five men, and have no charge of forts or of armament."

## GRAND TRUNK RAILWAY BRIGADE, PROVINCE OF QUEBEC.

"I was not called upon to inspect this Brigade; but Lieut. Colonel Brydges informed me, through his Brigade Major (Major Worsley), that he concurs in the advisability of converting two batteries of the brigade into a heavy battery of position, to be armed for the present with an 18 pounder equipment in store at Montreal."

"The horses belonging to the Grand Trunk Establishment are exceedingly powerful and well suited for artillery."

"The self contained character of the Grand Trunk Brigade, and its high "esprit" render it advisable that it should be self supporting in the matter of field artillery. A complete force could then be transported at short notice to occupy any important position on the line of railway. Some stations might be selected as desirable to strengthen with earthworks."

"This service could perhaps be effectively and at very little expense, executed by the engineer companies of the Grand Trunk Brigade, who would also, doubtless, be very efficient in breaking up or restoring interrupted communication on their own line."

"I have had no opportunity of inspecting the engineer companies of the Grand Trunk Brigade."

## ENGINEERS.

"The Engineers of this Province consists besides the Grand Trunk, of two companies at Montreal—No. 2 Company under the command of Major Kennedy, No. 1 Company being under the command of Lieut. Devine, who is at present undergoing a short course of military engineering, &c., at the Gunnery School, Quebec."

"Both companies are very weak; but their training was satisfactorily carried out by the officers who are all intelligent and zealous. They were encamped on the Island of St. Helen's for sixteen days. Their company and arm drill was very good; but the dispositions made to blow up a stockade did not meet with my approval, which was perhaps scarcely to be expected, as their attention had not been directed to this important subject. Gabions and fascines, which they made from brushwood cut on the island, were perfectly serviceable, and they repaired the pontoons subsequently used in the construction of a raft, by a detachment of "B" Battery, for the transport of guns across the St. Lawrence for the use of the Shefford Battery. I had intended that the construction of the raft should form part of

the engineer training, but the delay incident to the necessary requisitions frustrated my plans."

"Their rifle practice was carried out on the island under their own officers. The conduct of the non commissioned officers and men was good. They have in their ranks many skilled mechanics, but they were not sufficiently numerous to construct a half sunk battery on a plan which I gave to the commanding officer. A model room for their use, in connection with an enlarged Gunnery School at Montreal, would largely contribute to the efficiency of the sister corps, the subjects of study being common to both."

"The construction of field works and batteries in snow, with the aid of gabions made in summer, would be a beneficial and inexpensive military exercise, which could be carried out, if the Gunnery School at Montreal had sufficient numerical strength to do the greater part of the labor for which the volunteer engineers could not spare time."

"The island of St. Helen's is peculiarly adapted for an artillery and engineer school, especially for pontooning and rafting. The discipline is good from the absence of temptation, and the difficulty of leaving the Island."

"The military stores are safe. The earth batteries thrown up in the course of instruction would remain as valuable defences, and would not impair the natural beauty of the Island. There is a considerable growth of brushwood exactly suited to making gabions and fascines, and the necessary entrenching tools are probably in store."

"I have in my possession plans of the Royal Engineers for some proposed defences and as the river would be a comparative safeguard against a *coup de main*, masonry escarpments would not be necessary."

"I do not anticipate much expense beyond the wood necessary for laying gun platforms, and timber for expense magazines and shell rooms."

"I need scarcely remind you that the armoury store buildings and large powder magazines on this Island are of great value to the Dominion Government."

"Their protection is essential, and the British Government proposed to arm such works if erected by the Dominion."

## FORTS.

"The Citadel of Quebec and the forts at Point Levis are in good order, with the exception of the walls surrounding the "A" magazine, Citadel, one of the magazines at Point Levis, and some of the unoccupied casemates which suffer from damp during the spring and autumn, especially at the latter time, and the subsequent frost has a tendency to burst the casemated arches. I would recommend that a Royal Engineer sergeant, qualified as foreman of works, be asked for from the Imperial Government to superintend a certain amount of annual petty repairs and pointing masonry, which the extremes of climate render necessary. It would in the end prove an economical preventive to rapid and general decay. During the greater part of the year, especially in winter when mason's work is impracticable, he could be utilized as an assistant instructor of field works (using snow as a medium of instruction). The masonry of the lines from the Citadel to the Artillery barracks is in very bad order; but it would not be advisable to repair it, as the proximity of the suburbs has in a great measure destroyed its military value as a line of defence, except to close the gorge of the river front against a *coup de main*. It

could moreover be enfiladed or taken in reverse by batteries from the opposite side of the River St. Charles, armed with modern guns."

"With reference to the defenceless state of Montreal and its railway bridge, I beg to remind you that the Moncrieff system of defence has been developed, and in some places adopted, in the United Kingdom, since the proposal of the Imperial Government too arm such forts as the Dominion. Government might construct at Montreal. The expense of such fortifications would be reduced to a minimum by digging six sets of double Moncrieff pits, rivitted with forest timber, in lieu of the six forts proposed opposite St. Helen's Island. They could be protected from assault by reverse fire pallisade galleries in the counterscarps of their ditches; the unrevitted scarp, being left to the natural slope of the earth could not be breached. No masonry or skilled labor would be required. The principal part of the expenditure would be the armament promised by the Imperial Government."

ARMAMENT.

"The heaviest guns mounted on the Citadel at Quebec are four 7-inch breech-loading rifle guns, on the salienta. They are not capable of penetrating ironclads."

"As the calibre of guns and the thickness of common plates have increased considerably since the original date of proposed armament, it is probable that some heavier guns might be substituted for those mentioned. It would be convenient and economical to supply 64-pr. converted Palliser guns in lieu of the thirteen 7-inch breech-loading rifle guns and traversing platforms on the work, which would take a 64-pr. converted from a 32-pr. with wood blocks on the axles to check the recoil. This would be a very efficient armament for the Citadel land front, the expense of carriages and platforms being saved. I do not think the old objections to the use of cast iron carriages under fire need be considered, as a blow from a heavy rifled projectile would place beyond any immediate repair any carriage of cast or wrought iron or wood. The durability of the carriages and the simplicity of the guns is also an important consideration. I would recommend the same inexpensive armament for the forts at Point Levis, which do not command the river, and cannot be opposed by heavier guns than such as can be brought overland. But as No. 1 fort, the nearest to the ship canal, is not close enough for penetrative effect, I presume that at least a couple of 12-ton guns, probably in Moncrieff pits, almost a *fleur d'eau*, would be placed at the northern angle of Indian Cove, and two more Moncrieff pits, with guns would be useful to command the railway and the river channel westward."

I concur in the recommendations submitted by Lieutenant Colonel T.B. Strange for increasing the efficiency of Artillery Corps in the Province of Quebec, especially with regard to the mounting of two extra gunners on extra horses in Field Batteries, whereby the services of a sufficient gun detachment are always available with the gun. This proposal had previously been made to me by Lieut. Colonel G. French Inspector of Artillery, who was equally convinced of its propriety, and this latter officer has been for some time engaged in compiling a Manual of Field Artillery Drill, suitable for Canadian Field Batteries, based in a great measure on the above suggestion.

Lieut. Col. Darrel Iago, of the New Brunswick Artillery, reports for my information as follows:

"In accordance with General Orders dat-

ed Ottawa, May 31st, 1872, an artillery camp was formed at St. John, on August 22nd 1872, for eight days, the batteries attending it having previously performed eight days drill at their own headquarters."

"No. 1, 2, 3, and 10 Batteries attended from St. John, and No. 7 sent a strong detachment, with one officer, from Woodstock."

"It is unnecessary for me to remark on this camp, further than to say that without doubt the officers and men derived great benefit from it, and that the continuous drill of never less than five hours per diem did more for the attendants at it than treble the time consumed in a drill room."

"I found the officers fully capable of instructing the men, and men anxious and willing to profit by their instruction, whilst both endeavored to maintain the credit this corps has always enjoyed for good conduct."

"The position you assigned me as Superintendent of drills was, therefore, as easy as it was pleasant; and I had also the satisfaction of superintending some excellent shot practice made by the different batteries, both as regards accuracy and also rapidity of firing, for prizes presented by well wishers to the brigade."

"I inspected No. 5 battery at Woodstock on the 15th July. This battery attended the brigade camp formed at that place as a field battery, they having two (2) six pounder guns in their charge, but having no horses properly enrolled, and really belonging to the brigade of Brunswick Garrison Artillery."

"I saw some creditable shot practice made by them, and the men drilled well at standing gun drill; but I should recommend that this battery be either turned into a field battery and properly armed and horsed (the country around Woodstock offering peculiar advantages for the establishment of a good field battery) or that in future they should perform their annual drill at St. John."

"I inspected the remainder of No. 7 (Major Gillespie's) Battery at Chatham, on September 28, 1872, as I previously stated, the best part of this battery attended the St. John camp; and though the men were fairly drilled, they compared badly with their comrades who had accepted the greater advantages of instruction. There are two twenty four pounder guns at this place, and a slight expenditure of money would lay down platforms, build a side arm shed, and otherwise provide a proper muster place for the battery at the same time adding much to the defence of Miramichi."

"I inspected Captain Call's (Newcastle) Field Battery, at Newcastle, on September 30th, 1872. This battery turned out for 8 days drill in camp this year."

"Captain Call appears to have a good deal of difficulty, from local causes, about re-enrolling his men and horses; but he informed me that he has now determined to adhere to the proper system of enrolling a field battery, and to take no drivers from any but the farming class. I had pleasure in reporting favourably upon this battery last year; and if Captain Call adheres to his rule, and uses the energy I have noticed in him, I have great hopes that he will have a thorough good battery next summer."

"The number of batteries in the Garrison Brigade has been diminished by five, all of which are in Charlotte County. The two batteries at St. George, could be spared, if the men do not desire to re-enrol; but with regard to the battery at St. Andrew's the case is far different. It is not necessary for me to point out to you the importance of St.

Anderw's, commanding as it does the navigation of the St. Croix river; and it is much to be deplored that there is no garrison artillerymen at this place. In my opinion, the loss of the battery at St. Stephen is not of more importance than those at St. George; but I should recommend that the armament at all these places, when the batteries have failed to re-enrol should be returned into store at once, including the two 32 prs. at St. Andrews, if nobody can be willing to raise a battery at that place within a reasonable time."

"There is one point in conclusion to which I should like to call attention, viz.: the want of a Gunnery School for the instruction of officers and men in this District. It is useless to hope to make a really good battery without a certain number of officers and men being competent to impart instruction in the theory and practice of artillery."

"In this Province we have hitherto managed to get on without a school, and both officers and men have acquitted themselves well; but I am in a position to state that it has been done by much extra work by all ranks, and speaking in the interest of the New Brunswick artillery, I shall be glad if they are accorded the same privileges as the artillerymen of Ontario and Quebec."

MILITARY SCHOOLS.

During the past year 339 Certificates of Qualification in Infantry Drill were given by the Commandants of Infantry Schools, of which 47 were first class, and 292 Second Class Certificates.

Two Riding Schools for instruction in Cavalry Drill and Equitation were established for a short period, one at Kingston, and the other at Quebec, and 12 certificates of Qualification, 5 of which were first class, and 7 Second Class Certificates were given.

It is reported that a large proportion of those who attended the Infantry School belonged to the Active Militia, and that the class of Cadets who passed through the Infantry Schools last year was much superior to the class of Cadets attending in previous years.

GUNNERY SCHOOLS.

The results already attained by the Establishment of the Schools of Gunnery at Kingston and Quebec, (A and B batteries) are very satisfactory.

These schools of practical and theoretical Artillery Science were established under the system detailed in General Orders, October, 1871, a copy of which will be found in the Appendix; none are admitted to those schools for duty and instruction except duly gazetted officers or enrolled non-commissioned officers and men belonging to corps of the Active Militia.

The periods of admission to the Gunnery Schools are for three and twelve months, and a limited number of officers and men may be re-admitted for a further period, if it be found necessary to do so, in order to maintain a sufficient staff and nucleus for carrying on the instruction and duties.

Whilst attached to the Schools of Gunnery (A and B batteries) for duty and instruction, all officers and men are under military discipline as prescribed in clause 54 of the Militia Act, and thus Artillery Schools are real as corps of the Royal Artillery itself, have been formed for Garrison duty as well as for theoretical and practical instruction in Artillery Science.

[To be Continued.]

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

(Continued from Page 261.)

CHAP. V.

General Remarks.

During the journey from Manitoba to the Pacific Coast, an opportunity was afforded me of becoming acquainted with the state of affairs in the Saskatchewan, and the condition of the Indian tribes.

Every possible information was furnished by the missionaries whose acquaintance I made, and by the employes of the Hudson's Bay Company; in the course of the journey I met with many bands of Indians.

Between Fort Garry and Portage de la Prairie three large camps of the Sioux tribe were visited—a portion of the same band who in 1862 massacred some American settlers in Minnesota, U. S., in retaliation for the many wrongs and outrages committed in the first instance on them by American citizens. Ever since that event this band has sought refuge in Dominion Territory. These Sioux Indians live quietly enough apparently among four people, and occasionally assist the farmers at harvest time. The presence, however, of such a wild and warlike looking band in the settlement frequently cause no small apprehensions amongst the settlers dwelling near Portage de la Prairie; and it should be remembered that at the time of the Minnesota massacre, this very band, although living quietly apparently among the Minnesota settlers, rose suddenly in one night and swept the settlement, committing horrible atrocities.

Before reaching Fort Ellice I met two bands of the same tribe, one consisting of about one hundred men, unaccompanied by women or children, who told me they had been to visit the Lieutenant-Governor of Manitoba in hopes of obtaining presents. This band belonged to the United States, and had come all the way from the plains south of the Missouri River whither they were returning. These Indians were bold and wild-looking fellows, fantastically dressed and all armed. They were perfectly friendly in their manner.

On one occasion when far out on the prairie, an band of ten mounted Sioux, after reconnoitring from a distance, rode rapidly towards our small party of four (two of whom were only boys), surrounding us in a moment; on being told by the guide, who spoke their language very well, that I was not an American citizen, but a British officer travelling towards the Rocky Mountains, they became quite friendly in manner, shaking hands with us heartily.

Subsequently, this band were somewhat bold and pressing in their demands, for presents, which we resisted in a firm but friendly manner, it being bad policy to comply with extortionate demands, or to appear in dealing with Indians to act from intimidation.

Between Fort Ellice and Fort Carlton I met some bands of the Saulteaux tribe,—at the various forts along the North Saskatchewan, several of the Cree tribe (plain Crees) and at the Rocky Mountain House some Blackfeet and Assiniboine Indians.

Although there may not at present be much risk in travelling through the Saskatchewan Territory along the well known track followed for so many years by the Hud-

son's Bay Company, especially when associated with an employe of the Company, speaking the Indian language, it is a matter of doubt if such can long continue under the changing state of affairs, without the introduction of some Government supported by material force.

Beyond the Province of Manitoba westward to the Rocky Mountains, there is no kind of Government at present whatever, and no security for life and property beyond what people can do for themselves.

The few white men there are in the Saskatchewan country, and at the H.B.C. Posts, frequently expressed to me their conviction that unless a military force is established in the country, serious danger is to be apprehended.

The clergymen of all denominations whom I met with, expressed similar convictions; those at Forts Victoria and Edmonton, as representatives of the community, urged me in the most impressive manner to lay their claims for the protection of themselves, their wives and families, before His Excellency the Governor-General of the Dominion, and the Government of their country.

It appears that of late years no attempt has been made to assert the supremacy of the law, and the most serious crimes have been allowed to pass unpunished. Hardly a year has passed without several murders and other crimes of the most serious nature having been committed with impunity.

During the present year, about three weeks before my arrival at Edmonton, a man by name Charles Coudin, a French speaking half breed cruelly murdered his wife at no great distance from the gate of the H. B. Company's Posts. I was informed that the criminal might have been arrested, but that there was no power to act. This same man had previously most wantonly and cruelly mutilated an old Indian woman by cutting the sinews of her arm so as to incapacitate her for work.

At Edmonton there is a notorious murderer, a Cree Indian, called Ta-ha-kooch, who has committed several murders, and who should have been apprehended long ago. This man is to be seen walking openly about the Post. Many instances can be adduced of a similar kind, and as a natural result there is a wide spread feeling of apprehension. The gentleman in charge of the H. B. C. Post at Fort Pitt, as well as others elsewhere, assured me that of late the Indians have been overbearing in manner, and threatening at times. Indeed, the white men dwelling in the Saskatchewan are at this moment living by sufferance, as it were, entirely at the mercy of the Indians. They dare not venture to introduce cattle or stock into the country, or cultivate the ground to any extent for fear of Indian spoliation.

When at Edmonton and the Rocky Mountain House I was informed that a party of American Smugglers and Traders have established a trading post at the junction of the Bow and the Belly Rivers, about 30 miles due east from the Porcupine Hills, and about 60 miles on the Dominion side of the boundary line; this trading post they have named Fort Hamilton, after the mercantile firm of Hamilton, Healy & Company, of Fort Benton, Montana, U. S., from whom it is said they obtain supplies. It is believed that they number about 20 well armed, men under the command of a man called John Healy, a notorious character.

Here it appears they have for some time carried on an extensive trade with the Black-

feet Indians, supplying them with rifles, revolvers, goods of various kinds, whiskey and other ardent spirits, in direct opposition to the laws of the United States and the Dominion of Canada, and without paying any custom duties for the goods introduced into the latter country.

The demoralization of the Indians, danger to the white inhabitants, and the injury resulting to the country from this illicit trade is very great.

It is stated upon good authority that during the year 1871 eighty eight (88) of the Blackfeet Indians were murdered in drunken brawls amongst themselves, produced by whiskey and other spirits supplied to them by those traders.

Year after year these unscrupulous traders continue to plunder our Indians of the Buffalo robes and valuable furs by extortion and fraud, and this shameful traffic causes certain bloodshed among the Indian tribes.

At Fort Edmonton during the past summer whiskey was openly sold to the Blackfeet and other Indians trading at the Post by some smugglers from the United States who derive large profits thereby, and on these traders being remonstrated with by the gentlemen in charge of the Hudson's Bay Post, they coolly replied that they knew very well what they were doing was contrary to the laws of both countries, but as there was no force there to prevent them, they would do just as they pleased.

It is indispensable for the peace of the country and welfare of the Indians that this smuggling and illicit traffic in spirits and firearms be no longer permitted.

The establishment of a Custom House on the Belly River near the Porcupine Hills, with a military guard of 150 soldiers is all that would be required to effect the object.

Not only would the establishment of a military post here put a stop to this traffic but it would also before long be the means of stopping the horse stealing expeditions carried on by hostile Indians from south of the line into Dominion Territory, which is the real cause of all the danger in that part of the country, and the source of constant war among the Indian tribes.

Indeed it may now be said with truth, that to put a stop to horse stealing and the sale of spirits to the Indians, is to put a stop altogether to Indian wars in the North West. The importance of the Porcupine Hill in a strategical point of view is very great, commanding as it does the entrance of both the Kootenay Passes towards the West, and the route from Benton into the Saskatchewan territory on the south and east; the country can be seen from it for immense distances all round. Although hostile to citizens of the United States it is believed that the Blackfeet Indians would gladly welcome any Dominion military force sent to protect them from the incursions of other tribes, and to stop the horse stealing which has for so long been carried on. With excellent judgment they have pointed out the southern end of the Porcupine Hill as the proper place for a Military Post.

In order to satisfy myself on this point, I spent the greater portion of the 29th September in reconnoitring the ground recommended by them, and if it be the policy of Government to take steps to stop the illicit smuggling which is being carried on at this part of the Dominion, there is every convenience for establishing a Custom House and Military Post. Timber of large size and good quality for building is close at hand,



and the surrounding country is most fertile and favourable for settlement.

The distance from Fort Edmonton to the Porcupine Hill is about six or seven days journey on horseback, and from the Kootenay Valley on the Western side of the Rocky Mountains, from whence supplies could be easily obtained, about fifty or sixty miles.

Frequent intercourse, and an active trade between the Kootenay District of British Columbia and the Saskatchewan country, would result from the establishment of a Custom House and Military post at the Porcupine Hills. Many individuals are prepared to settle there if any protection is afforded, and the Indian trade of the country at present tapped by U. S. smugglers, would remain with our own countrymen. There is a general belief prevalent, moreover, that valuable gold deposits are to be found near the Porcupine Hills—the unsettled state of the country hitherto has not admitted, however, of much prospecting. A party of four American miners, who crossed through the Kootenay Pass two or three years ago, were all killed by the Blackfeet, near the Porcupine Hill, the moment they entered the plain on the eastern side; since which no attempt at prospecting for gold has been made in that part of the country.

With regard to the measures which should be adopted for the settlement of the country, I feel satisfied that the introduction of a civil police force unsupported by any Military force into the Saskatchewan Territory would be a mistake, and that no time should be lost in establishing a chain from Manitoba to the Rocky Mountains. The appointment of a Stipendiary Magistrate for the Saskatchewan, to reside at Edmonton, and to act as the Indian Commissioner, is also a matter of the first importance. The individual to fill this important post should be one, if possible already known to, and in whom the Indians have confidence. I consider that it is very necessary to invite the co-operation of the Hudson's Bay Company in the adoption of any steps towards establishing law and order in the Saskatchewan for the first few years, and no Indian Commissioner should proceed unaccompanied by a military force.

A large military force is not required, but the presence of a certain force, I believe, will be found to be indispensable for the security of the country, to prevent bloodshed and preserve peace.

The number of the Indians dwelling in the extensive country which lies between the Red River and the Rocky Mountains on Dominion Territory, has been much exaggerated. It is very difficult to arrive at any accurate Indian census, but having made every enquiry during last summer on this point, whilst travelling through the country, from those most competent to judge, I doubt if there are more than four thousand Prairie Indians capable of bearing arms in the Dominion Territory, between Fort Garry and the Rocka Mountains south of the Sub-Arctic Forest, and north of the International Boundary Line,—the total Prairie Indian population amounting, perhaps, to 14,000 or 15,000.

These Indians are scattered over such an immense extent of country, that anything like a formidable combination is impossible; most of the tribes, moreover, have been hostile to one another from time immemorial.

It is believed that the Blackfeet and the Plain Crees, the two strongest tribes of prairie Indians, may have respectively about one thousand fighting men, but it is doubtful if either tribe could ever concentrate such a

number, or if concentrated, that they could long remain so from the difficulty of obtaining subsistence.

Although many of the Blackfeet have breech-loading rifles, the Indians generally, are poorly armed and badly mounted.

Under these circumstances, it will be readily understood, that comparatively small bodies of well armed and disciplined men judiciously posted throughout the country could easily maintain military supremacy. A body of fifty mounted riflemen, armed with breech-loading rifles, is a formidable power on the Prairies.

One regiment of mounted riflemen, 550 strong, including non-commissioned officers divided into companies of fifty, would be a sufficient force to support Government in establishing law and order in the Saskatchewan, preserving the peace of the North West Territory, and affording protection to the Surveyors, Contractors, and Railway Labourers about to undertake the great work of constructing the Dominion Pacific Railway.

Although the proposed military strength, and consequent expense, may appear somewhat considerable, I have been guided by every consideration of economy in recommending the above number.

It is wiser policy and better economy to have one hundred soldiers, too many than one man too few; the great extent of the country, and detached nature of the service must also be taken into account, and it should be borne in mind that the only thing the Indians really respect, and will bow to, is *actual power*.

It should be borne in mind too, that in addition to their Indian element, there is a half breed population of about 2,000 souls in the Saskatchewan unaccustomed to the restraint of any government, mainly depending as yet upon the chase for subsistence, and requiring to be controlled nearly as much as the Indians.

[To be concluded in our next.]

Germany, as we have already announced, is about to build a canal from the North to the Baltic sea. When this canal is completed the German navy will have the advantage of interior lines, and no enemy can undertake to blockade the coast with a having fleets in the Baltic and North seas, and each of sufficient strength to meet the entire German navy. Aside from the value of the canal in case of war, it offers great advantages to commerce. Vessels can avoid the dangers of the western coast of Schleswig and Jutland, and the commerce of the Baltic will be greatly encouraged. The work will not be undertaken until 1875, when the Wilhelms-haven and the defensive works on the Eibe, Weser, and Jahde are to be finished, so that in the event of a war these works can protect the canal. The entire cost is estimated to be about ten millions of thalers and it is expected that the work will be finished in eight years.—*U. S. Army and Navy Journal*.

The magistrates of the city of Belfast with a view to the adoption of measures for the prevention of disturbances on the 1st and 12th of July, the anniversaries of the battles of the Boyne and Aughrim respectively, have determined to prohibit all processions on those days.

MILITARY FUNERAL.

INTERMENT OF THE REMAINS OF THE LATE COLONEL DENISON.

On Tuesday morning the remains of the late Colonel G. T. Denison, senior, were conveyed from his late residence, Rusholme, to St. John's Cemetery, on the Humber.

This is the oldest burying-ground on this side of the lake, west of Kingston, where all the Denison family have been interred since they first emigrated to this country.

It is delightfully situated on the right bank of the River Humber, which at this point is lined with trees and gives one the idea of its being a sacred and beautiful locality for the repose of the dead.

The funeral cortege, on leaving Rusholme was preceded by the firing party, composed of the Toronto Field Battery, under command of Captain Gray; then followed the Governor General's Body Guard, commanded by Lieutenant Orlando Dunn; officers of the several corps in this district, followed by the Rev. Dr. Strong and the hearse and pall-bearers, who were: Mr J. Crawford, M. P., Hon. J. B. Robinson, Mr. Kivas Pully, Lieut. Colonel Gilmour, Lt. Colonel Boxall, Lieut.-Col. Scoble. After the hearse came a long train of mourners. At Black Creek the mournful procession was met by a part of the Queen's Own Rifles and the Tenth Royals, under command of Major Otter, headed by the band of the Tenth Royals.

A number of the officers of these regiments were present, also some of the Grand Trunk Brigade and Toronto Garrison Artillery. On their arrival near the Cemetery, the troops opened fire, and the cortege passed through the band of the 10th Royals playing the "Dead March in Saul."

At the Grave, the impressive and solemn Burial Service of the Church of England was read by the Rev. Dr. Strong, the Incumbent of St. Ann's.

At the conclusion of the ceremony, the Toronto Field Battery commenced firing the usual number of guns, an officer of the rank of the late lamented Colonel was justly entitled to.

"Requiescat in Pace."

We noticed amongst those present the Hons. G. W. Allin, D. J. Macpherson, Donald MacDonald, Messers C. Robinson, Percival Ridout, Blain, Edgar, Col. Cumberland, Majors Alger and Leigh, Capt. Curtis, A. D. C., the Mayor and several of the Corporation, Rev. Drs. Fuller, Scadding and Grassett. The Rev. Dr. Richardson, President of the York pioneers, and many of the members were also amongst the number.—*Mail*.

**FIREPROOF ROOFS.**—A wash, composed of lime, salt, and fine sand or wood-ashes, put on in the ordinary way of whitewash, is said to render shingles fifty fold more safe against taking fire from falling cinders, or otherwise, in case of fire in the vicinity. It pays the expenses a hundred fold in its preserving influence against the effect of the weather. The older and more weather beaten the shingles, the more benefit derived. Such shingles are generally more or less warped, rough, and cracked. The application of wash, by wetting the upper surface, restores them to their original or first form, thereby closing the spaces between the shingles; and the lime and sand, by filling up the cracks prevents the warping.

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## The Volunteer Review,

AND

## MILITARY AND NAVAL GAZETTE.

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

OTTAWA, TUESDAY, JUNE 10, 1873.

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

Our dearly beloved cousins are never at a loss for an excuse to justify any international outrage of which their officers or agents may be guilty, if a precedent does not exist they are at no loss to invent one. The *Army and Navy Journal* (United States) puts into the mouth of General GRANT a speech which, if uttered by the President of the United States, proves that such a quality as simple truth is not a necessary requisition of the Station.

In its issue of the 31st May, that journal endeavours to excuse the conduct of a Colonel MACKENZIE who has endeavoured to make war, à la WILKES, on his own account and at his own will and pleasure, by violating Mexican territory on the Rio Grande, in a raid across the border after some cattle stealers. Our readers will remember that General SHERIDAN and Mr. BELKNAP, the United States' Secretary of War, reconnoit-

ed this neighbourhood quite recently, and that we direct attention to what was likely to occur in consequence in the *VOLUNTEER REVIEW*. When our neighbors begin to preach about peace and international obligations our wisest plan is, to look out for some stunning violation of both. If General GRANT has stated, what our contemporary gives him credit for, we can only say that the role of Philadelphia lawyer is played by more than one of the United States celebrities, and that the President of that great country can invent facts to suit his purpose or fit any object he has in view.

The *Fenian raids* are awkward stumbling blocks to Yankee philanthropists and politicians, the violation of territory came altogether from the United States and they refused to give any compensation therefor, we repelled the raids without violating their frontiers, and General GRANT in his anxiety to find an excuse for a deliberate and unwarranted violation of territory, makes a deliberate misstatement in attributing to the British authorities a single act of territorial violation during the whole period of four years over which they extended, and it was not necessary to maintain an army "sanctioned by Congress" to put down the raids organized in open day on her territory, which was done by her municipal law when she was compelled to put it in force.

We believe the *Army and Navy Journal* has invented the tale of the pig and the corn field to aid and abet the action of Colonel MACKENZIE, which was devised by the Washington authorities as the result of the late reconnaissance, and we should not be surprised to hear of the necessity for annexing a strip of territory along the Rio Grande in order to protect the frontiers. In the mean time this very act illustrates the assertion we made in reviewing the life of the great chief tain of the lost cause, and that was "that nations like the United States were regularly engaged in training a large portion of their servants as leaders of rebellion." The following is the article, and we recommend the earnest study of its moral to our readers.

"That an officer of the United States in time of peace, should cross the frontier of a friendly State, and levy war therein, is undoubtedly a subject for great surprise and apprehension to his own nation. When that officer is well known to be a man of great prudence as well as boldness, one not likely to act rashly; and when his acts are approved by men of great caution and experience in affairs, such as Grant, Sheridan, and Secretary Belknap, our first impressions are apt to change to those of deep attention. There must be something behind all this; exactly what, it is not so easy to say without careful examination of the circumstances connected with Colonel Mackenzie's late exploit.

"For a long period of years past, the Rio Grande border of Mexico has been infested with horse thieves on both sides of the river; Indians of all tribes, from the Comanche to the Kickapoo; turbulent border men dis-

guised in borrowed plumes, worse than the red men; and finally Cortina's gentry, with others of the like persuasion, who have been industriously making their living by "lifting" their neighbor's cattle, in the style of Mr. Robert MacGregor of old, celebrated by Sir Walter under his nickname of "Rob Roy." That the extent of these ravages has been greatly magnified by the sensational daily press, is best evidenced by the fact that we only hear of them now and then, when it is necessary to get up a cry against the "administration." That they do exist, and take place at intervals of greater or less length, is however, a settled fact. The "raiders" come from both sides of the border and seem to be no worse in Mexico than in United States territory. When we consider what a wilderness said United States territory is, just in that neighborhood, and what trouble we have, in land undoubtedly our own, with a handful of Modocs, it will be readily seen what a task must lie before a cavalry officer, on either side of the Rio Grande, set to watch Indians. The Mexican side of the river undoubtedly offers the most inducements to a savage gentleman to take up his abode there, if disposed to "lifting." On our side he must keep moving to escape the troops, whereas on the other side he can sit down under his own vine and fig tree, if they happen to grow wild, and meditate on future expeditions to plunder "Los Gringos." When not actually raiding on Mexican soil, he is absolutely safe; and this immunity has gradually drawn most of the free lances to the side of Mexico in the course of years. That one of these bands, the Kickapoos as it happened, should go on the warpath after American cattle is a common thing. That Mackenzie should follow them is not surprising. He was sent there to do it. That they should cross the border, is but the experience of all border raiders. They started out to do all the mischief they could, and then to run to just that crossing to escape. So far all is mere everyday incident. That Mackenzie should cross the Rio Bravo del Norte, as Cæsar once crossed Rubicon, is indicative of a similar resolution. In calm deliberation Cæsar violated the territory of the republic; with equal coolness Mackenzie rode into Mexico. That he did so, argues that he was, if not under orders, at least pretty certain of approval. If the end justifies the means, the complete victory he obtained over the brigands he was following will plead for him in judgment. That he did right we have no doubt. The simple and forcible illustration ascribed to General Grant puts his conduct in such a clear light that we are tempted to append the extract.

"If your neighbor's pigs come into your cornfield and destroy your crop, what use is it to complain? That will not restore the corn. You would naturally say remove the cause. But somebody says the cause of the trouble is the pig. I don't think so. The pig will be true to his instinct. The real trouble is we have no fence. The river has been, diplomatically, the dividing line. The United States has been willing to consider the weakness of Mexico and its inability to protect its borders. It would be foolish for us to complain now. That point was made against the United States during the Fenian raids. We did not pretend that the border was inviolate. All that the British government argued was that the United States, being at peace with England, and having friendly relations with the United States, the crossing of the boundary line in pursuit of an enemy, equal to the United and Great Britain could not constitute a cause for misunderstanding."

"If this was true with Great Britain, how much more with Mexico? We could not guard our frontier then with the army authorized by Congress. Neither can we now; but, that is no reason why our cavalry should not pursue bandits whether they cross the Texan or the Canadian line.

"We have not complained because the British authorities have done so, nor have we complained seriously at the offensive acts of the Mexican government. But, as far as I have influence, I am determined our citizens on the Rio Grande shall have the same protection those enjoy in the interior States. There will not be war. There is no occasion for hostilities. The Kickapoos and Lipans can no longer occupy Mexican territory peacefully. Colonel Mackenzie has already received orders to exterminate both bands, and if his force is not sufficient, to ask for more. If Mexico is to be an asylum for highway robbers after the United States protests, we do not intend to sanction it. And if the Mexican government complains, this administration has resolved to treat the accessory as guilty as the principal.

"The last lines of the above extract will find an echo in the heart of every soldier. We have stood enough from Mexico. Henceforth let us compel her to do justly, or, if not, to submit to the proper reparation. The United States cannot afford forever to be made the laughing stock of Mexico. Come to order she must or be punished.

The torpedo question is still agitating the minds of military and naval philosophers in England, the following synopsis of a valuable paper on the subject is from *Broad Arrow* of 10th May. Our readers will see that the conclusions arrived at in the *VOLUNTEER REVIEW* long since are all borne out by the talented and experienced lecturer.

"At the Thursday evening meeting of the Royal United Service Institution, a paper was read by Captain Orde Browne, R.A., on 'The Combination of Torpedoes and Land Batteries.' Major, General F. Eardley Wilmot, R.A., presided. The lecturer commenced by classifying the defence of England in three divisions, as follows:—1. Mines, 2. Torpedoes, which belong to the navy; 3. Guns worked by Artillery. In reference to mines, he was of opinion that no fort could keep out a fleet unless proper obstructions were used, but that each was necessary to the other. He suggested the use of mines fired with Abel's culminating fuze by electricity as the most desirable method—the general principle of which may be explained as—a barrel secured to the sea floor containing gunpowder, acting as the mine, in which is a fuze connected with a strong battery on shore and a buoy, so secured as to float a few feet below the surface of the water.

"When the buoy receives a blow, a pendulum is agitated in it which connects the current of electricity from the strong battery to a wire communicating with the mine, and the explosion takes place.

"The advantages of this system being that the mine could be placed or removed, and a friendly ship pass in perfect safety, and by a special arrangement it could be found if the mine was in or out of working order. He advocated that the charge should be composed of forty parts nitro-glycerine and the remainder gun-cotton, which had as much power as powder, and was more economical.

The lecturer, in reference to the use of torpedoes, stated Captain Harvey's and

Captain Dawson's opinion as being that a small steamer with two torpedoes attached, could pass among large ships with few and heavy guns with absolute safety, but in this he said he could not agree. He said that Whitehead's fish torpedo could be directed with great accuracy, but when the ship was in motion, or a tide running, it could not be depended on, even if it had been able to move 800 yards at the speed of ten knots, and if it missed the enemy he thought it would prove a dangerous fish to leave abroad. To clear obstructions he suggested the use of shot with a line attached which could be hauled in, and so clear the passage.

"In reference to batteries, he thought some should be placed as high as possible, and others on the water's edge; that the commandants of each fort should be partly under the direction of a general controlling commandant, who would be able to use them systematically, and to more effect than when acting individually—that no rule should be laid down before the action, and each fort should be provided with a plan for the distance of its range. The lecturer estimated that the allowances for penetrative power through iron in an angular position, was in inverse proportion with the sine of incidence, and thought that when the ship was in this position, the gun should be directed at her well forward, about the water line. For penetrative powers under these circumstances he strongly recommended the flat-headed Whitworth projectile, but he stated it was objected to, because the cost was seven or eight times that of the service shot. He referred to the incomplete state of Gilchiker and other forts, and hoped the country would not be continually unprepared in this direction."

With reference to the combination of mines and batteries we quite recently advocated the same system, but it has this disadvantage, that the defence of obstructions must depend in a great measure on the batteries on the lower levels and that the fire therefore may be overpowered by one or two large ships, while properly fitted gun boats of light draft sweeps the obstructions away with the apparatus he describes. In future attacks on shore batteries, it is not at all likely that ironclad war vessels will take up a position at all, with their motive power completely under control, it is more likely they will always keep in motion and deliver their fire when within range, the rule respecting the angle of incidence in this case would be of very little use, but the *range plan* is not only a good idea but should be adopted and experimentally tested.

ENGLAND is engaged in a little war on the West Coast of Africa. Our readers will remember how much praise the Radical Press bestowed on the vigorous policy of the GLADSTONE administration for acquiring the Dutch possessions on that coast, it appears, however, that there is another claimant to the property so coolly transferred. It is quite possible that *Mynheer* understood the situation of affairs better than Earl GRANVILLE, and quietly shifted a responsibility of doubtful advantage to John Bull's broad shoulders. It would not be the first extraordinary act of the Foreign Secre-

tary, if such should turn out to be the case. *Broad Arrow* of 17th May, says:—

"As we anticipated, in our article on the Ashantee invasion, so far back as the 22nd March, the real object and purpose of the African despot in his march on Cape Castle are at length revealed and acknowledged. The following is a verbatim extract from the remarks on that date:—"The transfer last year of the Dutch Colony of Elmina to our dominion was not carried out without vehement protests from the native king, and as his adherents were, and are, staunch adherents and admirers of the Ashantee potentate, it may be easily imagined that they would be ready to afford any and every advantage their strategic position and moral force would carry with it. Accordingly the King of Ashantee, relying on the co-operation of his friends, is now on the march to take possession of Elmina, as a seaport; but what is far more serious, to avenge his personal defeat by British Forces and their native allies in 1863. The troops in Cape Coast Castle then were upwards of 1,200 strong; now they have dwindled down to two companies! No doubt the handful of soldiers under Colonel Harley, C.B. (who, by the way, served in the former Ashantee campaign), will defend the castle to the last, but we could wish the settlement had a battery of Gatlings, to supplement the painful disparity of numbers by mechanical means." The actual strength of the garrison, including the crews of four men-of-war, the Houssa Police, and other local levies, is, we learn from the statement of the Under Secretary of the Colonies, 850 men, and it now appears beyond doubt that 40,000 victorious Ashantees are advancing steadily to the attack of the Castles of Cape Coast and Elmina, whilst our wretched native allies are in full retreat "all along the line." Under the circumstances the next intelligence will be anxiously awaited."

This threatened complication exhibits another interesting phase of the peculiar management of the Whig Radicals, as well as the folly of intrusting army reformation or re-organization to the hands of civilians alone. The following paragraph from the same journal and of the same date furnishes a text for a telling sermon on the efficiency and value of the changes brought about by Mr. CARDWELL's meddling, and supplies the first earnest of the total failure his military system will prove whenever it comes to be tried.

"The present threatened invasion of our West African colonies by the Ashantees shows the short-sightedness of that policy which disestablished the West Indian Regiments, for now, just on the dawn of summer, we are obliged to ship off an Irish corps to the West Indies, in order to enable black troops to proceed to the Gold Coast. Had nothing so unforeseen happened, the 97th Foot would, in the ordinary course, have proceeded to Bermuda towards the end of the year, whereas now it will go to Barbadoes in the full blaze of a tropical summer."

It took years of experience to arrive at the establishment of *West Indian Regiments*, it only required days for the genius of the English War Minister to put them down as useless, and the above points out the moral of the transaction.



The efforts of the Peace Society have been singularly futile in effecting any portion of the objects for which it was established. Since the Peace Congress of 1848 at Frankfort, Europe has been convulsed with contests, internicine and international, even JOHN BUCOUR's mission to his dearly loved friend the late CZAR NICHOLAS was not only a failure but an egregious mistake, although the same individual's influence in the GLADSTONE Ministry led to the disgraceful abrogation of the securities which were placed on ambition and is preparing the way for a repetition of worse scenes than those his mistaken efforts were directed to arrest.

So far from wars having ceased through the meddling of those philosophers it would appear as if they had actually played a prominent part in forcing contests which might otherwise never be undertaken. It is notorious that the late CZAR NICHOLAS would never have risked the consequences of the Crimean contest if he had not been persuaded by BUCOUR and his associates that they represented the people of Great Britain and that they would not fight; be this as it may, a quarter of a century of effort on the part of the Peace Society is illustrated by the Revolutionary contests of 1848-49—the Crimean War—the Indian mutiny—the Austro-Italian contest of 1859—the Schleswig-Holstein war—the civil war in the United States—the Austro-Prussian contest—the Abyssinian war—and the Franco-Prussian war—leaving at present in active operation—the following contests, any one of which may lead to consequences involving a general outbreak, viz.—The Internicine contest in Spain—the civil war in Cuba—the Russian and Khivan contest—the Indian troubles in the United States—the Dutch and Atheen war—the Ashantee contest on the West Coast of Africa in which England is engaged. The late President of the United States is credited with the saying "that it was a bad time to swap houses while fording a river," with such elements of disorganization abroad it is a bad time for a prudent nation to disarm, and from the known activity of European governments in organizing their armies and their fleets it is evident that little faith is placed on the maintenance of peace.

Those amiable dreamers who meditate on the beauties of universal brotherhood would be horrified to think that they indirectly had anything to do with such a fearful catalogue of evils as detailed in the foregoing enumeration, since their idea took a practical shape of a society organized for putting a stop to violence and bloodshed; it is a singular fact nevertheless, that such is the case, and it can be clearly shown that their intervention has in more than one instance been singularly injurious and disastrous.

The last Gazette contained the announcement that there were to be no camps of instruction during the current year, but that the annual drill was to be put in at the Corps

Head quarters. With the fact before the country that the temper of the House of Commons indicated hardly satisfaction with the reduction of \$550,000 off the estimates for military service, and that ministers might have gone much further with their approval, such a conclusion is inevitable; but we very much question whether in this particular the House fairly reflected the opinions or wishes of the country; it is quite certain, however, that its interests were not consulted.

In ordinary civil life society is kept together by well devised safe guards prominent amongst which is a force armed or unarmed as the case may be, known as local or municipal police. No sane man will presume to meddle with the organization or standing of such a force, much less to talk of its abolition on the pretense that the general honesty of mankind has improved so much that it is useless providing safe guards against dishonesty or violence.

What is true of municipalities and individuals is equally true of nationalities and the great mass of their peoples, and it is as necessary to guard individual wealth from national cupidity as it is to provide against the known danger, from the burglar, or foot pad of social life, the result therefore of crippling the development of a military system is to leave the State practically defenceless, and to paralyze the force capable of protecting its interests.

A pretty general idea appears to prevail that the era of wars is passed or is about to pass away for ever, judging by the preparations making in other countries such a conclusion must be ranked amongst the fallacies of popular thoughts and ideas. Parliament appears to be in the state of the English House of Commons previous to some startling event, which has the effect of a fearful outlay of public money and a disastrous loss through the consequent and ensuing panic.

We believe that every one of the great commercial crashes which have shaken public as well as private credit, had at bottom the idea of insecurity from political aggression as the motive power that precipitated each disastrous crisis, and that insecurity was founded not on the fact of immoderate outlay for military purposes, but because that outlay was not sufficient, had not produced a force capable of inspiring "the man upon change" with the idea of security; and we are quite certain that the efforts of the Canadian House of Commons in this direction will be the cause of a corresponding crisis.

The soldier is the security first and last for the success of the trader, failing that, wealth only belongs to an individual or State as long as they can hold it, and that time can be measured by the exigencies of a better prepared State. The reply of Solon to the Lydian King, whose name has become the synonym for acquisition, that "He who

possessed more iron would be master of the Gold," is as true now as it was 3,000 years ago.

We need not point out the necessity which exists for keeping our troops in an efficient state, the very conditions which compel us to keep up a military force at all fully illustrate that requisite of their organization. As a part of the British Empire we are bound to be able to render the Mother country efficient military assistance, and as a numerically weaker people than our neighbors we are obliged in self defence to maintain a force capable of protecting our independence of action and national autonomy. With the example of France before us any act tending to paralyze our military development is not an act of wisdom.

The peculiar value of the camps of instruction were that they taught men how to act together, and an outline of what the life as well as duties of a soldier should be, such knowledge will not be acquired at Head-quarter's drill, and the action so far delays the development. The Volunteer principle was gradually leavening the country with good soldiers, with men that could work together under discipline. There were some drawbacks; too much of the cost of supporting the measure was thrown upon the officers, and the pay of rank and file was and is not what it should be; so that, instead of reducing the allowance true political economy would have pointed in the other direction, especially as it is quite clear the country would be receiving full value for its outlay, and its prosperity warranted the advance.

For the present nothing can be done beyond submitting to circumstances, and endeavouring to do all that is possible with the means at hand, but it is a grievous mistake for the sake of a paltry sum of 17 cents *per capita* on the population of the Dominion, to cripple a force that by its prestige alone added many thousand times more to the general prosperity of the people.

This is a subject, however, on which public opinion is sure to be brought to bear and make itself felt, so that it is quite possible the next session may find the House of Commons quite willing to recognize the claims of the Volunteers, and to call to remembrance that the system is the cheapest, the most effective, and interferes less with the industries of the people than any other.

The courtesy of Lieutenant Colonel PARSON, 38th Batt., has supplied us with files of the Nelson Examiner (New Zealand) of 12th April last, containing very interesting news from that colony, and the presentation of prizes to the amount of £587 sterling to the successful competitors at a rifle match on 15th March last.

It appears to have been a very gorgeous affair indeed, the prizes being distributed by the Hon. Colonel RICHMOND, C.B., assisted by Mrs. RICHMOND. The following extract

will show that the average shooting was very good.

"NELSON AND MARLBOROUGH DISTRICT PRIZES.  
—The following is the return of the firing for these prizes:—

	FIRST SET.			Totals.	Prizes	
	200 yds.	500 yds.	600 yds.		£	s.
Pte. W. Soper*	17	18	11	46	7	0
" E. Sutton*	13	15	17	45	5	0
Sergt. Boddington†	14	13	14	41	4	10
Pte. Crossman†	10	16	14	40	2	10
Sergt. J. Burn†	17	14	8	39	2	10
Capt. W. J. Baillie*	14	13	11	37	2	10
Sergt. J. Fuller*	13	16	7	36	2	0
Pte. F. Sutton*	14	15	6	35	2	0
Lieut. H. Geo*	12	7	15	34	2	0
Pte. P. Martello*	15	11	8	34	1	0
" W. L. Soper*	16	6	10	32	1	0
" Jeffrey*	8	13	10	31	1	0

Private W. Soper, of the Spring Creek Volunteers, is the winner of the District Medal.

	SECOND SET.			Totals.	Prizes	
	200 yds.	400 yds.	500 yds.		£	s.
Pte. T. Gifford*	13	15	15	43	5	0
" R. Soper*	18	12	13	43	3	0
" H. Moore†	16	17	10	43	2	0
Sergt. D. Burn†	17	13	10	40	2	0
Lieut. D. Monro*	14	17	9	40	1	10
Sergt. J. Cane*	14	10	15	39	1	10
Pte. M'Allister*	17	24	6	37	1	0
Captain Sinclair†	10	12	14	36	1	0
Pte. Metcalf*	11	15	10	36	1	0

\* Attached to a name signifies that the competitor belongs to a Marlborough company; † that the competitor is a member of the Nelson company. It will thus be seen, that out of twenty-one prizes Marlborough carried off fifteen, including the district medal, and the two highest prizes in each set. This is not creditable to our Volunteers."

It is with feelings of deepest regret we have to record the death of the Hon. JOSEPH HOWE, Lieutenant Governor of Nova Scotia, on Sunday morning, 1st June, at Halifax, in the 69th year of his age. Four weeks had barely elapsed from his appointment, to the first position in his native province, till death terminated the career of one of the greatest men British North America has produced.

A statesman, a patriot, and an orator—a poet, a forcible writer, and an able man, the Hon. JOSEPH HOWE for nearly half a century was one of the foremost figures in that group of statesmen which those provinces have produced.

The following obituary notice of the death of a distinguished Canadian soldier, we copy from the *Mail*.

"Colonel G. T. Denison, s.r., breathed his last at seven o'clock yesterday morning (Thursday). The attack of paralysis of the brain which so suddenly seized the lamented gentleman on Wednesday evening resulted in the gradual lapsing of the patient into a state of *coma*, which was terminated by death at the hour mentioned. The Colonel was 57 years of age. He was born in this city, when it was known as 'Little York.' His father emigrated to Canada from Yorkshire, England. The deceased joined Fitzgibbon's rifle corps during the troublous times of the 'Rebellion,' and served as a Lieutenant in that corps at Navy Island. He subsequently served with the same rank in the corps, then known as the 1st York Cavalry, now called the Governor General's Body Guard, of which the deceased's son, Capt. Fred. C. Denison, is now commander. He afterwards became commandant, first of all the cavalry, next of all the artillery, and finally of the whole strength of the Fifth Militia District, then comprising the counties of York and Simcoe. Colonel Denison was the senior volunteer officer of Ontario, and the only full colonel in the Province. He was enrolled as a barrister about the year 1839, and practised his profession up to 1855. He was the Vice-President and an active officer of the York Pioneers, whose flag courted the breeze at half mast yesterday (Thursday) over the cupola of St. Lawrence Hall, as a token of respect to his memory. During the years from 1843 to 1873 Colonel Denison faithfully served the citizens of St. Patrick's Ward as one of their aldermen, and when he retired from the civic turmoil of that day he was the father of the Council. We had almost omitted to say that he was commandant of the militia district named during the Fenian raid of 1866."

Colonel Denison was the father of "Modern Cavalry," Lieutenant Colonel G. T. Denison, jr.

From the *Irish Times* we copy the following paragraph relative to a gallant Canadian soldier.

"Captain Thomas R. Jackson, 1st Canadian Cavalry, is attached to the 1st Dragoon Guards, Island Bridge Barracks (Dublin) for a period of instruction, with the approval of the Major General Commanding the Forces and the sanction of the War Office."

CORRESPONDENCE.

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

MONTREAL.

(FROM OUR OWN CORRESPONDENT.)

A court of enquiry consisting of Lieut. Col. Jarvis of Toronto, Lieut. Colonel Jackson of Belleville, and Lieut. Col. Lamontagne, has

been sitting during the past few days to adjust the differences between Major Robinson and Colonel Bond, both of the 1st Prince of Wales Rifles. Without attempting to criticize on evidence so far adduced, I feel sure the matter will be thoroughly sifted and justice done to all parties.

The funeral car which will be employed to take the mortal remains of the late Sir Geo. Cartier to the place of interment is being built by Messrs Larivière, St. Antoine Street, from drawings and designs of Marshall Wood, the sculptor of Her Majesty's statue. The members of the Union of St. Joseph will attend the funeral in a body, also the officers of the Mount Royal Rifles and other corps. The City of Three Rivers will send a deputation to meet the body at Quebec, and accompany it to this city; and at a meeting of the bar of Three Rivers resolutions of sympathy with the family were passed.

The High School cadets consisting of two companies Nos. 1 and 2 lately had a march to the mountain, on Saturday went over to St. Helen's Island, accompanied by Lieut. Colonel Bacon; a number of field exercises were gone through very creditably, and at the target practice in which of course the older members took part, some capital scores were made. The younger lads had plenty of blank cartridge. The excursion was altogether a pleasant one, and Captain Barnjuin is to be complimented on the marked success he has had with the cadets.

The Military School has closed for the ensuing six months, the final examinations being conducted by Lieutenant Colonel Harwood.

The "no camp" this year has disappointed many. B.

The proceedings in the Tichborne case have been more interesting during the last two days. Mrs. Jury, a connection by marriage to the Orton family, positively identified the claimant as Arthur Orton, and Sonora Hayley, of Melipilla, recognized in him the Thomas Castro she had known in South America. Other witnesses from Australia have also been examined.

REMITTANCES Received on Subscription to THE VOLUNTEER REVIEW up to Saturday the 7th inst.—

BEAVERTON, Ont.—Lieut. C. H. Davidson	.....	\$6.00
HAWKESBURY, O.—Ens. Jas. Dandy	.....	4.00
INGERSOLL, Ont.—Capt. R. Y. Ellis	.....	2.00
AYLWIN, Quebec—Lieut. R. McAfee	.....	4.00
QUEBEC.—Lieut. Colonel T. B. Strange	.....	2.00
WAKEFIELD, Que.—Lieut. Wm. Millar	.....	2.00

(Per Capt. and Adj. L. J. Bland.)

HALIFAX, N.S.—Major Ritchie	.....	2.0
Lieut. Colonel Belcher	.....	2.00
Lieut. McKerron	.....	2.00
Lieut. Goreham	.....	2.00
Capt and Adj. Smithers	.....	2.00
Major Murray	.....	2.00
Capt. McIntosh	.....	1.00
Lieut. Col. J. J. Bremner	.....	2.00
Lieut. Flowers	.....	2.00
Lieut. Walsh	.....	2.00
Major J. E. Albro	.....	2.00
Lieut. Humphrey	.....	2.00
Lieut. J. E. Curren	.....	2.00
Capt. C. S. Curren	.....	2.00
Lieut. Donald Robb	.....	2.00
Lieut. J. C. Anderson	.....	2.00

## BY-GONES.

"Let by-gones be by-gones,"—they foolishly say,  
 And bid me be wise and forget them;  
 But old recollections are active to-day,  
 And I can do nought but regret them;  
 Though the present be pleasant all joyous and gay,  
 And promising well for the morrow,  
 I love to look back on the years past away,  
 Embalming my by-gones in sorrow.

If the morning of life has a mantle of gray,  
 Its noon will be brighter and brighter;  
 If March has its storms there is sun shine in May,  
 And light out of darkness is lighter:  
 Thus the present is pleasant, a cheerful to-day,  
 With a wisor, a soberer gladness,  
 Because it is thiged with the mellowing ray,  
 Of a yesterday's sunset of sadness.

THE LATEST IMPROVEMENT IN  
MILITARY BREECH-LOADERS.

When the Small Arms Committee decided after a most laborious and carefully-conducted inquiry, that the Martini-Henry rifle was the best and most perfect description of arm which had been submitted to them, they were undoubtedly right in recommending its adoption as the new weapon for the British Army. It never failed during the many severe trials to which it was subjected, and although disappointed inventors protested at the time against its adoption, not one of them could prove that they had any better idea to offer; in fact, the Martini, on its own merits, fairly beat down opposition from every quarter; nor was its triumph at the time undeserved. However, the greatest mechanics in England still cling to the belief that a better, and, at the same time a more simple and inexpensive piece of breech mechanism might be produced; consequently from time to time numerous new ideas have been brought before the public—many of them of much merit—but those who are acknowledged judges of what is required hitherto held that the choice of the Small-Arms Committee had not been surpassed. Yet from the first many defects were pointed out connected with the Martini. It is undoubtedly somewhat complicated and expensive in its construction. Its too numerous parts require much time and skill in their manufacture, and necessitate the employment of elaborate and expensive machinery. The mere "assembling" of the various parts is a matter which has to be taken into consideration. Now that we have erected all the necessary machinery for its construction at our Works, it may be, perhaps, questionable whether it would be desirable to throw aside the selection of the Small-Arms Committee, and adopt a more easily constructed breech action, unless, indeed, it would be proved that an absolute saving would be gained thereby.

In the event of a war, we, ourselves and our colonies, must be supplied with arms, and it is desirable that we should not only possess a good arm, but one which our colonists might be able to manufacture in their own workshops; again, the description of arm should be easily made and inexpensive. Now, to have a cheap arm, and one that would be expeditiously made, we must have few parts to construct, nor should these parts require much nicety of finish, in order to make them work properly. We fear that the Martini, with all its excellence, would prove not only very costly, but owing to the time and care required in its construction, a difficulty would be found, in the event of a sudden outbreak of war, in supplying with proper expedition a sufficient number of

arms for our own masses, whilst our colonies, without the requisite expensive machinery, would be totally unable to provide themselves with the same description of weapon. So, if we can find a breech mechanism at once perfect in all its details, easily and cheaply constructed, one which the workshops of Canada or Australia might rapidly produce, we should be justified, even now, in rejecting the Martini, and adapting our machinery for the construction of a more easily made and less elaborate style of breech action.

The Martini, we know, consist of 30 separate lever pieces—viz., body, lever, block-lever, catchpiece, trigger guard, stock bolt, block, coiled mainspring, extractor, indicator, stock bolt washer, tumbler, striker, nutstop pin block axis, thumbpiece index, locking bolt, thumbpiece, trigger, tumbler rest, block catch lever pin, trigger spring, locking bolt spring, extractor pin, tumbler rest screw, trigger screw, keep screw, thumb piece screw, trigger spring screw, index thumbpiece screw. All of the parts necessitate material in manufacture, and time and labour in finish and fitting; whereas the latest, and by far the most simple and ingenious breech action which has hitherto been invented, that of Mr. Aston, the armourer of the School of Musketry, consists simply of ten parts in all, viz., body, breech block, hammer and tumbler in one, mainspring and sear spring in one, extractor, trigger and sear in one, side lever, claw lever, extractor pin which also holds the hammer and trigger plate, and breech tong pin.

The body, which is fixed to the stock by a tong pin, is somewhat similar to that of the Martini, only much shorter, being but 2½ inches in length, so that it can easily be case hardened. The greater length of the Martini renders casehardening extremely difficult, if not altogether impossible.

The breech block has a slot cut for the hammer to move in, and has a small hole through the center of its face for the point of the hammer to strike the cap. On each side of the breech block is a strong stud for a claw lever to act on when opening or closing the breech.

The hammer, which also acts as tumbler, has one stud on each side fitted for the downward movement of the breech block, by which it is brought to full or half cock. The tumbler end of the hammer is curved so as to act on the bottom end, or foot of the extractor for throwing out the cartridge case. The other end or point is made to press through the small hole in the face of the breech and explode the cap. The hammer can be made to suit either a hook or swivel mainspring. The mainspring is a single flat piece of metal screwed by a pin, and acts also as sear spring.

The extractor is somewhat similar to that of the Martini, and is acted on by the lower end of the hammer when coming to full cock. The foot of the extractor is made longer than that of the Martini, and is bent to a smaller angle, by which means more power can be brought to bear in extracting.

The trigger, which is fitted to the trigger-plate, has a slightly prolonged nose, which acts as sear to enter the full and half bents of the tumbler. No separate sear spring is necessary to secure its action, the mainspring performing this function.

The side lever for opening and closing the breech consists of a flat piece of iron fitted on the right side of the action, and has a simple and most ingenious contrivance to secure it when the breech is closed. By means of this lever the rifle can, at pleasure,

be placed at full or half cock—the hammer having two bents in its tumbler, and a slight downward movement of the lever allows the sear, which is a part of the trigger, to enter the half bent. The lock may again be brought to full cock for firing by a further downward movement without ejecting the cartridge.

The lever which moves the breech block and to which the side lever is attached by a key, consists of a piece of steel acting on the stud of the breech block, to which it attaches itself by means of claw shaped cuts.

When the side lever is lowered the claws force down the breech block, and bringing the hammer to full cock eject the case.

The key of the side lever passes through a round hole in the claw lever, where there is a slot to receive the stud of the key. This stud also prevents the side lever worked out when in use. The extractor pin serves at the same time to secure the hammer and trigger plate. In fact, in every portion of the Aston breech action we are not only led to admire the beauty of its mechanism, but also the wonderful skill with which the inventor manages to economise the parts in the performance of their several separate functions. One pin holds the extractor, hammer and trigger plate; the point of the hammer explodes the cap whilst the other end acts as tumbler, and also as lever to eject the case.

The mainspring is made to perform the double duty of causing the blow of the hammer and at the same time secures the action of the gear. And yet too much work is not imposed upon any single part! In point of fact, the whole action may be said to consist simply of seven parts,—viz., breech block, hammer, extractor, mainspring, trigger, side lever, and claw lever. Moreover, the whole of these parts can be stamped out at a single blow. The action of Aston's hammer is a manifest improvement on the Martini striker. The latter is worked by means of coiled spring, having a force of 45lb., the striker being merely pushed against the cap, whereas the Aston Hammer describes a quarter circle in its descent on the cap, thereby giving it a blow, and requiring but a comparatively light mainspring. Mr. Aston finds that one of a force of seven pounds is amply sufficient. It is computed that the cost of making a rifle on the Aston principle, with everything complete, would not amount to more than 40s., with the Henry barrel, which is the most expensive description of barrel we have. We believe it will yet be found that the Martini action is too expensive and complicated in its construction, and we do not hesitate to say that the Aston breech action has fairly surpassed it, and, indeed, all other inventions, on account of its mechanical perfection, the simplicity of its construction, and the ease, rapidity, and economy by which it can be manufactured.

## PRUSSIAN TACTICS.

The conclusion arrived at by so great a military Power, as Prussia, relative to the fighting formation of her infantry soldiers, cannot fail to be of interest to our readers; and they must also, we imagine, be of the greatest practical importance, coming after the late war experience, and the actual use of tactics based thereon during the last drill season. They are expressed in the following Royal Prussian Cabinet Order, dated March 19, 1872, and quoted in the *Military Wochenblatt*, of April 2, 1873:—

INSTRUCTION OF INFANTRY.

"In pursuance of my order dated Ems, 4th of July, 1872, I ordain—the report of the generals relative thereto having been laid before me—that the following rules come into use in the instruction of infantry, until further orders:—

"1. When actually under the enemy's fire the employment of battalion columns can only be justified by special circumstances. The normal fighting formation of the first line is therefore to be in company columns. The battalion must, however, under all circumstances be in the hands of their commanders, who command their company columns in the same way as the regimental commander does his battalions.

"2. When the Enemy's fire renders it necessary, the 'trüffen' (bodies of troops) in rear must also assume an appropriate formation, in order to lessen its effects. It may, therefore, be suitable that these 'trüffen,' or certain of them, from wholly or partially in company columns or in line. The companies may also deploy in line, or break off into half 'züge' and sections. At wheelings and alterations of direction of the 'trüffen,' the battalions have, however, as a rule, to assume the formation in columns.

"3. For the formation of the skirmishing line, half 'züge' at least are to be employed at once.

"4. The troops in support may follow the skirmishing line in line or column (in 'züge,' half 'züge,' or sections) and, quite as an exception, also in file.

"5. The attack under certain circumstances, and with due regard to the ground can also be carried out as follows:—After running across a space of fifty to sixty yards the troops throw themselves down, and after a short pause, the advance will be continued in this manner (the advance by rushes). The regulations for the execution of the bayonet attack in line, and in large or smaller columns, remain in force.

"6. A cavalry attack can be received in other than the square formation. The troops will have their attention drawn to the approach of cavalry of the enemy by the signal, 'Look out,' (Achtung!) whereupon the leader will order the formation most suitable to the circumstances."

"7. The distances laid down in sections 114 and 120 of the regulations will be increased in accordance with the object of the exercise to be performed.

"8. Regiments and brigades must be practised in executing precisely movements in accordance with the formations submitted.

"In the above rules the demands of modern fighting have been taken into account. I must, however, impress strongly, that in the instruction of companies, battalions, regiments and brigades, the following sections of the regulations Nos. 43, 88, 98, 99, 112, 113, 114, 115, and 130 have to receive increased attention; so that the multiplicity of fractions, and the development of strong lines of skirmishers, necessitated by the manner of fighting of the present day, do not lead to a disastrous lessening of the tactical combinations. This danger can only be effectually opposed by an intimate knowledge of the fighting formations on the part of the officers, and by a high degree of fighting and fire discipline, combined with a well grounded and strictly executed system of drill (exercir-schule). Although I have to make such increased demands upon the instruction of infantry, I nevertheless accord it some relief; for the practice of some of the

practice of some of the regulations formations will in part be entirely abolished, and in part undergo a modification.

"I therefore ordain that the following be no longer practised:—The counter march (S. 34); column formations by placing the subdivisions one before another (S. 60); deployments upon a rear division (S.S. 94, and 96); movements with the attacking column formed in three ranks; breaking off and forming up the division in the attacking column on the flanks (S. 73); the formation of the skirmishing subdivision in open and closed column (S. 84); and the formation of square in three ranks (S. 89).

"Further—the following are no longer to be made the objects of an inspection:—The formation of subdivision columns to the left (S. 60); and the deployment from the same (93); the marching in file of a battalion (S. 63); breaking off and reforming the attacking column from the head and tail (S. 79); and changing the attacking column into the close or open subdivision column (S. 80.)

"The breaking off by companies; and forming the attacking column, as laid down in S. 79, remains as before, an object of practice and inspection. You will cause the above to be further promulgated.

"The War Minister."

(Signed)

WILLIAM.

"The above Royal Cabinet Order is here-with made known to the army.

Signed,

V. KAMECKE.

A translation of the previous Cabinet order referred to above, and dated July 4, 1872, will be found in a pamphlet published some time ago on "Experimental Tactics," by Colonel E. Newlgate.

SPECIALIZATION OF SHIPS OF WAR.

(Translated from the Russian in the *Revue Coloniale et Maritime* for May, 1873.

We now come to the next question: What order should take the place of the old fashioned line of battle?

When we speak of an "order of battle" we must be understood to mean the order in which a fleet should advance to meet another hostile fleet.

The authorities, who have written most recently on the subject of naval tactics, two Austrian naval officers, Lieutenant Weyprecht and Captain Oesterreicher, speaking from impressions formed and experience gained in the combat of Lissa, deny *in toto* that any order whatever can be maintained during a naval engagement in the present day. Probably the majority of officers will coincide in this view.

As to the best order for commencing an action, opinions are divided. We have single and double lines, wedges, parallelograms or naval squares, and double indented lines, but all these subdivisional arrangements are not strictly speaking orders of battle, but rather dispositions of the fleet. Assuming that in certain of the above cases it is necessary that the posting of the several vessels in each sectional position of the fleet should be determined by the peculiar attributes of individual vessels, it will be found that the question has not been touched upon at all by tactical writers. With a fleet subdivided into smaller portions, each forming a sort of tactical unit by itself, it would be of greater importance to ascertain what ships should be combined in each. Should we post together ships possessing, as far as possible, the same qualities—or, should we choose

them so as to supplement each other and afford mutual support? We have as yet been told nothing upon this point: and yet these interior arrangements are of far greater importance than any general plan of formation for the whole fleet.

But the interior arrangements of a fleet in order of battle can only be rendered truly effective by a thorough acquaintance with the special qualities of every vessel in the fleet, and also those of the enemy's ships. Those who have hitherto written on the subject of naval tactics, speaking constantly of ships of war in the abstract and *en masse*, without attempting a more minute examination of the various qualities which constitute the chief value of individual vessels, which have had no motive and no means to enter into these details. Nevertheless, in these very details lies the essence of the naval tactics of the future.

Trammelled by old fashioned habits of regarding naval tactics, M.M. Weyprecht and Oesterreicher have arrived at the conclusion that the science of naval tactics no longer exists. And in regard of vessels with indeterminate qualities, whose principal role is ramming, they are no doubt right. As soon, however, as we begin to recognize distinctions between ships depending on their qualities and armaments, we are led to the consideration of the specific qualities of each class, upon which qualities must depend the method of handling each individual vessel, and its position in the order of battle.

Naval tactics thus presents a wide field of study—a study necessarily involving considerations of *naval strategy*, a science which at present has no existence.

Viewing the matter broadly and considering how confused and entangled are the questions at issue, it appears absolutely necessary that these two branches of science should be fused into one under the head of *maritime warfare*.

With the facilities for manœuvring which the vessels now possess, the sea may be regarded as a vast field of battle, where the outposts of the side remaining on the defensive occupy, the whole length of the latter's coasts.

If then, a direct answer be required to the question: What should now be the order of battle for a fleet or squadron putting to sea with the object of bringing the enemy's fleet to an engagement? we can only formulate the reply thus:—The order of battle will depend absolutely on the descriptions of vessels of which the said fleet or squadron is composed, and also upon the composition of the hostile fleet.

Then comes another question. In engaging an enemy of inferior strength, it is still desirable to close with the latter as far as possible?

This question, which in times past was generally decided in the affirmative, must now in most cases receive a negative reply.

For example, a heavy ironclad attacked by a small armoured ram or torpedo vessel should not only *not* close with her opponents, but should endeavor to keep them as much as possible at a distance. This rule is not without exceptions, as in the case where the ironclad finds herself abreast of the ram when she must use all her endeavors to keep her opponent in such a position. But this is an exceptional instance. In the case of ships forming an unbroken line—including not only rams and torpedo vessels, but large sized armor clad ships, provided with spars and torpedoes as auxiliary weapons—it is impossible to decide at what particular distance it will be most advantageous for any particular ship to engage any particular

type of adversary, without knowing intimately beforehand the specific qualities of one and the other.

The conditions of attack and defence in this case alike depend entirely on the qualities and armament of the ships engaged. A direct answer to the foregoing questions appears therefore impossible.

In our next and concluding notice we shall have to consider: What is now the true measure of the fighting powers of a ship of war.

### THE SWISS ARMY.

The *Farkbuecher fur die Dutches Army and Marine* in a notice of the Swiss Federal Army furnishes the annexed particulars:—The new Swiss bronze breech loading field gun is 8.4 centimetres in calibre, and weighs 433 kilogrammes; the ordinary charge is 840 grammes. The weight of the projectiles are as follows: shells, 5.53 kilogrammes; shrapnell, 5.61 kilogrammes; canister, 5.53 kilogrammes. The gun is mounted on an iron field carriage, provided with side boxes. The limber is also of iron. Both are fitted for practice with wooden wheels. With forty rounds in the limber boxes, and a team of six horses, the total draught of the piece is 1,600 kilogrammes, or with a detachment of five guns mounted on the gun and limber boxes, 2,000 kilogrammes. The range and accuracy of fire are very favourably reported of. The terminal velocity of the shell was found to be 356 metres, at a range of 600 metres with an elevation of 0° 45'; 239 metres, at a range of 2,500 metres, with an elevation of 7°; and 195 metres at a range of 3,500 metres, with an elevation of 11° 30'. The fuzes used with the shells are a modification of the Prussian fuze. The shrapnells are an improvement on the Boxer shrapnell. They are of wrought iron with cast iron ends the bursting charge being contained in a central brass tube. The charge consists of 130 bullets of 16 millimetres diameter, 20 of them being of zinc, weighing twelve grammes each, and the remaining 110 of hardened lead, weighing 22 grammes each. This compound consists of four parts by weight of lead and one of antimony. Shrapnells of like pattern are used with the steel 10 centimetre and the bronze 12-centimetre guns for artillery of position. The canister shot consists of tin cases fitted with wooden bottoms, and filled with hardened leaden bullets of 24.5 millimetres diameter, weighing 75 grammes. The revolver adopted in the Swiss cavalry and artillery is stated to be an excellent weapon. It is an improvement by a Major Schmidt on the six shooting "Chameot Delvigne" revolver. The manufacture of the weapon is in progress at the establishment of M.M. Perlot freres, at Liege. The total number ordered is 30,000, of which 800 were ready for delivery on 1st February last. A lighter description of the same weapon, to be used with the same ammunition, has been proposed for officers and men of the infantry. Some experiments with this weapon were commenced in November last, which were understood not to be concluded when the notice was written. An order of the Federal Government of 4th November, 1872, provides that the whole of the landwehr infantry should be furnished with breech loading rifles in the course of the current year; also that by the end of the year 1864, the whole of the active and reserve infantry contingents of the Federal Army shall be equipped with the new "Vetterli" repeating rifles. Of these 119,000

stand have been ordered, of which 65,000 have already been delivered. For the annual manoeuvres, which are to take place under the command of Divisional Colonel Scherer, the following troops are detailed: two battalions of rifles, nine battalions of infantry in half battalions, one squadron of dragoons, to 8 centimetre field batteries, one sapper company, one field telegraph detachment, with commissariat and pontoon train in proportion. The Divisionary staff guides will perform the duties of field gendarmes. The sum voted by the Federal Government for military purposes during the current year amounts to 3,000,000 francs (£125,000) the remaining cost of the army being defrayed by the several cantons individually.

### RIFLE MATCHES.

#### RIFLE TOURNAMENT.

The Rifle Tournament which the officers of the Sarnia Battery, Garrison Artillery, were obliged to postpone during the Christmas week on account of the storm, took place at the range on the 23rd and 24th ult. The Battalion, with the exception of the Oil Springs and Forest companies, was represented. The Battery, under the G.T. Rifles, and a few members of the Association took part in the contest. The following is a list of those who took prizes, with the scores of each.

#### VOLUNTEERS AND ASSOCIATION MATCH.

Ens. McLea.....	29	\$7.00
Capt. Wood.....	28	6.00
Sergt. Vanaken.....	29	5.00
Capt. Cruikshanks.....	27	3.00
Sergt. Adams.....	27	4.00
Pte. McIntyre.....	24	2.00
Sergt. Cruikshanks.....	20	1.00
Corp. Munroe.....	22	1.00
J. F. Elliot.....	19	1.00

#### SECOND MATCH.

##### Volunteers, non com'd. officers and men.

Sergt. Ticknor.....	33	\$7.00
Pte. Bass.....	30	5.00
Pte. McIntire.....	29	4.00
Sergt. Adams.....	27	2.00
Sergt. Ellis.....	22	1.00
Sergt. McElheron.....	21	1.00

#### THIRD MATCH.

##### Officers of 27th Battalion, G.T.R. Rifles, and Sarnia Battery.

Lt. O'Neil.....	34	\$10.00
Capt. Cruikshanks.....	30	8.00
Ens. McLea.....	28	6.00
Ens. Dalziel.....	25	4.00
Capt. Wood.....	17	2.00

#### 4TH CHAMPION MATCH.

##### Open to all who have made an average of outers. Seven rounds at 400 yards.

Sergt. McElheron.....	23	\$10.00
Ens. McLea.....	20	8.00
Pte. Wosley.....	17	6.00
Ens. Dalziel.....	17	4.00
Sergt. Williamson.....	16	2.00
Sergt. Ticknor.....	15	1.00
Capt. Wilson.....	15	1.00
Adj. Fisher.....	13	1.00
Sergt. McIntire.....	13	1.00
Pte. Bass.....	13	1.00

It will be seen by the above that Ensign

McLea made the largest score, his prize being \$21, made up of a morocco satchel, the gift of Mr. D. McKenzie, value \$6.75, a lady's sacque, the gift of Mr. John Crawford, \$3; a pipe, 50 cents, and cash \$10.75. Captain Cruikshanks stands second on the list for \$11—a meerschaum pipe, the gift of Mr. J. Woods, \$5, cash \$6. Sergt. McElheron took \$11 in cash and goods; Lieut. O'Neil took the first prize in the officer's match value \$10.

On the whole the matches were well contested, and, with the exception of the wet ground, the circumstances were all that was desired by the lovers of this rational kind of amusement, which combines pleasurable excitement with a patriotic duty. We are only sorry that the tastes of a larger number did not lead them to the range on the national holiday.—*The Canadian*.

### THE SHIPS OF THE FUTURE.

At the Royal Academy banquet on Saturday evening, Sir J. Packington, in responding for the navy, said: "It is with a pang of regret we no longer see depicted on your walls by Stanfield, by Turner, and many other of our marine artists, those beautiful picturesque ships which used to contribute alike to our artistic taste and national pride. Those ships are now the ships of the past. If we turn to the ships of the future, I am afraid there is no chance that any artist will ever be induced to give us the portrait of the *Devastation*, the ships of the future will have no canvas upon them, and I fear we shall never see them on canvas. Our beautiful ships are now changed to unsightly monsters, which I fear will never be seen on the walls of the Royal academy; but we trust and fully believe that they will be better adapted, perhaps, than any others have been to the protection of our shores; and of this I am quite certain—whether or not these ships of the future be exhibited on these walls, they will be commanded by officers as able and as brave, and by crews as gallant and true, as have done honor to our flag, and fought the battles of England in times of yore in our old wooden walls."—*Broad Arrow*.

The *Devastation* made a short cruise yesterday from Queenstown. The ship behaved well, and made 12 knots under easy steam.

Prince Jerome Napoleon has arrived in Paris. His presence causes much agitation in the Lobbies and in the National Assembly.

**BREAKFAST.—EPPS'S COCOA.—GRATEFUL AND COMFORTING.**—The very agreeable character of this preparation has rendered it a general favorite. The *Civil Service Gazette* remarks:—"The singular success which Mr Epps attained by his homoeopathic preparation of cocoa has never been surpassed by any experimentalist. By a thorough knowledge of the natural laws which govern the operations of digestion and nutrition and by a careful application of the fine properties of well-selected cocoa, Mr. Epps has provided our breakfast tables with a delicately flavoured beverage which may save us many heavy doctors' bills." Made simply with boiling water or milk. Sold by the Trade only in 1lb., 1lb., and 1lb. tin-lined packets, labelled—JAMES EPPS & Co., Homoeopathic Chemists, London, England.