



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

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No 50.

NEWS OF THE WEEK.

From Great Britain we learn that all the stokers employed by four or five of the largest gas companies in the city of London have struck work, ostensibly because two of their number were unjustly discharged. The directors of the companies warn the public to use as little gas as possible till the trouble is ended.

The steamship "Dalmatian" from Liverpool for the Mediterranean, has been wrecked, and 35 of the passengers and crew were lost.

An orderly meeting was held in Hyde Park on the 1st inst. Messrs. Odger and Bradlaugh were the principal speakers. A resolution condemning the public Park regulation Bill was adopted, and a petition drawn up asking for the resignation of Commissioner Ayrton.

It would appear to be the last effort of servile folly to allow all the vagabonds and loafers of a city like London, to distract the public peace at the call of every scheming cobbler like Odger. The time is not long since the law of England was that no legal public meeting could be called, except by a magistrate or sheriff, on the requisition of a certain number of rate payers. Now every ruffian can marshal his host of blackguards, and English journals will announce the fact that an *orderly* meeting has been held, with one of the *Tooley Street Tailors* in the chair. Said meeting limiting its modest desires to the resignation of a Minister of the Crown. The Whig Radicals are fast bringing London and its blackguards, the latter especially, to represent England, as their friends have brought Paris to represent France, and with pretty much the same results.

The gas works in the town of Newport, Monmouthshire, exploded last night with terrible effect. Several persons were instantly killed and a large number injured some fatally.

The steamship "Cresswell" from Falmouth to Cork, was lost during the voyage, and 21 passengers and crew perished.

Five hundred of the stokers employed in the London Gas Company, who are now on strike, have been summoned to appear before the Police Court under the Masters and Servants' Act. The summons of several of the strikers charge them with conspiracy. The companies show no disposition to concede the demand of the strikers, and the latter announce that they are determined not to resume work until their companions are taken back. Meanwhile the absence

of gas is severely felt throughout London. Last night the city was in a state of partial darkness, and several of the theatres were compelled to omit their performances.

A despatch from Madrid says a Royal decree fixes the emission of a new loan, to the amount of 250,000,000 pesetas, for the 12th inst. The announcement was made in this city to-day that subscription books for a Spanish loan of £10,000,000 will be opened in the London market, on the 12th inst.

A despatch from Bayonne, in the department of Basses Pyrenees, says 250 Carlists entered Spain from France yesterday.

President Thiers has sent a despatch to King Amadeus of Spain, congratulating him upon his convalescence.

There is much excitement in Malaga over apprehensions of a Carlist demonstration in that city. Many families are leaving and troops are being quartered in the custom house and cathedral.

It is reported that Count Von Longay, Minister of Finance of the Austrian Empire, has tendered his resignation, which has been accepted. The other ministers remain in the cabinet.

The Crystal Palace will soon be lighted by gas manufactured from petroleum.

Abstracts of President Grant's message are published in the morning papers. The *Times* says it will be read with interest, although so largely devoted to domestic affairs. The *Daily News* hopes General Grant's attention will hereafter be more occupied with the reform of the civil service than with the acquisition of San Domingo. The *News* thinks the people of the United States are ready for a new departure in the administration of their affairs, and the present session of Congress will be especially interesting to those who watch for indications of the coming party of progress.

The determination of M. Thiers and his Cabinet to remain in the Government has served to dispel grave feelings of uncertainty which followed the action of the Assembly on Saturday last. All parties are awaiting the organization of the Committee of Thirty, appointed by the Assembly to draw up a law regulating public powers, and prescribing the conditions of Ministerial responsibility, as provided for in the resolution of Minister Dufaure, adopted on Friday last. M. Picard is mentioned for Minister of the Interior, to fill the vacancy caused by the resignation of M. Lofranc. The *Republique*

Francaise newspaper says that in the event of the defeat, on organization, of the committee under M. Dufaure's motion on Thursday, it is possible that M. Thiers and his supporters will withdraw from the Assembly. The Assembly will divide into two great parties, the Left and the Right, for the election on Thursday of the Committee of thirty proposed by Minister Dufaure. The Ministry of the Interior was tendered to Dufaure, but he declined it.

It is expected the committee of Thirty to be elected by the Assembly to-morrow, and whose duty is will be to draw up a law regulating public powers and prescribing the conditions of the Ministerial responsibility, will consist of sixteen Monarchists and fourteen Republicans. The party of the Right had rejected a proposition for even a renewal of the Assembly by an appeal to the people. A meeting of the party of the Left was held to-day at which after a powerful speech by M. Gambetta in advocacy of the dissolution of the Assembly measures to that end were absolutely insisted on.

The Government situation at Versailles unsettles business of all kinds throughout the country. The committee of Thirty, formed on 6th by the Assembly, is regarded as hostile to the Republic. The Republican journals of Paris declare that the Assembly does not represent the will of France, and demand its immediate dissolution. President Thiers is expected to resign. The Government will probably make a statement at the session of the Assembly to-day, as to the course it intends to take.

The tombs of General's Cavagnac and Baudin, in the Montmartre Cemetery, were decorated yesterday, in the presence of 300 persons. The demonstration was quietly conducted, and there was no interference on the part of the police.

The steamer which arrived at Havanna yesterday from Spain brought 200 sailors implicated in the Ferrol revolt.

The steamer *Fatchery* has arrived with 1,000 coolies who were sold previous to the arrival of the steamer.

The *Reho* newspaper, published in Sancti Spiritis announces the arrival there of ten bloodhounds, to be used in capturing negroes still remaining in the mountains near that city. The hounds were purchased by order of the Commanding General.

It is rumored that Namyk Tachia, who was governor of Djeddah at the time of the massacre of 1859, will probably be appointed Grand Viceroy of Turkey.

THE AUTUMN MANOEUVRES.

THE SCENE OF OPERATIONS.

(From the Broad Arrow, Sept. 7.

(Continued from Page 531.)

MONDAY SEPT. 2ND.

Northern Army.—The rain caused such general discomfort on Saturday and Sunday, did not cease until late this afternoon, by which time the camping ground of both divisions had become moist and sloppy to a most disagreeable extent, and in places the roads were little better than mud ponds. The cavalry of the 4th Division had a rough time of it, the 19th Hussars having to shift their quarters twice in consequence of the sloppy nature of the ground. A dry night, and the warm sun today considerably improved matters, and it was generally thought that today would have been one of entire rest, and that it would be devoted to bur-nishing up and putting things in order after the march from Aldershot. Both Sir Chms., Staveley and Lord Mark Kerr were, however, anxious to be certain how their brigades could handle the Militia and Volunteer regiments which joined their commands on Saturday; and consequently, at about nine o'clock Staveley had his division in full march for Pewsey Hill. Marshall's cavalry were first away, and after cresting the hill, turned off to the left for the enemy, who were supposed to be advancing from that direction. We saw here some very pretty manoeuvring take place, and it was surprising to notice the ease with which the heavy brigade was handled, and the promptness and precision with which they performed their duty. In the infantry camp, although Erskine was the first to get his men in motion, owing to the larger distance they had to march, Anderson's Brigade was the first in position. It was very picturesque to see his column advance up the hill, the red jackets in front and rear, and the dark uniform of the 2nd Battalion of Volunteers in the centre. On arriving on the plateau, General Parke's brigade took ground to the right, Anderson's Brigade was posted in the centre, and Erskine's on the left. General Staveley then directed several brigade movements to be performed, and while this was going on sent a battery of artillery well to the front and just in rear of the further ridge of Pewsey Hill. In the meantime the Guards discovered their opponents somewhere near Verley, and soon the battery of Horse Artillery they had with them opened on the enemy's right. The Guards were thrown well forward, but their advance was soon driven in, and although the main body retained its ground for a considerable time, it was ultimately compelled to retire under cover of Erskine's Brigade who still formed the extreme left. At this juncture, the 90th was deployed in open order, and received the order to advance. Nos. 2 and 3 Companies extended as skirmishers, rushed thirty paces to the front, and were supposed to deliver their fire. These were followed by Nos. 4, 5, and 6 Companies in this order supported by the two remaining regiments of the brigade. They advanced over the brow of the first hill, but their left was for a few seconds thrown into disorder, owing to two companies having to advance in file on either side of a turnip field, the crop being regarded as too expensive to be trodden upon by a skirmish line. The supports, in consequence of this obstruction, had also to work their way further to the left than would be actually prudent in real warfare. On reforming, the 90th, working their way

steadily up the hill, got upon the enemy's left, and compelled a change of front to the right. General Parke's Brigade was thrown forward in force, and the guns on our right opening, our opponents were compelled to retire. The movement was one of a very simple character, and it might be easily understood by the officers and privates of the Militia and Volunteer regiments engaged against the imaginary foe. Anderson's brigade which was kept in reserve, and to which the volunteers are attached, had an excellent opportunity of seeing what was going on in front, and great pains were taken to instruct the men in the nature of the movement. The 2nd Staffordshire Militia were handled very cleverly by their noble colonel and while everyone was pleased with the excellent manner in which the Royal Aberdeenshire men performed every movement they were called upon to execute, there was so much confusion caused by officers repeating in a loud and noisy manner the leading word of command, that Brigadier Erskine had in a very summary manner to check it. With regard to the Volunteer battalions present, as they were kept in reserve, no opportunity was afforded them of displaying their good qualities. After the engagement Anderson's Brigade marched past General Staveley, and the style in which the 2nd Battalion of Volunteers (the Post Officers) swept by the saluting post was much admired by the staff, and won a very justly deserved word of praise from Sir Charles. The remaining two brigades, before they were taken off the ground, marched past their respective brigadiers.

Hardly had the 3rd Division reached camp, when cannon, heard in the direction of Upavon, told us that Lord Mark Kerr had his division out. Both cavalry and infantry were knocked about a good deal, but as the operations were merely intended to get the brigade commanders accustomed to their commands, the manoeuvring was not of a very complicated description.

Southern Army.—The presence of the Prince of Wales at Mr. Sturt's, only a few miles from Blandford, added to the attractions of the Camp, and the show of troops, would seem to have made the people boil over with enthusiasm. Blandford Downs to day resembles Brighton Downs on the occasion of a review. The spectators began to assemble before nine o'clock, and at one o'clock when the march past occurred, the ranks of horsemen and carriages near the saluting base were eight or ten deep, and from this point the lines of spectators extended for more than a mile in either direction. The military authorities, inspired, no doubt by the Duke of Cambridge, were equal to the occasion; they quite understood the national sentiment, and fell in with it. This was no occasion for deep laid plans of operations, for nice calculations of distance and the marching powers of troops, for hiding lines of skirmishers and whole regiments of cavalry four deep in ditches. What was wanted was the British uniform and plenty of it, combined with the presence in health and happiness of the heir to the Throne. These sights seen, and a little gun-powder burnt into the bargain, Blandford will feel itself more than repaid for what must have been the extreme disturbance of its social, commercial, and agricultural system caused by the presence this year of an army of occupation. The general orders issued in reference to today's movements provided that the force should turn out as numerously as possible. The troops were to parade not later than nine o'clock, and to be in the positions assigned to them by half

past ten, the Duke of Cambridge with his staff, arriving shortly before eleven. An enemy in outline was constructed from the 12th Lancers, one of the strongest and smartest of the cavalry regiments in camp, and the whole of the engineers in the corps d'armes, and was placed under the command of Col. Herbert O. B. Six guns were placed at the disposal of this force, and each of them was to be considered equivalent to a battery. The whole of the army with these exceptions, was constituted a rival and attacking force, coming from the direction of Cranborne, and marching upon the Racecourse Down which covers the town of Blandford. The 1st Division (Sir A. Horsford's) was posted on the right, nearest to the Salisbury Road, the left (General Brownrigg's) across the Valley of the Tarrant, which lends its name to several hamlets along its course—as, for instance—Tarrant Monkton, Tarrant Hatch, Tarrant Gunville. The movements of today, mainly consisted in a forward movement of the left flank, so as to turn the enemy's right, and drive him back on the Racecourse Down. The skirmishing on both sides was for a time well sustained, the widely scattered Lancers and Sappers working together, so as to produce an appearance of considerable strength; but there was an amount of cultivated ground which it was necessary to traverse, and numbers of spectators accompanied such regiments as the umpires could be called upon to criticize, so after about an hour and a half's marching, skirmishing, and distant artillery duelling, the order to "cease firing" was sounded by order of the lieutenant general commanding, whereupon the various regiments drew together previous to the march past, and the enemy, relinquishing their character of a separate army, dispersed into their natural places in the brigades.

The march past was really a brilliant spectacle. The old Blandford Racecourse, now disused, lies along the crest of a perfect circular ridge of turf, two or three times the length of the Epsom Racecourse, with a deep sloping valley in the midst. Within this hollow the whole of the Southern army was formed, by regiments and brigades, the lines of spectators occupying the highest ground on the ridge; and from this, in all directions, a wide, swelling panorama extended of hill and valley, of open, rolling downs, with patches of cultivation here and there, and on the summits of many of the hills thick bush like woods and plantations. There was little temptation, however, for the eye to wander over the landscape. It was fixed either on the large and gawking staff which surrounded the Prince of Wales, or else on the masses of life and colour which were approaching the Commander in Chief. One march past is so like another, that the attempts to describe what has been seen on any of these occasions reads like a page from some very old book, and yet the scene is one which is always animated, always fresh, and full of interest, spectators and horsemen alike entranced by the spectacle, and never think of moving however long the procession endures, until the last man has passed the flagstaff. It was so today. The least demonstrative of the foreigners upon the ground, and there were many, could not help watching at the sleeve of his neighbor, and exchanging glances at the beauty of the horses, the perfection of equipments, the matchless accuracy of the drill—in a word, the sense of power which went along with the march past of the gns. The cavalry, notwithstanding what one has heard of the condition

of some of the lighter horses, marched and halted admirably, the Grenadiers and 12th Lancers especially. The Guards moving in grand divisions produced an effect which is altogether different from that of any other infantry regiment, and they were as much admired today as ever, though they had only their own files, drums, and bagpipes to march to. Of the remainder of the force it is sufficient to say that they looked and bore themselves as English regiments are accustomed to do when upon their mettle. One could have wished very much that several of the regiments, cavalry and infantry, had fuller ranks, and the disposition in this respect with the Militia regiments is very marked. More than one of these bodies of Militia, if one had known positively to the contrary, might easily have been mistaken for regiments of the Line, and finally the Volunteer Corps, although so recently arrived, bore the test admirably and won golden opinions. The only matter of regret in connection with the southern army, is that it is not stronger numerically. As to the material of which it is composed, no one having seen it can entertain a doubt as to its quality. His Royal Highness the Prince of Wales was present throughout the day, wearing as he had done at Cricheol on Saturday, the undress uniform of the 10th Hussars. In whatever part of the field he appeared he was loudly and cordially cheered; and when the barriers which had restrained the spectators during the march past were loosened, and the full tide of humanity was allowed to spread itself over the Downs, popular currents set simultaneously from all quarters in the direction of the Prince. Upon turning his horse homewards some considerable time afterwards, he was still followed by a large and enthusiastic crowd-anxiously evidently to impress upon His Royal Highness that personal goodwill and loyalty towards the Crown are felt in Devonshire, as in any other part of the Queen's Dominions.

TUESDAY, SEPT. 3RD.

Northern Army.—To-day has been completely an off-day. Lord M. Kerr's Division were to have had a regular field-day, but about half past nine, just as the troops were forming up on parade, heavy rain set in, and the intention was therefore abandoned. It would indeed have been a great mistake to expose the troops to be again wetted to the skin just as they have recovered from the effects of the continuous drenching of Saturday and Sunday. As it turned out, the manoeuvres might very well have taken place, for the rain proved to be merely a heavy shower, and the rest of the day was extremely fine; but this could not have been foreseen. The uncertainty of yesterday, terminated in a march by the 3rd Division of three miles and a half to Upton, where they encamped close to Maxwell's and Pakenham's Brigades of the 4th Division. The head-quarter staff also moved to Upton, which lies in the Pewsey circuit, just as the camps three miles from Blandford are included in that circuit, and the orders of the commander in chief were that neither army was to advance beyond its boundaries, before tomorrow (Wednesday.) The cavalry of this army consider that an unfair advantage has been taken by the cavalry of the southern army. Colonel Baker's Hussars have been reconnoitering the whole country around the River Wilye, and trying all its fords. The Control Department have wisely established a depot at Pewsey for sick horses, so that all animals with sore heels, or other ailments can be left behind,

and rejoin their respective corps upon their return. The light cavalry have today, for the second day in succession, had to eat salt meat instead of fresh. This is too bad; no one could grumble at such a thing had it occurred during the fighting, when the corps were rapidly changing their positions, but there is no cause for it when the troops are remaining in what may be called a fixed camp, at their base at Pewsey. This annoyance is accounted for by the advent of a new contractor. Notwithstanding this drawback, the camp was very gay all day, there having been several drill parades and a good deal of military music. In the afternoon the Volunteers, having gone through a careful drill, got up a game of cricket, with improvised bats and wickets made of the branches of trees.

Southern Army.—Each of the divisions had a field day upon its own account, the troops commanded by the generals being divided, and being in each case, two brigades against one—its efficient force of cavalry and artillery, added to redress the balance of numbers. Sir A. Horsford's division went to Launceston Downs, and Gen. Brownrigg to Mocton Common. A feature of novelty, moreover, was given to the operations over the well known down by the fact that the fighting was at right angles to the positions hitherto maintained and attacked. One division commenced operations at nine o'clock, and the other at eleven. Both operations were conducted with great spirit and were probably the more satisfactory to the troops as well as to the commanders, from the fact that the generals were left in large measure to themselves, and were not hampered by any special instructions. The Duke of Cambridge seemed much pleased with the operations in each case, and the principal point to which he directed the attention of the officers at the close of the movements was the somewhat excessive expenditure of ammunition. He also thought that the skirmishers had not always been properly supported. The troops as they returned to camp seemed in excellent condition, and not the least distressed by the field day in which they had taken part. The Volunteers especially, were making the lanes resound with song, and their only regret appears to be that, owing to the new regulations, they were not in the thick of the battle, and hence their opportunities of skirmishing and exchanging volleys with the enemy were comparatively limited. As regards the Volunteers, it would seem that their recent arrival has thrown additional duties upon the Control Department. In marches it has only been necessary to provide for regulars and Militia but now the baggage and requirements of the Volunteers have to be taken into account, and in the majority of cases they seem to have depended upon the authorities to do everything for them. The army of the south turns its back upon Blandford to-morrow, and it will march by the roads known as the Higher and the Lower Shaftsbury Roads—the infantry not starting much before eight o'clock, the cavalry probably an hour or so earlier. Fontmell, the site of the first day's engagement, occupies a lofty position, and commands a view of several counties. In the character of its scenery it differs widely from anything the troops have hitherto seen, but as a military position it is one of the finest in England. Hostilities may now be considered to have fairly broken out, and the armies will march with all the caution necessary in an enemy's country. After the troops have left Blandford there will be nothing any longer to detain His Royal

Highness the Prince of Wales at Cricheol, and it is therefore probable that he will move across in the course of the day to the quarters which have been prepared for him at Bomerton, near Salisbury.

(To be continued.)

RIFLE MATCHES.

Amherst Island,
Nov. 25, 1872.

Sir.—I enclose you the score and list of Annual Shooting Match of No. 2 Com., 43rd Battalion, V. M., if you would care to publish it. The match took place on the 28th of October, the day was fine but rather hazy. The Company turned out in full force, and enjoyed it thoroughly, they were dismissed for an hour at 1 o'clock, to partake of a sumptuous dinner provided by Mr. Cousins, Marksman's Hotel, and paid for by Capt. Patterson, as he has done every year since he became Captain of the Company.

NO. OF POINTS AND PRIZES OF NO. 4 COM. 43RD BATTALION.

	TL
No. 1, Wm. Glen, Riding Saddle	\$12 00 45
2, Sgt. R. Glen, set of Chins	7 00 45
3, Sgt. H. Filson, Plaid Shirt	10 00 44
4, Corp. J. Gibson, 1/2 doz. silver spoons	7 00 38
5, Pte. S. Speers, Pair Blankets	9 00 37
6, J. Gibson, Crut Stand	4 50 36
7, R. Henderson, Bronze Lamp	5 00 36
8, S. McGin, Picture	5 00 34
9, Wm. Fleming, 1/2 doz. of Chairs	4 50 34
10, J. Montgomery, Wool Scarf	2 50 32
11, A. Stevenson, Patent Kid Gloves	1 50 31
12, J. Burns, Picture	4 00 31
13, J. Burns, 1/2 doz. knives and forks	2 50 30
14, Sgt. R. Filson, Whip	1 50 29
15, Corp. J. Brown, Pocket Knife	1 50 26
16, Pte. R. Gibson, 1/2 doz. spoons	1 00 24
17, Pte. R. Kirkpatrick, Set of Shirt Studs	50 22
18, Pte. J. Askin, Breast Pin	25 20
19, Pte. J. Hill, prize for the lowest score	1 00 2

\$50.25

The French Prince Imperial was to join the British Royal Military Academy as a "Queen's Cadet" about the middle of this month, and to have for a companion the son of Dr. Conneau, the Emperor's physician.

The Berlin correspondent of the London Times writes that the Russian Government has determined to construct a military port in the Bay of Balaklava, the harbor of Sebastopol being set apart for merchant ships.

The oldest steamer in the world has been presented by her owners, Messrs Steele & M'Caskill, to the Glasgow Chamber of Commerce. The vessel is named the *Industry*, is 54 tons register, and was launched from the building yard of Messrs John and William Fyfe, of Fairlie on the Clyde, in May 1814. She was the seventh steamer built on that river. Latterly she has lain sunk in the East India Harbor at Greenock, but last week she was floated and beached to be caulked, thereafter to proceed to Glasgow, where she will be kept as a memento of the early days of steam navigation.

CORRESPONDENCE.

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

To the Editor of the VOLUNTEER REVIEW.

Woodstock, Nov. 20, 1872

DEAR SIR.—I should like to ask through the columns of the Review, whether or not, it was ever intended by the law, that a gentleman, holding a first class certificate from the Board of Examiners, could then enter the military school and obtain a second class certificate and fifty dollars, when his first class one awarded by the board embraces everything. If so, I say it is downright robbery to allow any person to do so, when he is already qualified, at least the Board says so.

Now Mr. Editor, a few lines in reference to who compose the Board, and what they know about drill. I believe the Law, confining it to the Deputy Adjutant General of Militia, Brigade Major of the division, and Lieutenant Colonel of the Regiment, whom the candidate belongs to, is all very well, providing those officers know their places, but, I am sorry to say, the colonels in our Province, with one or two exceptions, are woefully deficient in drill, in fact, New Brunswick can boast of Commanding officers who have been in the Volunteers since the time of the Prince of Wales's visit in the year 1860, up to the present moment, and yet they don't know actually one single section in the drill book, but have first class certificates, (cooked of course). The assertion, Mr. Editor you may think untrue, but I am prepared to prove, or substantiate, should you require it, by mentioning names, and these are the gentlemen who award certificates by appending their names to recommendations to Head Quarters.

It ought, I think, to be the duty of the D.A. Gens. to rid regiments of these men, by recommending to have their commissions cancelled for incompetency, instead of cooking up their bad case, so that he might be able to boast to the Adjutant General of the Forces, of the very efficient state of the Volunteers in his district when the former gentleman made his tour to our Province; in fact that gentleman would be able to judge for himself.

As it stands, the hand of the indicator points to the opposite direction, as was clearly proven at the Brigade Camp held in our city in July last.

Yours respectfully.

GEORGE STAMP.

EDITORS NOTE.—The practice maintained by our correspondent, is an abuse of the worst character, it is illegal also. We decline discussing the question of competency, but he must be a very stupid field officer, that will not learn something in a period of twelve years. Our correspondent must recollect that his assertions are not conducive to discipline.—Ed. Vol. Rev.

BRITISH COLUMBIA.

SPECIAL CORRESPONDENT.

Victoria, B.C., 14th Nov., 1872.

Previous to the departure of the Adjutant General, a memorial, extensively signed, was presented to him praying for the appointment of Captain Delacombe, R.M., Commandant at San Juan, as Deputy Adjutant General, and it is now supposed that Captain Haughton's appointment is by no means secure. It would appear that this latter gentleman has (deservedly or not, I cannot say) numerous and energetic enemies in Victoria. They have not let the grass grow under their feet in working to his detriment, while the Adjutant General was here, and I am inclined to think that a considerable amount of success has attended their efforts. This morning appears in the *Standard* another announcement, that Lieut. Sturt, R.M., of the San Juan Force is likely to receive the appointment.

Whatever may be the result of those movements it is of course impossible to predict. I do not know Mr. Sturt personally, Captain Delacombe is unquestionably a gentleman and I believe a sharp officer. Army gentlemen have a fair field here, where there has been no force sufficiently important to develop the capacities of its officers before the public in such a manner as to create confidence in them on the part that Hydra. I do not observe that the best volunteer officers here seem to feel confidence in themselves as to the handling and guidance of any considerable body of men. Yet there is among them a strong common sense and intelligence which is characteristic, in different degrees, of the whole population, and would no doubt, go far, with respect to the two or three gentlemen who are candidates for B.M. ships, to constitute them respectable organizers.

In Canada, where we can publicly guage our officers, and know that in the Dominion Militia, there is no scarcity of men fully equal, as to their military knowledge, to the average of Army officers of the present day, (and they are, or ought to be, more than equal to the men of "sixty years since") while many are absolutely superior to that average. I trust that we have seen the last of the appointments of Linesmen to the Militia Staff, either direct from their regiment, or from half pay, without previous service in the Militia.

It is fully time that the Dominion Army ceases to be a charitable institute for gentlemen, who find it convenient to leave the Army, and turn up their insolent noses for years at the military arrangements generally, but evince remarkable alacrity in developing new opinions whenever there is a Staff appointment to be got. The 100th Regiment ought, certainly to feel deeply indebted to the Benevolent Asylum afforded to its officers by the Militia of Canada, as we have

already four staff officers from that gallant corps, and a fifth was a candidate for the Deputy Adjutant Generalship in British Columbia, only that the politic delays of the ministry were out the poor fellows leave and patience together. I neither say a word, nor imply a thought, hostile to such gentlemen as Major Chas Boulton of the 46th, (E. Durham,) who, on selling out, join a Militia Regiment in such rank as may be offered to them, and fairly and honestly do their work, as regimental officers. Let all that they can get be open to them.

But the few officers of the existing remnants of the Volunteer Corps here; all left England some years ago, before the mother country had followed the example of Canada in initiating examinations of officers, they have not seen such a large homogeneous force worked on broad and simple principles—for the English system has been, until lately, cumbrous, complicated, and involved—and they probably share with the mass of the population the prevalent distrust of the efficiency of officers who have not been in the army. By and bye, when the service has been built up to respectable dimensions, when military schools, and Brigade Camps, have elicited aptitude, and inspired confidence, I trust we shall have no more appointments to suit the convenience of retired Army Officers even here. One officer here, however, who was on active service with his militia regiment, for, I believe, two or three years during the Crimean War, is an exception to the Volunteer officers alluded to.

I perceive, after all, that in a recent article you give the Prussians full credit for their "discipline," as the main cause of their success. I shall presently, with your permission, have something to say on that point, i.e. discipline, I "take notice" also as the Toronto folks say, of what is written on loose formation, which as you observe, will shortly be the only formations practicable within range of an enemy's fire. I shall also, as soon as I have time, have a few remarks to make on the subject of tactics, as adapted to present knowledge of the effects of rifle and artillery fire and range. I venture in the meantime to predict another Drill Book, admirable as is the present one, in two years.

The Bill to carry out the fishery clause of the Treaty of Washington was made a special order for the second Tuesday in January next.

That portion of the Message relating to Utah is highly gratifying to the anti-Mormon community. The *Herald* (church organ) says that the President has been misinformed and misled, and that in no part of the United States is the constitution held in more reverence and the laws esteemed more sacred than in Utah. The *Journal* (anti Mormon) refutes these assertions in strong terms.

GUNS AND ARMOUR.

The following letter from Major A. Moncrieff, inventor of the Moncrieff gun carriage, appears in the *Times*—"Sir, -In common with many persons now engaged on artillery questions, I have long foreseen that the struggle between guns and armour is rapidly reaching its practical limits as now applied on ships. I see no difficulty in mounting guns at sea of even far greater weight and power than any now used; but, on the other hand, not many more inches of iron can be floated. I would beg to call your attention to a proposition of mine bearing on the question which was advanced and discussed at the Royal United Service Institution on the 4th of April, 1870, and which has been before the Lords of the Admiralty -viz, that of securing protection for guns, men, and engines, without either the weight and expense of turrets or of armour on the poop and bow, except below the waterline. It is unnecessary to repeat the details of the scheme, as it has already been made public in your columns, except to remind your readers of the general principle that the gun recoils downwards into cover below the deck through an opening which closes upon it, or from under an iron hood which covers it, and that the force of the recoil is stored up by pneumatic agency to raise the gun again to the fighting position without other applied force. This method of mounting guns gets rid of the burden of the turrets, and dispenses with iron plating above the waterline both fore and aft of the central armed portion of the vessel containing its vitals. Thus this portion of the ship can be greatly strengthened with an actual decrease of total weight of armour. It is but seldom that a ship is actually engaged, but when so, protection to this, the fighting part, is the great desideratum. When under sail - indeed, at all times when not in action - such vessels would have the advantages of abundant accommodation for the crew and good freeboard, thus combining comfort, safety, and increased strength with economy. The principle is applicable to different classes of vessels, in each of which the details would vary considerably. A gun-boat embodying the first of the above conditions is now in course of construction."

On the same subject, *apropos* of an article in the *Times* on the 30th, "E. P. O." writes in the following suggestive terms to that journal, and says:-

"Sir, -In the able and interesting article on this question in the *Times* of yesterday the writer omits two considerations, which, had he set them forth, must, I think, have modified his conclusions. He speaks of the penetration of armour-plates as though in the open sea every shot capable of penetrating the side of an ironclad at the distances would penetrate on striking, whereas only those which strike nearly perpendicularly will do so. As in action only a proportion of the shot fired can so strike, every inch of armour plating becomes a real defence. He has also omitted to notice that the weakness or strength of an ironclad in respect of artillery is the amount of damage she may sustain or inflict in a given time. The chances of hitting, gun, or gun have not been increased at sea by the introduction of rifled ordnance. As armour-plating has compelled us to reduce enormously the number of guns carried in a ship of given displacement, it has enormously reduced the chances of hitting or being hit in any given time. Two *Devastations* would be infinitely longer in fighting it out

with artillery than would two *Duke of Wellingtons*, because the *Devastation* would only fire, say, four shots in three minutes, while the *Duke* would fire, say, 180 shots in the same time. If ten per cent, were hits the *Duke* would receive, say, 54, effective blows, while the *Devastations* would receive but one. If, as suggested by the writer of your article, we were to attack our *Hercules* with an unplated, but unsinkable ship, he must arm her with a few heavy guns. Our *Hercules*, knowing what was to come against her, would retain her plating, but would arm herself with large numbers of light shell guns. She would effectively hit the unplated ship many times for once she was effectively hit herself, and would, in the natural course of things, gain an easy victory. The writer assumes that the splinter from a grape-proof side would be considerably less than those from an armour clad side when penetrated; it would be interesting to know if he forms his judgment on any experimental comparison of the two structures."

In a letter on the same subject, Sir Spencer Robinson expresses a hope that Mr. Reed will before long take up the subject of armour versus non-armour. "I know," he says, "that he has in his power to show how thoroughly the protection hitherto given to ships against guns carried at sea can be still maintained, and this important subject, involving novel features of construction, might have been developed for the benefit of the British Navy, at any rate towards the close of 1870, or about two years ago."

The unprecedented, sudden and early closing of navigation causes great loss of property and inconvenience to owners of freight vessels. Immense quantities of lumbermen's supplies for the northern ports of Michigan are still here and cannot go forward, unless at ruinous prices for teaming. One steamer and one schooner were brought from Maumee Bay to-day. A number of vessels are in Pigeon Bay and beyond reach of help. Among them are the schooners *Josephine*, *Minch*, *City*, *Sheboygan*, *Alice* and *Mont Blanc*. The schooner *Sargent* and number of barques have disappeared from Middle Sister Island, and were probably cut by the ice and sunk. The crews were all brought off. Much uneasiness is felt regarding a large number of vessels overdue from Lake Superior - among which are supposed to be the steamers *St. Paul*, *St. Louis*, *Japan*, *Arizona*, *Atlantic*, *China*, *Acadia*, *Peerless*, *Menominee*, *Norman*, *Truesdale*, *Cuyahoga*, and *Tuttle*, with twelve or thirteen sail vessels. An expedition is being organized here to attempt to relieve these boats. The Straits of Mackinaw are clear of ice to-day. The wind is blowing a gale from the northwest. Two steamers passed here to-day bound down.

The report of the Secretary of State on contingent expenses, shows that during the fiscal year ending with June last, the contingent expenditures for foreign intercourse and missions amounted to nearly \$30,000; \$325,000 were paid to satisfy the Hudson Bay, and Puget Sound indemnity; \$292 were paid to B. C. Davis as the bearer to England of the Alabama Treaty. The treaty case cost \$58,200 and; the freight on it was \$23. The aggregate cost of cable telegrams was \$6,600.

HONOR TO A CANADIAN.—We are glad to perceive that our old friend Sisson has for the third time been unanimously elected Reading Clerk of the Senate of South Carolina.

"Mr Robert A. Sisson was yesterday unanimously re-elected Reading Clerk of the Senate. This was a deserved compliment to this clever, popular gentleman, who to ably and satisfactorily discharged the duties of that office at the last session of the General Assembly. We congratulate Friend Sisson on the result, and trust he may long continue to fill the position in which he has given such general satisfaction."

Experiments have recently been made in England to determine the velocity of the 9 pounder shot when fired with various charges of powder. From the 9 pounder gun of 8 cwt, with 3½ lbs. of rifle large grain powder, a velocity of about 1,500 feet per second was registered, the gun being quite uninjured. In order to obtain these results on service a stronger carriage is required, and will probably shortly be made. The carriage on which Sir J. Wentworth's new gun was fired on the sands at Southport has endured the strain of the heavy charges exceedingly well.

An official trial was lately made in England of an invention which consists of interposing between two thicknesses of wood an elastic preparation, which, when fired at and perforated by a bullet, would instantly close and be perfectly watertight. For the purpose of the experiments, a wooden box, three feet long by ten inches wide, ten inches deep, and three-quarters of an inch in thickness, and having on one side an eighth of an inch of iron plate screwed on to the wood was treated with the composition, and fired at with a rifle at twenty-three yards' range. Ten shots were fired, the bullet each time going completely through the box. With eight of the shots the apertures only partially closed, and on the box being immersed admitted the water more or less freely. Two other shots fired point blank were successful; the perforations closed immediately and were practically tight. It is claimed for the invention that it could be applied to ships, and that the perforations made by the largest projectile would close as readily as a bullet hole.

The report received here on Sunday of the wreck of the steamship *Dalmatian* and the loss of 35 of the persons on board proves to have been untrue. The *Dalmatian* has reached Liverpool in safety.

It is reported that Count Von Longyay, Minister of Finance of the Empire, has tendered his resignation, which has been accepted. The other ministers remain in the cabinet.

BREWER.—Congratulations, Lieutenant Colonel Phillips! This is a merited promotion of an efficient officer.

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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, MONDAY, DECEMBER 9, 1872.

LEUT.-COLONEL WAINWRIGHT GRIFFITHS, at present on a tour through British Columbia, has kindly consented to act as the Agent for the VOLUNTEER REVIEW in that Province.

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

On and after the 1st January next, the VOLUNTEER REVIEW will be discontinued to parties in arrears. All those desirous of continuing their subscription will please forward them, direct to the office of the paper. The expense of paying a travelling agent to collect subscriptions is too great, and we mean to discontinue it for the future. To those who have regularly paid their subscription in advance, we return our sincere thanks. Our agent in St. John, N. B., will have the accounts written for, forwarded to him in a few days, they are now in the course of being made out.

THE *Edinburgh Review* for October contains an able article on "The Past and Future of Naval Tactics," in which the whole history of that science is ably detailed, but we are inclined to think that the talented writer lays altogether too much stress upon the idea that, "The scientific study of tactics has never been a favorite occupation of seamen. In the British Navy especially it has not been so much neglected as despised."

In reply to the last sentence it is only necessary to say that when Britain had a navy no other country in either ancient or modern times produced better or more thorough seamen, that is, men who knew how to handle their vessels in either foul or fair weather, or men who fought them to more purpose; and when it is considered what a complicated machine the old line of battle ship or frigate was, it is very evident that the man who handled them singly or *en masse* in action must be something more than the careless, happy-go-lucky ignorant Tar the *Edinburgh Review* would make him out to be.

The fighting regulations, the fate of Admiral MATHEWS and the atrocious murder of BYNG, both to save the reputation of a worthless administration, tied the hands of many a gallant seaman and by placing responsibility on irresponsible shoulders, led to results that helped materially to increase the National Debt of Britain without any corresponding advantage.

It is true that PAUL HOSTE, the Jesuit, in 1697, by his treatise on Naval Tactics taught his countrymen to shun defeat, but he did not teach them to achieve victory and we must be excused if we doubt that CLARK of Eldin who never saw the sea, could, by an "Essay on Naval Tactics systematical and historical" of which the first part only was published in 1790, and the whole in 1804, teach RODNEY to win the victory of the 12th of April, 1782 off Port Royal, Dominica from DE GRASSE and the French fleet by cutting the line, separating the French Starboard squadron from the centre and engaging it at once on the Port and Starboard quarters.

The most reliable account of the action states that "on the 12th of April at sunrise the British fleet was about five leagues North west of Prince Ruperts Bay, standing Northward with a light air of wind in the order of sailing, the French were upon the same tack to windward of the Saintes with a fresh sea breeze and one ship having lost her foremast and bowsprit was in tow of a frigate standing in for Gaudaloupe, RODNEY made the signal for four ships to chase the disabled ship, which being perceived, DE GRASSE bore up with his fleet to protect them. But finding that by persevering in this course he should give the British the weather gauge, he gave up his intention and formed his line on the Port or Larboard tack,

RODNEY seeing a general action inevitable recalled his ships and made the signal to form line of battle on the Starboard tack, DRAKE'S division leading, thus formed the two fleets gradually neared each other, the French being only far enough to windward to cross the bows of the British. At a few minutes before 8 o'clock, A.M., the Marlborough, 74, Captain PENNY being the leading ship, opened fire upon the centre and rear of the French; at 8 o'clock Sir GEORGE RODNEY made the signal for close action and shortly afterwards the action was commenced by all the other ships of Rear Admiral DRAKE'S division. The British rear commanded by Sir SAMUEL HOOD, and a great part of the centre was nearly becalmed, but the leading ships had the breeze, and the same variation in the strength of the wind, was soon afterwards experienced by the French. As the ships got more to the southward the breeze had also drawn more southerly, so that their van ships could not lay higher than south-west, while the centre and rear having the sea-breeze at about east were lying up south.

"This southerly breeze, although it completely broke the French line did not necessarily disarrange the British, but RODNEY perceiving the aperture in the enemy's line kept a close luff, and the Formidable, the flag ship, at a little before 11 o'clock, passed through it."

The result is well known in the total defeat as well as positive destruction of the French fleet, but neither in the records of the action or any other document is there a word to show that RODNEY had ever studied breaking the line as a tactical manœuvre. It is quite possible he understood all its advantages and seize the proper moment to profit by the knowledge, but Sir ALLAN GARDINER who commanded the *Duke*, the Admiral's second astern in his account of the action said, "the wind was very light at the commencement of the action, but as it advanced it fell calm, my ship dropped through the enemy's line and thinking I was wrong and out of my station did everything I could to get back again but was unable to do so."

The *Edinburgh Review* also claims that NELSON'S tactics were derived from CLARE'S works. Trafalgar was fought in 1805, the great seaman was in constant service and his tactical lessons were comprised in his last instructions, "no officer can do wrong if he places his vessel alongside one of the enemy's," and we know Trafalgar was fought and won in defiance of strategy and tactics.

It is evident the cases adduced point out the fact that superior skill in seamanship were the chief tactical lessons necessary for the period, and that skill was possessed by the British and not by the French. The *Edinburgh Review* points out that on the very day of RODNEY'S victory, one of the greatest of French Admirals, SPYFFRIN, tried this very tactical manœuvre on a British

squadron, under Sir EDWARD HONES, in a well contested action off Trincomalee in the East Indies and failed for want of seamanship, surely he did not draw his inspiration from CLARK of Eldin.

Whatever the future tactics of the British Navy may be, it is quite evident that without thorough seamanship and that article appears to be remarkably scarce, they will be useless for any purpose, whether as rams, torpedo towers or floating batteries, their success will not be owing to the accuracy with which they will be arranged in line, in echelon, or as the good old phrase would have it, "engaging on the quarter," in detachments, in skirmishing order like the intelligent rifleman of the period, but to the facility with which they can be handled, the skill of the seaman, and the coolness with which their fire is delivered.

The action at Lissa proves there was not a seaman on board, *Il Re d'Italia*, and it was a very sorry specimen indeed of the new school of Tactics, far inferior to the old line of battle ahead.

By the way the *Edinburgh Review* in speaking of that formation is under an erroneous impression; general actions fought in those days were always under sail, the value of the weather gauge was simply that the vessel to leeward could only use their guns in firing at rigging, sails or spars and not always at that while her whole hull below the water line was open to the fire of the vessel to windward and there were some other advantages.

It may be all very well to abuse the past, but it requires no conjuror to guess that shore training even with the aid of a *Naval Kriegsspiel* will never make sailors, and the present state of the British Navy is sufficient proof of that fact.

It is very fortunate that the London *Times* does not represent the feelings of the people of England in its desire to cast the colonies adrift, with the exception of one or two notoriously pro-Yankee Journals it stands alone as the advocate for the last not of degradation to which a free people might be forced, but never willingly sub-plish.

The colonists know full well the position the *Times* occupies in the politics of Great Britain, it is not nor was it ever a leader of public opinion, it was and is the organ and representative of the commercial class, and true to the traditions thereof would willingly sell barter or betray the birthrights of the British people for a supposed commercial advantage, its present rage or otherwise is because the policy forced on the Empire by the English monied class has ended in direct loss of territory, money, and what they take no account of, national honor.

We, the people of British North America who are the direct sufferers for the blunders and imbecility of the nominees of the Gov-

ernment which the *Times* and the people it represents forced on the Empire, will quietly await an opportunity for rectifying mistakes, and in the meantime toll all meddlers in our affairs, the *Times* included, that it would be quite as well they should attend to their own business, as our practical experience of the manner in which that duty is prepared leads us to infer that they really do not understand it and consequently can in no case be competent judges of our affairs.

We give our readers the following article from the *Broad Arrow* of 9th November which has the ring of the sterling metal about it, and shows that if the commercial organs do not understand Imperial interests the Military Journals do, and moreover truly represent the feelings and desires of the English people.

"Noblesse Obligo" is a maxim as applicable to nations and journals as it is to families and individuals. Our leading contemporary, in a recent article on Canada and the San Juan award, seems to be trying to bring about the time when, in the word of a German writer, "England will sink to the condition of a larger Holland, or perhaps a mere colony of North America." We are ourselves, happily, far from believing in the likelihood of such a thing; yet the *Times*, by its recent advocacy of a separation between the mother country and Canada, strikes with suicidal hand the first blow at the root of our future greatness. Is the *Times* itself aware of the influence it possesses abroad—an influence powerful for evil in this case, as it might be, and we willingly acknowledge often as been, for good? Is it aware that abroad, much more than at home, it passes as the recognised exponent of English public opinion, and as such wields a tremendous power, a power which should surely be exercised most charily? Did the writer of that article, when he penned those coarse, unfeeling words, remember that they will be copied into every journal in Canada and America; will thus penetrate into far-distant Canadian homes, and will rankle deep in loyal Canadian hearts?

In the article to which we allude, the *Times*, after acknowledging with apparent frankness the many injuries done to Canada by years of English diplomacy—the loss of Maine and the harbour of Portland, the abandonment of all satisfaction for the Fenian raids, the sacrifice of the fisheries, and last, but not least, the loss of the island of San Juan,—coolly proceeds to add insult to injury by telling the Canadians, to go fish for themselves! Is this the time to select to enunciate such sentiments, when the Canadians are naturally irritated at continual blunders, and chafing at the sordid ostentatiousness with which we persist in parading the bribe of a pecuniary guarantee which does not cost us one shilling? Is this the time to advocate a separation, in language calculated to leave behind it bitter feeling of disgust and hatred, and to convert a loyal, friendly people into open enemies? Let us, at all events, do our duty as journalists: let us at once disavow complicity in such a suicidal policy, in such unfeeling language. Let us hasten to assure our Canadian fellow-subjects that in this at least, the *Times*, does not reflect the feeling of the English people; and, in the name of all that is noble and chivalrous, in the name of the British Army and Navy, Militia and Volunteers, let us assure them of our deep sympathy for

the wrongs done them by our muddling diplomacy, and that the great English nation is still sound at the core. Thank God! the *Times* is not England.

But to what do our contemporary's words lead? Let us see. Taken in their entirety, they mean that England is to cast off one by one all her colonies, commencing with Canada, and to withdraw into the isolation and fancied security of her seagirt shore. They mean that England stripped of her dependencies, "sans" Canada, "sans" Australia, "sans" New Zealand, "sans" India "sans" everything, would soon sink to a third-rate Power, and be of no more importance than Holland. Hear what a friendly foreign critic has just said on this very subject:—"If English statesmen allow the present state of things to last much longer; if they do not, as regards their foreign policy revert to the principles of their predecessors who overthrow Napoleon I., England will, it is true, remain a great commercial country, but it will abdicate all claim to the title of a great Power, sink down to the level of a larger Holland, and possibly at some future day become the prey of the old German race, led on by Germanised Slavs; or perhaps a colony of North America." As a contrast to this melancholy picture, let us draw closer the bonds that unite us to our loyal colonies, so that at some future day, not we trust very far off, we may form together a grand consolidated federation mutually protecting each other; thus united, we should present to the world the spectacle of an Empire greater than that of Alexander, a United Empire that might proudly bid defiance to the world in arms, and that need not lower its front before the might of Russia, of Germany, or of America. Look on this picture, and on that!

Our gallant contemporary has done the State more than yeoman service in the diffusion of a correct knowledge of military and naval science, and in keeping the rising generation of soldiers and seamen abreast of the great development in the practice and mechanism of modern warfare, yet we are inclined to think that the article on "Canada and England," which we have copied is by no means the least important or lasting of that great work in which the *Broad Arrow* has borne so conspicuous, useful and honorable a part, or one more likely to establish its claims to the gratitude not only of Canada but the whole Empire.

While the people and Government of Great Britain are facilitating themselves on their entrance into the fool's paradise of arbitration and negotiation which the fears of the monied classes and the imbecility of the Whig Radicals have forced upon them, their more practical antagonists have spent no time in devising new systems of naval construction having already proved the worthlessness of the monitors, but have at once started to make their vulnerable points secure, a process by the way for which the fifteen millions of dollars JOHN BULL was swindled out of will help to pay.

A few more arbitrations would be nearly as profitable for the United States as the Pious Kaiser has found his French expedi-

tion to be, and no doubt it would be turned to the same good account.

The following article is taken from the United States Army and Navy Journal of 30th November, and is worth knowing, especially if in the course of events the *Devastation* or any other iron clad should appear off the Narrows, a possible contingency notwithstanding arbitration and the new law of international philanthropy:—

"An Associated Press despatch announces that "From the report on the sea coast defence of New York city it appears that the modifications of Fort Schuyler, to conform that work to the requirements of the modern defensive system, have so far progressed that the north front will be completed during the present fiscal year and the northeast front be taken in hand immediately thereafter. The estimates for the next fiscal year are \$100,000 or \$15,000 more than the yearly appropriation granted last session. The fort at Willett's Point, which unites with Fort Schuyler in defending the entrance to the port and by the East River, requires to be put in a better state of defence now that the Hell Gate obstructions are in a state of removal, and \$100,000 is asked for in consequence. This is regarded as a favorable site for the scattered earthen barbette batteries that are a prominent feature of the new defensive system, and two of those batteries, of two and six guns respectively, have been completed, and a part of a large battery of ten guns has also been finished up for the service. Another six-gun battery will shortly be completed and, when funds are provided, the construction of others will begin. An appropriation of \$76,000 was granted at the last session, and which with the balance from former grants, has paid for the work already done, which also includes a large magazine to hold 250,000 pound of cannon powder. Extensive repairs and modifications have been completed at Fort Columbus, on Governor's Island, including a new six-gun barbette battery. An appropriation of \$70,000 for the coming year is wanted by the engineer in charge. At Fort Wood, on Redloe's Island, defending New York, Jersey City, and a part of Brooklyn, but little has been done the past year, and the estimate for the coming year is but \$40,000. On Fort Hamilton down the bay, and its outlying batteries, \$40,000 was appropriated for the present year, and \$40,000 is asked for to go on with the work. The mortar battery intended to play upon the decks of hostile ships while entangled in obstructions or dragging for torpedoes, is about completed. At the new Fort Tompkins on Staten Island, commanding the Narrows, much work is nearing completion. Thirty thousand dollars is the estimated sum which, with the balance of the \$83,000 last appropriated, will carry on the construction during the next year. The glacis gun battery to the north of the main work and the glacis mortar battery to the south are finished. Battery Hudson and the North Cliff battery are almost finished, and the modification of the South Cliff battery is shortly to be commenced. At the fort at Sandy Hook it has been necessary to build two jetties of sheet piling for the protection of the site from the washing of the waves, and a beach is rapidly forming. These comprise all the important operations of the past year.

It is with feelings of sincere pleasure we are enabled to announce to our readers the safe arrival of the Commander in Chief of

the Canadian Army, Colonel P. ROBERTSON Ross, at Head Quarters (Ottawa) on Saturday the 30th November, from Victoria, Vancouver Island.

In a protracted tour of five months, the Adjutant General has visited the various points of interest in the Dominion of Canada, between the head of Lake Superior, and the shores of the Pacific, and acquired information of the capabilities of the country, as well as the measures which should be taken for its development, of a character which does not fall to the lot of every casual observer.

Gifted with an eminently practical turn of mind, from training as well as temperament, disposed to deal with the inexorable logic of facts rather than the promptings of imagination, the knowledge acquired will furnish a sure basis to found subsequent proceedings on, in dealing with the vast interests of that territory, and such portions thereof as are not required for strictly professional purposes, will, we hope, be given to the public in the next report on the State of the Canadian Army.

The gallant Colonel, accompanied by his son, Mr. HENRY ROBERTSON ROSS, and an officer of the Hudson Bay Company, the usual guides, with a very slight equipment left Fort Garry on the 19th of August, and reached Victoria on the 23rd October, having travelled a distance of about 2,500 miles, going considerably to the south of the *Tele Jaune* pass, and crossing into the territory of the United States at *Walla Walla*. The time occupied was seventy days, fifty eight of which were spent in the saddle or actual travel.

Such a journey, diversified by adventures of a very trying description, such as grizzly bear shooting, a six days snow storm, short of provisions amongst the Rocky Mountains, and perils of flood, as well as field, would leave even a very ordinary mortal something to tell, worth hearing, but as the services of the gallant Colonel have had a very wide geographical range, from Africa to the shores of the Pacific, the plains of the Saskatchewan after all, furnished nothing very extraordinary beyond its peculiar value to the interests of the Dominion.

He describes the country as the most magnificent he has ever seen. Rich as an agricultural country abounding in minerals, and having a climate unsurpassed by that of any other. He has brought back several specimens of the gold found on the Saskatchewan and its tributaries, and is of opinion that all that is wanting to make it a richly paying pursuit is simply protection to the miner. At present there are but four persons engaged in the business in the North West Territories.

Our readers will see the importance of a report such as COLONEL ROBERTSON ROSS can make on the great country between us and the Pacific. It must carry conviction to every mind, in so much, as his special objects

were more of a military character than any direct interest in the agricultural, mineral, or commercial development of the territory, and therefore, are totally unbiassed.

We are quite sure that any document over his signature, will convey convictions at once to minds, otherwise disposed to question the motives actuating interested parties, and tend largely to induce a healthy flow of emigration into it.

COLONEL ROBERTSON ROSS speaks highly of the capabilities of the Dawson Route, and says when fully developed, the distance between Fort Garry and Thunder Bay can be easily got over in six or seven days. What appears to be wanted is an increase in the number and capacity of the tug boats.

We are happy to announce that the gallant officer and his son are in perfect health and do not seem to have suffered from their protracted and necessarily fatiguing journey.

Our readers of the Canadian Army who have gone through the usual practical training of a military school, will be naturally desirous of knowing the exact course of studies the British officer of the regular army of the present day is trained in. *Broad Arrow* of the 12th October last is accountable for the following, and we commend its earnest perusal to our friends.

The periodical examination of the Gentlemen Cadets at the Royal Military Academy, Woolwich, together with the award of commissions and prizes to the successful candidates, is fixed for Tuesday next. The Field Marshal Commanding in Chief will, it is expected, preside on the occasion. The following are the authors and periods of history in which the candidates will be examined for admission to the Academy at the examination to be held in May, 1873:—English authors: Chaucer, "Prologue to the Canterbury Tales" and "Knight's Tale"; Shakespeare, "King Lear" and "Julius Caesar"; Bacon, "Advancement of Learning"; Milton, "Paradise Lost"—Books 4 and 5; Dryden, "Absalom and Achitophel"; Macaulay's Essays on "Milton," "Sir W. Temple," "The Wars of the Succession in Spain," and "Addison"; Scott, "Peveril of the Peak" and "Old Mortality," Period of History: The "History of England, from A. D. 1660 to 1727."

In a profession eminently practical, to which is to be superadded scientific attainments of the highest order, with the solitary exception of "The Wars of the Succession in Spain" not a single military subject is included in the whole of this extraordinary range of subjects, which is presumably the first examination of the series.

It is also to be noted that the Artillery and Engineer officers are educated at Woolwich Academy, and the course of instructions may throw some light on the recent failures in the practical application of the knowledge acquired under such an extraordinary curriculum.

While freely admitting that officers of either arms ought to be possessed of a liberal education, we see no reason to ap-

prove of a course that will probably end in producing a very limited number of good officers, and an unlimited supply of pedagogues, nor are we in the slightest degree surprised at the mechanical failures in the Ordnance of the period.

To ordinary mortals, the usual way of obtaining proficiency in a speciality would be to train the individual to its theory and practice, leaving light literature for lei sûre hours. The system pursued is admirably calculated to make Jacks of all Trades, and masters of none,

The following text of the award of the German Emperor on the San Juan Boundary question is taken from the *London Echo* of the 30th Oct. last,

"We, William, by the Grace of God German Emperor, King of Prussia &c., after examination of the treaty between the Government of Her Britannic Majesty and that of the United States of America, dated at Washington, May 6, 1846, by virtue of which the above named Governments have submitted to our arbitration the question at issue between them, viz., whether the line of boundary which, according to the treaty dated at Washington, June 15, 1846, after it had been continued westward along the 49th parallel of north latitude to the middle of the channel which separates the continent from Vancouver's Island, shall be; further drawn southerly through the middle of the said channel and of Fuca Straits to the Pacific Ocean, should be run as claimed by the Government of Her Britannic Majesty, through the Rosario Straits, or through the Canal of Huro, as claimed by the Government of the United States, in order that we should decide finally, and without appeal, which of these claims is most in accordance with the true interpretation of the treaty of June, 1846, have, after taking into consideration the statement of the experts and jurists appointed by us to report upon the contents of the respective cases, and counter case with their inclosures, given the following decision.

The claim of the Government of the United States—viz, that the line of boundary between the dominions of Her Britannic Majesty and the United States should be run through the Canal of Huro, is most in accordance with the true interpretation of the treaty concluded between the Government of Her Britannic Majesty and that of the United States of America, dated at Washington, June 15, 1846.

Given under our hand and seal at Berlin,

WILLIAM,

Oct. 11, 1872.

This decision is said to have been influenced by the offer of Captain (now Admiral) PREVOST in 1859, to accept on the part of the then British Ministry, the Douglas or central channel as a compromise, and that Mr. BANCROFT, the United States Minister at Berlin produced a letter of his to Mr. CAMPBELL the agent on the part of the United States making such an offer.

So far as the document itself shows, no reasons are given for a very extraordinary decision. The dicta of the experts and jurists, however, are detailed by some of the

leading journals, and they are ridiculous enough.

What special aptitude the German Emperor or his people had to determine such questions, or what their particular opportunities were for forming a judgment in the matter, can only be told by philosophers of GLADSTONE'S class, but the Holy Alliance has benefitted by the move in no ordinary degree.

REVIEWS.

Blackwood for November contains the following articles:—

The Parisians—Book II.

The Shores of Biscay.

On a Resurrectionist.

A True Reformer—Part IX.

Montalembert.

La Bruyere.

The end of the Banquet.

On Autumn Manceuvres.

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GUN COTTON V. GUNPOWDER.

From the *London Army and Navy Gazette* we take the following: "The vexed question of 'gun cotton v. gunpowder' assumes, daily, features of increasing importance. A series of most interesting experiments has just been conducted in the Royal Arsenal at Woolwich, with the view of ascertaining the relative degrees of effect produced by the explosion of compressed gun-cotton in combination with different proportions of nitre and other compounds, when detonated with 'Abel's electric detonator,' and the results which have been obtained throw a vast amount of additional light upon the varied characteristics of this explosive element. But before commenting upon these results, it may be as well to advert to the nature of detonation in contradistinction to combustion. One of the principal attributes of compressed gun-cotton is, that, when one or more of its discs are detonated by means of fulminate of mercury ignited in a tin tube with a little loose gun cotton at the top,—for such is briefly the construction of an electric detonator—it explodes with terrific violence and a loud report, whilst the same discs may be ignited with an ordinary fuse or portfire, and will only fly away harmlessly until they are consumed. Gunpowder on the other hand whether ignited partially or instantaneously throughout the mass, is invariably more or less violent in its action, and, no matter whether the slow-burning or the quick-burning natures are made use of the difference, in effects produced is only in degree. By detonation in fact, as applied to compressed gun-cotton, we have a totally distinct action set up to that of combustion, either as applied to gunpowder or gun-cotton, being the result of the violent influence exerted by the fulminate of mercury in the detonator. The forces in this case which are brought into play are so excessive, that the chemical combination previously existing in the compressed gun cotton are destroyed, and the particles assume a fresh arrangement altogether the various elements being separated from one another instantaneously, with great explosive effect. There is no necessity for any combination of the oxygen of the air with the ingredients of the gun-cotton to produce a condition analogous to combustion, a supply oxygen, being instantaneously evolved by the material itself in the act of detonation. Hence, in a word, combustion and detonation are

two separate and distinct conditions. And the results which have been arrived at in regard to detonation are truly surprising. In order to produce any considerable effect with gunpowder, as is well known, it is absolutely necessary to confine closely the explosive agent, in order to form a resisting medium for the forces generated by the powder gases waves to exert themselves against. But gun cotton when detonated, required scarcely any resisting medium, a slight 'tamping' of sand patted over it with the hand being sufficient to ensure a most violent explosion. Solid cylindrical shot 10 in. in diameter, with a small hole drilled in the centre, were charged with a thin column of cotton filling the hole, and weighing about a pound; but although the extremity of the aperture was only lightly closed with clay, the shot were split into fragments by the explosion. Flat discs of compressed gun-cotton weighing one-quarter of a pound were also placed upon iron slabs 1.8 inch thick resting upon hollow cylinders of iron, so as to support the edges but not the centres. A thin tamping of sand some few inches in depth was then piled over the gun-cotton and upon the detonator being fired the iron slabs flew into a number of pieces. This property of gun-cotton when detonated, viz., to form a resisting medium for itself, cannot be too highly estimated.

BRITISH COLUMBIA.

Our British Columbia files brings us intelligence of the arrival of Mr. Justice Gray at Victoria, Vancouver Island. He arrived out on the 26th October by the steamer "Prince Alfred," and was received by a deputation of leading citizens, including Mr. Justice Crease, Mr. De Cosmos, M. P., and Mr. Wallace, late M. P., for Vancouver District. The new Judge took his seat on the Bench on the 31st October, having been sworn in by the Chief Justice; and the compliment was paid him by his learned brothers of asking him to deliver the judgement of the Court, in a case which had created some interest. It appears that a murderer named Bell had been tried, convicted and sentenced to death. Application had been made to Ottawa for a commutation of sentence, which was refused, but the Sheriff refused to carry out the sentence, pleading that he had not received the Governor's warrant which, before Confederation, was issued to the Sheriff in such cases. The Court decided that the warrant was not necessary, and instructed the Sheriff to proceed to the execution of the sentence. Mr. Justice Gray travelled via the Isthmus of Panama, in going to his new sphere of labor.

The Italians, says the *London Globe*, are disturbed by reflections on the enormous force to be put at the disposal of the French Government by the new military law, when its influence on the recruiting of the Army is fully felt. By one estimate the number of men whom France will be able to put in the field under the new system will be over three millions. The Italians do not quite like the prospect. Their papers are therefore advocating the immediate extension to the peninsula of a similar system, under which there shall be very few exemptions from compulsory military service, and the period shall be raised from twelve to twenty years. Thus Italy shares in the universal fever. Although M. Thiers has counter-ordered the mines that were being constructed on the Italian frontier in connection with the defence of the French side, it is evident the Italians do not breathe freely, as they contemplate the prevailing militarism of the Gaul.

EUSTACHE.

The subject of the following lines is a young Indian of the Iroquois tribe, who was recently out with the writer on a deer hunting excursion:

As from the craggy mountain's crown,
The lordly Buck came crashing down,
"Hind him with a bloodhound's dash,
Can, o' restless, bounding, wild Eustache,
A soul of that kindly tribe
Whom foreign gold could never bribe,
In Council sage, in battle strong,
Fit hero's for a minstrel's song.

While his swift footsteps trod the steep,
From the dark gorge with carol deep,
"The voice of 'Bugle' on the gate,
Swell'd loudly over hill and dale,
"And 'Speed' and 'Hector' in his train
Join'd fervently in the grand refrain
As down the granite's rugged side
In haste the forest monarch hid.

Wild flashed Eustache's eagle eye
As homeward bound his step drew nigh;
Glancing round on every side
The antler'd glory he espied
Stretched out beside the camp fires blaze,
As twilight's gently falling haze,
Threw its soft curtain over the air,
"All right," he cried, "you have him there."

Then round the fire the hunters drew,
And sporting stories old and new
Among the forest's noblest game,
Kept music to the crackling flame
Which shed a brilliant glare around,
Making as 'twere enchanted ground,
Our green encampment on the brink
Of that clear lake that Gods might drink."

Eustache is tall and strong of limb,
Full of the hunter's virile vim—
His step is bold, his flashing eye
Is like the eagle's in the sky—
Methinks among that mighty race
That once had here their dwelling place—
Bonds of the war-path, fierce and rash,
Stood many a brave like bold Eustache!

W. P. LERT,

Ottawa, Nov. 26th, 1872.
—Ottawa Citizen.

CAVALRY AT THE MANŒUVRES.

(Continued from page 590.)

The writer in the *Times* goes on to observe that the question of equipment (partly discussed in our former quotation) has a direct bearing upon the use of cavalry in war and at manœuvres, for there is a cry that the horses would be laid up if called upon to do all demanded for them. The answer is, of course, what Austrians, and Prussians, and Russians can do without injuring their cattle, Englishmen can do as well or better. If they find that injury results from proper work, there is something wrong. It cannot be in the men, and and surely we are not going to admit that our English horses are bad. What can be the matter but equipment, and perhaps a certain luxury of the timent accorded to the animals, which are often, to our mind, too fat when they take the field? The marches lower their condition, and then their saddles do not fit.

Suppose it to be granted that English cavalry can be improved as much in their mobility as the infantry have lately been, what is the work they should set about practising so as to be ready at once for war when the time comes?

When two combatants stand face to face with rapiers or foils in their hands, they touch each other's blades and look in each other's eyes. By habit the eye and hand work together. The duellist feels the thought of his adversary with his blade and reads it in his eyes. To look at an antagonist's hand in order to see what he is about to do is to be certainly too late, for the hand cannot be seen to move till the pass is in course of execution. Now, a general who does not use his cavalry properly is neither looking into his opponent's eyes nor touching his

blade. He is always behind-hand because he cannot find out what is going to be done till it is half executed. Cavalry must constantly feel the enemy, whatever be the risk. They are the nervous system of an army, and behind them should be an intelligence department, acting as the brain. Improvement is only to be made by study of actual war. It is admitted that the German cavalry did their work well; let us see for a moment how they did it.

Before the army was assembled masses of cavalry were sent to the frontier, and, had the French invaded, we should have sent the German cavalry harassing the advanced columns and keeping the headquarter staffs perfectly informed of all the enemy's movements. But the French were dilatory, so the Germans set about making rails across the frontier, getting intelligence, breaking railways, bridges, &c. When the armies moved to the frontier and advanced beyond it, the cavalry were the first to reconnoitre the French positions, and from that moment some regiments never lost touch of them, the horses remaining saddled for weeks. After Spicheren, Wissembourg, and Worth the cavalry divisions led the pursuit. Bogulawski describes their action in words which we will paraphrase. Strong detachments were always pushed forward close to the enemy, no matter how far in advance of their own armies. Their business was to keep the French in a perpetual condition of worry, and allow no march to be made or position to be taken up without a report being sent to headquarters. The duty was performed by means of officers' patrols, which had orders to push forward at any risk until they came upon the foe. Mark these "at any risk." The risk was frequently great, and it has been said by German officers of high rank that no one will ever know how many men were sacrificed upon patrol duties. They acted with extraordinary boldness and determination, showing that pushing aggressive faculty which is the soul of first-rate cavalry. They spread terror throughout whole districts, won for themselves such a name that cities used to open their gates at the command of two men, and when, as sometimes happened, a patrol was cut off by the enemy, two or three men out of the number were sure to escape and carry back the intelligence. But it was not only in front of the French when they stood firm, or behind them when they retreated, that the Prussian cavalry were on the alert. They were constantly working round the flanks and breaking in upon the communications, making foraging excursions to great distances, cutting telegraph wires, destroying railways, roads, and magazines; in fact perpetually threatening the communication. It has often been wondered how, in the second period of the war, the German railways were never thoroughly broken up, their roads cut, and their communication interrupted by bands of men forming in the country or issuing from the towns. There was no chance of such assembling, for the Prussian cavalry patrols were too vigilant. There was an incessant warfare between them and the *Franc tireurs*. Many of the soldiers were shot from ambush or killed in sudden affrays, but their comrades always took vengeance for their loss. The cavalry divisions, being pushed to the front during marches, so cleared and filled the country that the tired infantry were spared the fatigue of outpost duties. Therefore, because all, or nearly all, could sleep, there was no check upon their marching powers. The operation of surrounding the French at Sedan was partly performed under cover of

the cavalry, which, always close to the enemy, had given information of MacMahon's march to relieve Bazaine. During the rest after the first bloody battles on the Loire the cavalry lay close to the enemy, and enabled the infantry corps to have some peace. Sometimes Lancers were stopped by infantry detachments or dismounted French cavalry, armed with chassepots; sometimes Hussars and Dragoons left their horses under charge of a few men and fought on foot, even against French infantry. The Lancers frequently armed themselves with chassepots taken from the slain, and the result of their combats has proved how necessary is a good firearm for all cavalry. The services rendered in a thousand ways by Prussian horsemen spread over the country were invaluable, and entirely eclipsed the massive charges in battle array. Yet it is just this universal work which is so little practised in the English Army. It is one thing to be placed in advantageous positions and told to watch for an enemy, quite another to be ordered to find the enemy and tell what he is doing. Again, all infantry pickets in Germany were latterly, and are now habitually, during peace manœuvres furnished with a few cavalry soldiers to carry messages and patrol perpetually. With our outposts but few cavalry were associated, and they were for the most part employed independently.

The lesson to be learnt from the late war in France is that cavalry are indispensable to cover front and flanks of an army at long distances, to obtain and transmit intelligence; but the lesson does not appear to be yet appreciated fully, and the action of the horsemen is still chiefly employed in battles at our manœuvres. We have to repeat the opinion we expressed with regard to the infantry—namely, that the cavalry have not during the year enough work in their special guarding and reconnoitring duties. Their want of experience at the manœuvres, and their consequent remarkable inaction at times when they should have been keeping their Generals informed of every movement on the part of the enemy, showed that they are not quite prepared to undertake and perform with intelligence their most important duties in war.

It is with the deepest respect for the magnificent appearance of the English cavalry and the manner in which they performed all they had been taught to do, that we criticise their action during the manœuvres. Were the men of all regiments trained as some have been—the 10th Hussars for instance—to read maps and reconnoitre with intelligence, there would be no room for doubt that the English cavalry would not only hold their own with other nations, but would even surpass them. It only needs a little more practical instruction throughout the year in veiling the movement of friendly corps and bringing intelligence concerning those supposed for the time to be enemies, in order to fit them for similar duties at the manœuvres. There is no lack of good riding, or care of horses, no unsteadiness or stupidity among officers or men and we are confident that next year the cavalry will show as great an advance in knowledge and handiness as was shown this autumn by the infantry.

Only one remark more seems necessary on this subject. The veil and reconnaissance work described as performed so well by the Prussian cavalry was not left to the light regiments only. Heavy cavalry was employed quite as much as light. The *Uhlans* themselves are rather heavy than light, and the duties so well carried out by Balfour's

Light Brigade are just as much the duties of Dragoon Guards and Household Cavalry. To treat the latter as only to be used in grand charges would be to place them in a position of inferiority to their comrades of the light horse; for charges in battle must be comparatively few, while covering and intelligence work is constant and of the highest importance.

INFANTRY LESSONS OF THE MANŒUVRES.

(From the Times.)

If an intelligent soldier from a far off country, such a Japan, were to pass through Europe studying the military systems of each country as shown at the autumn manœuvres, he would arrive at the curious opinion that the English Army, more than any other, believes in an infantry advance in column under fire of an enemy. It would be in vain to assure him that England adopted (not invented) the line formation for battle, and holds to it as specially characteristic of British infantry tactics. He would reply—"I see that you always deploy, sometime or other, before you are quite close to the enemy, but that when under fire, is, of course, a manœuvre quite impossible in war, and I see whole brigades marching in column within easy range of artillery, or even rifle fire of picked marksmen." No soldier at once honest and intelligent could contradict the statement. Brigades did so advance in column under fire on Salisbury Plain, and, what is more, supposing the country unfit for an advance in line, there is no other recognised formation. We trust that the days are over when English officers would answer that the present system served our purpose in the Peninsula, and must therefore be good for all time. That arguments come consistently from the lips of those who opposed, first, the introduction of rifled muskets and then of rifled artillery. Their objections to improved armaments have been answered by the inexorable logic of facts, which cannot be disputed. There are facts too, against the old system of tactics, only they are not yet so widely accepted and understood. Much has already been published on this subject, and among all writings, both English and foreign; nowhere is it better worked out than in the Wellington Prize Essay, by Lieutenant Maunice, R.A., upon whom a portion, at least of his father's mantle seems to have fallen. But, as yet, no definite effect has been produced upon our old system, and there has been no official adoption of a new one. Supposing that the public opinion of the army is not yet ripe, we shall endeavour to put forward with what amount of clearness we can the reason why a change is imperatively necessary, the direction in which the movement must be made, and the result to be expected from it. Only, one previous remark may, to a certain extent, disarm prejudice. It is this. All the changes which we advocate tend, not to a reversal of the ideas of the Duke of Wellington, but to a development of them, not required in his time, but now called for to meet the conditions of modern warfare with its roads, railroads and its telegraphs, its increased range, accuracy, and rapidity of fire.

All conditions of modern civilization, the rapid diffusion of information and consequent decisions of popular opinion, the immense numbers of men now easily put in the field or moved from one part of the theatre of war to another, the enormous

consumption of food by these masses of men and their expenditure of ammunition, the drain upon the country's resources—all these taken together, with the fact that every new invention is a fresh weapon in the hands of genius, contrive to render wars shorter and sharper, campaigns spent in manœuvres and attempts to outwit an enemy being no longer possible. Decisive battles will occur soon after the armies take the field, which is as much as to say that an army to be successful even against an invader must be prepared to make and receive vigorous attacks. For, as Von Moltke says, "The defender, if he wish to bring about a decisive result, must eventually himself become assailant." It follows, then that however peaceably inclined a nation may be, or however determined to make war only in self defence, it must train its army in peace to a style of tactics suited as much to attack as defence.

But the attack is not to be with the bayonet. Few as real bayonet attack used to be they are still fewer now. The bayonet or the bat may be used in street fights or on sudden surprises, but since a man can now easily load his rifle when in the act of walking or even running forward, and as it is far simpler to pull a trigger at close range than to get a bayonet inside the enemy's guard, it is almost inconceivable that a soldier should prefer cold steel to hot lead. In fact, a long experience since the days of breechloading rifles tells the same tale, that the work of death and demoralisation is now almost entirely performed by fire.

Take, as an example, the battle of the Alma, as described by Von Moltke, remembering that it occurred before the introduction of breechloaders, and that the Russian small army were of a very different character:—"Owing to want of practice, they (the English) found great difficulty in simply making a forward march of about a mile, and then required several hours to deploy into two lines, the necessary space the first extends two miles, and it was two deep. In this formation they had to cross a river with steep banks, and to ascend a rocky slope in close proximity to a burning village, and among enclosed vineyards. Opposed to the village, stood at least two thirds of the Russian force. As soon as the first line had ascended the opposite bank, the 2d and Light Divisions formed an irregular chain of skirmishers, in which the men of not only different companies, but even of different regiments, got so mixed up together, that it became no longer possible to fire volleys, or to make any regular movements. The Russians felt confident of breaking the thin red line at any point with their massive and powerful columns. But here the same thing occurred as later on; in the advance of the 1st Division, and the same results were obtained everywhere. The Russian Army, formed in several battalions columns, one behind the other, advanced with a resolute imposing bearing, without firing, and the thin, weak-looking line of the English held its ground, and directed its fire on the dense mass, at a range at which every bullet could not fail to take effect. Before they could come to close quarters or deploy so as to deliver their own fire, the attacking columns halted, and a few badly aimed shots were fired from the centre of the leading battalion, which, of course, was the only one that could be employed. Most of the officers, some of whom were of the highest rank had fallen, but still for a short time the column stood firm; soon, however, it lost its wall-like appearance, and, becoming more in the form of an irregular cloud, at length

gave way, slowly and unwillingly, and with a proportionally great loss. On this occasion, according to the account of Anitschoff the Vladimir regiment lost forty nine officers and 1600 men, but this is probably an exaggerated estimate. In these ever-recurring encounters of the column against line the Russians lost, in barely three hours; 5700 men—i.e., nearly one-fourth of their whole strength. The English, advancing in line and keeping up their fire, twice broke into the principal entrenchment of the Russians, which was defended by sixteen guns: Their total loss did not amount to more than 2000 men; of the engagement cost the Russians, at least, twice as much as it did their opponents, and mainly decided the battle."

Here we see the line advancing with great difficulty, yet triumphing over the heavy column by developing a great front of fire. Had the Russians been as well armed as the English, and had they shown a wide front, either by forming in line or swarms of skirmishers, would it have been possible for the English to have formed their thin line so as to advance with any steadiness at all? As it was, we find them requiring hours to deploy, under estimating the space to be occupied, and at last skirmishing in confusion with different regiments mixed so that no regular movements were possible. Yet the wide front conquered the narrow one, as it had done half a century before. The solid heavy column is now obsolete. Instead of it an English army would meet swarms of skirmishers, which would be perpetually streaming outwards and enveloping the flanks of the stiff British line. Which army, then, would present the widest front of fire? Concerning the question of the policy of attack or defence, it is sufficient for our purpose to say that all writers, even those most in favour of a defensive system of tactics, agree that attacks must be made at some period of a battle, and troops must therefore be trained to attack with vigour and resolution. Now, there is no formation for advance so cramping to the energies of individuals as a long line which can only move in an orderly manner upon flat, smooth ground. On the ordinary surface of a country where battles are likely to be fought no line could advance without frequent stoppages to preserve order.

Again, no formation is so difficult to bring forward under cover as the line. Even heavy columns, may often be concealed till near the enemy; small columns, such as can be formed with 100 to 250 men, are easily brought forward under cover to within a few hundred yards. Individual men or small groups of skirmishers can generally conceal themselves from all but chance shooting until they are close to their work. There are, it is true, still existing in the English Army officers who reject the idea of cover and would, in theory, send their men across the open. But as they are becoming rare day by day, and are not likely to have much influence over the final decision of the question, we need spend but little time over the difficulties thrown in the way, by men who would sacrifice regiments uselessly rather than adopt a revival, not a new principle, and who would abandon a field of battle rather than a crotchet. But there are now by reason of the Volunteer movement, large numbers of the public sufficiently conversant with military affairs to understand a simple explanation, although they do not pretend to be military students, and to whom we would address a few remarks concerning the changes which make the utilisation of

cover much more important than it was in the days of the Peninsular war.

Artillery fire and infantry fire have been developed in three principal directions. The useful range is much longer, the accuracy, at all ranges far greater, and the possible rapidity of fire increased to an extraordinary degree. Let us see how these tell in a battle, and especially how they influence the staff formation in line.

In forming a line of battle, whether for attack or defence the best positions will be occupied by artillery, without refence, to the line of the infantry. The guns will not frequently moved, because the effect of their fire is not materially influenced by the addition or subtraction of a few hundred yards in range. It is by no means certain that the artillery will fire at what is straight in front of them. Indeed, the reverse would be the case if the enemy were advancing in line. The gunner knows very well that the fire of his gun will be sufficiently accurate so far as deviation to the right or left is concerned; his only difficulty is with the under and over. An advancing line therefore, would be receiving a shell fire, not as much from its direct front as from that diagonal direction which is expressed technically as "*en echappe*," or even almost directly from its flank. Batteries three or four miles apart could cross their fire upon a line advancing to attack, and the fire would be felt as coming from both flanks. What then becomes of the "thin red line"? It suffers as a column with a narrow front, but, very deep, would suffer from direct fire. Exactly the same principle is applicable, though in an inferior degree, to the fire of infantry, now that bullets fly with great velocity and striking effect to distances even of 2000 yards. Let us not be misunderstood, we are not advocating long-range infantry fire, but only pointing out that the bullets fired directly against an advancing enemy will frequently range as far as a second line of reserves, and that a small body of infantry occupying a position on the flank of an advancing line will range perhaps, along its whole length. Two special instances of artillery fire employed as we have above described happened to fall under our observation at the manoeuvres. On the first day, the 6th of September, Codford Hill was held by the right of the Northern Army, which was attacked on its right flank by Horsford's advance, at the same time that the troops occupying Codford Hill were being shelled by Southern batteries on the other side of the river, both in front and flank of the defenders. The lines on Codford Hill were distinctly visible to the gunners of Major King's battery, which was playing upon them under the most favorable circumstances possible for artillery fire—namely, in the direction of their greatest depth. Again on the last day, when Brownrigg's Division turned the left flank of the Northerners, and placed 18 guns in position there, no officer, of whatever school, who saw the Northern brigades advancing against the other Southern Division and exposing their left flank directly to the fire of Brownrigg's guns at ranges of 1500 to 1200 yards, could fail to be struck with the want of adaptability of the line formation to the case in question. The Umpires on the Southern side declared that two Northern Brigades must have been thrown into such dire confusion as to be practically valueless for battle during a considerable time. Now the same work performed by the artillery on this occasion might have been done by infantry, if only they had been a little nearer than the batteries were. There was no help for it, if the line of formation were to be

preserved. The fault did not rest with the officers who were leading the brigades, for they are forbidden to deviate from the instruction contained in the drill-book, and as they had, without doubt, received orders to advance no choice was open to them. If it be asked in what formation could they have moved under the circumstances, we reply, in no definite formation at all, but exactly as Col. Baker advanced his light cavalry on the last day of the manoeuvres of the Southern Army near Blandford—namely, by sudden rushes in loose order, across every open space, and by massing together wherever a little cover afforded by a wood or a hill gave opportunities. It so happened that the guns were able to fire at a range very short for them, but even if another 500 or 1000 yards had been added, their fire would still have been destructive under the circumstances, while it would have been perfectly useless against troops in proper order. So much for the power given by increased range.

With regard to accuracy the development of modern fire tells against troops standing exposed or moving in any formation whatever, and whether the fire be from front or flank. In combination with increased rapidity the great accuracy of modern rifles renders an advance across the open in either line or column a simple impossibility if the defenders are attacked in front and lie down or shelter themselves behind the thousand-and-one accidents which occur in every field of battle. The three movements together—long range, rapidity, and accuracy—may be said to have this effect upon modern tactics, that it is no longer necessary as a rule for the defence to occupy with troops open spaces under view of the enemy; for, in the first place, the enemy will not choose them for his advance, and if he aid the fire of the artillery and infantry of the first line from sheltered situations would so shatter him that he would fall an easy prey to what ever might come next, second line or reserves.

We arrive, then, at certain principles derived directly from the increased power of modern artillery and small arms. The old formation for battle, with two beautifully-arranged lines occupying the extent of country covered by them when deployed, is no longer right, and so far as the science of warfare is concerned, may be called barbarous. If this be granted, it is manifest that neither attack nor defence can be conducted with any hope of success in a formation based upon the principles hitherto understood and carried out by the stiff British line. Further remarks upon infantry tactics especially upon the merits of an habitual system of attack or defence, must be reserved for another article.

(To be continued)

LIEUT.-COL. VILLIERS.—We were to day informed by a gentleman well posted in military matters connected with this District that yesterday, commenced the eleventh year of Col. Villiers' duties as Brigade-Major of this Division, and obtained the following statistics of the relative strength of the Volunteer Force ten years ago and at the present time, which cannot fail to be entertaining to those of our readers who take an interest in the working of our citizen soldiery. In 1862 the Seventh Military District composed the Counties of Wentworth, Halton, Lincoln and Haldimand, and mustered only 890 men of all ranks in the active force. In the year 1864 the Counties of Brant and Norfolk were added, and in 1868 the six

counties above named were, under a new military division of the Dominion, made into the Second Brigade Division of Military District No. 2. The force of this Division now consists of:

	Officers.	Rank and File
5 Troops of Cavalry	15	200
2 Field Batteries of Artillery	8	150
1 Garrison Artillery Co.	3	55
4 Battalions of Infantry	110	1,430
4 Battalions of Rifles	113	1,485
Making a total of	249	3,320

Thoroughly armed and equipped, and ready for action at a day's notice. Besides the above, comprising the Active, or Volunteer Force of the Division, Brigade Major Lieutenant Colonel Villiers has now the organization of thirteen regiments of Sedentary Militia, ready to act as a reserve to the volunteers in case of an emergency. While the above figures shew to what an extent the military spirit has developed in this Division and with what alacrity our young men have responded to the call to qualify themselves for a soldier's duty, it also speaks very strongly in favor of the staff officer, to whose exertions much of this success is due and also exhibits the very popular favorable impression with which he is regarded by all ranks in the Force. We cannot allow the occasion of the tenth anniversary of Colonel Villiers' appointment to pass without congratulating him on the success which has attended his work during the past ten years, and express the hope (in which we are sure we will be joined by all our readers) that he may long represent the staff in Hamilton, unless it be that promotion to a higher command, which is always dear to a soldier, should remove him from amongst us.—*Hamilton Times*.

"The altered position occupied by the cavalry of the present day," says the *Army and Navy Gazette*, "is the subject of an article in the *Vedette*. Their task now is stated to be, firstly, the strategical service, which embraces the duties of exploration, taking measures for the safety of the army, and skirmishing, secondly, the tactical service of engaging with the enemy's cavalry, pursuing small bodies of infantry, and following up a decisive victory. This demands from the officers great intelligence and foresight, as well as a knowledge of topography. They must be men, too, accustomed to the saddle, and to all kinds of fatigue and hardship. Another important use of the cavalry is to discover the weakness and mistakes of the enemy; for without well-led cavalry, an army gropes in the dark, cannot rely on any decided victories, or turn the disorder of a retreat into a flight. One cause of the disarrangement that has fallen upon this arm of arms, is that it has been used without regard being paid to the increased excellence of fire arms. Instances of such noble but extravagant deeds are numerous. The charge of the cuirassiers at Aspern, of Murat's Horse at Krasnoj in 1812, and an Englishman will add, the Balaklava charge. In his work on cavalry, the Arch Duke Charles remarks that 'the general to whom the field marshal intrusts the cavalry on the day of the battle should not suffer his masses to be divided at the representation of any other general in order to render a fruitless and fragmentary assistance. In such a case the infantry lose their self reliance, and the cavalry do not decide the battle.'