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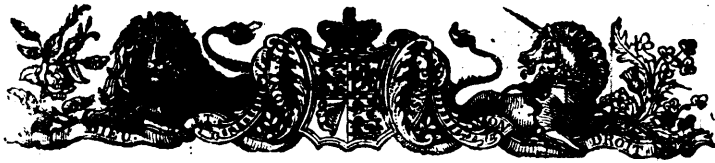
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# The Volunteer Review

## AND MILITARY AND NAVAL GAZETTE.

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

VOL. VII.

OTTAWA, (CANADA,) TUESDAY, JULY 15, 1873.

No. 28.

### NEWS OF THE WEEK.

The Shah of Persia took his departure from this city to day (July 5th) for France. His Majesty proceeded to Portsmouth, where he embarked on the British steam sloop "Rapid" at two o'clock this afternoon and sailed immediately for Cherbourg. An immense crowd gathered at the Railway station in this city and loudly cheered the Shah as the train moved off. As the "Rapid" steamed out of Portsmouth harbor, a parting salute was fired by the Channel Squadron.

A despatch from Bombay brings intelligence of a rising among the Hindoo peasants in the District of Pinah. They refuse to pay rents, and have plundered and burned several houses. Two bands have been dispersed by the police.

The European and American Congress will meet at Berne on the 9th September.

A reduction in the rate of discount of the Bank of England, will probably be made tomorrow. The rate of discount for 3 months' bills in open market 15-16 per cent below the Bank of England rate.

A Vienna despatch to the *Standard* says, an attempt was made yesterday by an incendiary to fire the exhibition building. Correspondents of the London journals and other persons who have returned here from Vienna, hint that the building will probably be burned soon.

In the House of Commons this evening the members for Merther Tydville, moved that in the opinion of the House Her Majesty's Government should communicate with foreign powers for the purpose of improving international law and with a view to establishing arbitration as a permanent resort for the settlement of differences between nations. In support of his motion he stated that he had received a large number of letters from America expressing sympathy with his motion.

Mr. Gladstone opposed the motion, he argued that it would defeat its own object, because continental nations held widely different views on the subject. He asked the gentleman to withdraw the motion.

Mr. Richard declined to withdraw and the House divided. The division resulted in a tie, 98 yeas to 98 nays, and the Speaker gave his casting vote in favour of the motion, which was adopted.

The *Herald's* London special says: The *Herald's* correspondent at Khartoum telegraphs via Alexandria, a confirmation of the arrival of Sir Samuel and Lady Baker and party. He adds that Sir Samuel Baker has succeeded in organizing district governments, appointing superintendents, and making Fatiko the chief station; Goudokoro being next in importance. He also established eight other principal posts, which form a connected chain from Mibia to Nynza, and obtained troops to complete the garrisoning of communications. An important geographical discovery is said to have been made, which will astonish the scientific world, as it pretends that Lakes Tanganyika and Albert Nyanza prove to be one and the same water, and a magnificent inland sea seven hundred miles in length. It is further announced that vessels can be launched above the falls named after Sir Roderick Murchison, and sail to Ujji. Baker and party are in excellent health, and leaves at once for Sonakim, en route to Suez.

Eighteen Norwegians belonging to the German Arctic Navigation Company's Service, who were left on Spitsbergen Island, were found dead by the party who went to their rescue.

The second instalment of two hundred and fifty million francs of the last milliard of war indemnity, was delivered to the German treasury on the 5th inst. There now remains due to Germany but five hundred million francs, which, in accordance with the treaty signed at Berlin on the 15th March last, is to be paid by the 5th of next September.

The Duke de Briment's libel suits against the proprietors of the *American Register* of this City, and the *New York Herald*, were decided for the plaintiff. The *Register* was condemned to pay 5,000 francs damages and a fine of 1,500 francs; the *Herald* to pay 6,000 francs damages, and 1,000 francs fine.

The Paris correspondent of the *Times* telegraphs that the trial of Marshal Bazaine will probably take place at Compeign in the latter part of September.

The Shah of Persia arrived this afternoon at Cherbourg, on the British ship 'Rapid.' The town and the shipping in the harbor were brilliantly illuminated.

The number of foreign visitors to the Exhibition is increasing daily. The great majority are from England.

The juries are now hard at work, and it is thought that a considerable number of prizes will be awarded to American exhibitors.

A severe rain storm passed over the city. The rain penetrated through the roof of the Exhibition building, considerably damaging the goods exhibited in the United States department and ruining the silks displayed in the French section.

Notice is given in the journals that the International Patent Right Congress will convene on the 14th of August. An Imperial Commission has been appointed to arrange the preliminaries. The language used at the Congress will be German, but French and English will be permitted. The decision of the Congress will be communicated through the several commissions to their respective governments. Inventors and proprietors of inventions are actively moving in the matter, and a large and important gathering is expected.

The Count de Cambrai has failed to form a Cabinet, and the crisis in the Ministry continues.

Shocks of earthquake are reported this morning in Billuno and vicinity.

The Shah of Persia has accepted an invitation to visit this city.

The Shah of Persia and suite entered the Passy station at 6:30 this morning where the Shah was met by President McMahon and Duc de Broglie. At the arch of triumph the Shah was met by the Prefect of the Seine and the municipal councillors. M. Vautrain made an address of welcome, to which the Shah briefly replied. He was then escorted to the Palais Bourbon, where he was received by M. Buffet, President of the National Assembly. The crowds of spectators were immense, and the Shah had a warm and popular reception.

ANNUAL REPORT ON THE STATE OF  
THE MILITIA FOR 1872.

(Continued from Page 314)

On the 24th June, the staff, composed as follows:

- Brigade Major, Major Crawford, 3rd Battalion.
- Supply Officer, Lieut. Colonel Dowker, M. G. A.
- Camp Quartermaster, Lieut. Seath, 6th Battalion
- Musketry Instructor, Lieut. Campbell, 3rd Battalion.
- Orderly Officer, Lieutenant Gordon, M. G. A.

proceeded to the ground, and the operation of laying out the camp commenced, and by the exertions of the Brigade Major, assisted by the Camp Quarter Master and Orderly Officer, was most accurately performed. A non commissioned officer and one man per company from the various corps arrived, and took over the camp equipment of their respective corps, commenced to pitch tents, dig latrines, &c. the whole remaining in camp during the night.

On the 25th the various corps commenced to arrive, and by nightfall with the exception of the Montreal Troop of Cavalry, which was marching from Montreal, all had arrived and were comfortably settled for the night; rations returns for the following day having been made out, guards mounted and sentries posted.

The Brigade was composed as follows:

- St. Andrew's and Montreal Troops of Cavalry.
- 1st Battalion "Prince of Wales Own Rifles"
- 3rd Battalion, "Victoria Volunteer Rifles."
- 6th Batt. "Hochelaga Light Infantry."
- 11th Bat. "Argenteuil Rangers."
- Wakelield Infantry Company.
- Erdley Infantry Company.
- Alywin Infantry Company.

The three last named companies were attached to the 16th Battalion.

On the 26th rations were first served out and regular drill commenced, which for the first five days was confined to squad, company, troop and battalion drill. The daily improvement was apparent, and especially with the Alywin Company which came into camp all recruits, and was soon able to take their place in battalion. On the 1st of July the first brigade parade was ordered, and a march past and a few simple brigade movements were gone through, but no blank ammunition was served out, as I did not consider the brigade had been long enough in training to make the expenditure profitable. From this time until the close of the camp, besides the morning drills, brigade parades daily (three days with 10 rounds of blank ammunition) and the improvement in brigade movements and light infantry was most creditable, and gave me very great satisfaction.

I gave the command of the brigade parade one day each to the following officers viz., Lt. Col. Bond, Lt. Colonel Bethune and Major Rogers, arranging with them beforehand what brigade movements were to be performed at the afternoon parades, and I have much satisfaction in reporting that they went through with their respective programmes in a very creditable manner.

The rifle ranges situated on a piece of ground kindly given for the purpose by Mr. Charles Albright, a farmer, were about a half mile from the camp; the butts, four in number, were carefully built under the supervision of the Musketry Instructor, and each range was available for 200, 400, and 600 yards. The target practice commenced on the 2nd July, and was conducted admirably and carried through successfully, and completed on the 6th without mishaps of any kind, thanks to the care taken by the Brigade Musketry Instructor, Lieut. Campbell. A list of best shots is herewith transmitted.

The whole of the buglers in camp were daily exercised under an efficient instructor and benefitted much by the arrangement.

The duties of guard mounting, posting sentries, &c. I found at first to be very unsatisfactorily performed, until I detailed an instructor to attend to this particular duty, and the benefit thereof was very soon apparent, by the manner in which the guards were relieved, and the greater alertness shown by sentries on their posts.

Regimental officers' messes were established and worked well; the Brigade Staff messed by themselves.

The brigade paraded for Divine Service each Sunday in camp; the Roman Catholics attending their church in St. Andrew's, and the Reverend Canon Lonsdale most kindly officiated in camp for the Protestants.

Under the supervision of the Camp Quartermaster, the camp was kept clean and healthy. The issue of all the camp equipment, as well as taking over again devolves on this officer, and he performed his duties sometimes arduous, very much to my satisfaction.

The duties of Supply Officer were most efficiently performed, and the Contractor's supplies were of excellent quality, there were consequently no complaints during the whole time of the training, either as to the quantity or quality of the rations, the additions made to which since the previous year were duly appreciated.

The Brigade Major was indefatigable, and my best thanks are due to him for the very satisfactory manner in which he carried out my orders in every respect; in fact, where all the Staff worked with a determination to make the camp a success, it is perhaps invidious on my part to individualize, as my thanks are due to the whole of my staff for the way in which they supported me throughout.

I forward herewith a sketch of the camp and a very little of its surroundings.

The Montreal Field Battery drilled for four days at Laprairie, and they have to complete their annual training during the winter.

The Montreal Garrison Artillery (6 Batteries) went into Barracks at Montreal, and there performed the annual sixteen days' drill.

The Montreal Engineers (2 Companies) encamped for sixteen days on St. Helen's Island. All these corps, as well as the Sheffield Field Battery and the St. John's Garrison Battery, I mustered for pay; but for efficiency in Artillery, Regimental Drill and Exercises I have to refer you to the report of the Inspector of Artillery, for the Province of Quebec.

During the year five troops of Cavalry have been raised and accepted in the District, and I have now two more offering their services.

Cavalry corps can be kept up in the rural

districts at the present rate of pay, but to keep up the infantry battalions, it appears to me, to become year by year more difficult.

Before closing this report, I beg to record my thanks to Mr. Emery Simpson, and Mr. Peter McMartin for their liberality in placing at my disposal a very large portion of their farms, for the purpose of the camp; and to the inhabitants of St. Andrew's for their most excellent supply of spring water.

To the Rev. Canon Lonsdale my thanks are also due, as, although much engaged, having three services to perform in his own Church in St. Andrew's, he each Sunday of flicted for us in camp.

I have the honor to be sir,

Your most obedient servant,

THOMAS BACON, Lt. Col.

A. D. A. G., Militia.

M. D. No. 5.

HEAD QUARTERS, 2nd Brigade Division.

MILITARY DISTRICT No. 5.

St. John's, October 23, 1872.

Sir,—I have the honor to inform you that the total nominal strength of the force in the Division under my command, were the respective corps complete to their established strength as authorised, would be officers and men 2,611.

The total actual strength of the force, when mustered at the time of the annual drill for 1872 and 1873 was, officers and men 1,169. There are wanting to complete, officers and men, 1,442.

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

The three troops of Cavalry and six Battalions of infantry in camp at Laprairie, under my command, and the two batteries of Artillery at St. Helen's island under the supervision of Lieut. Col. Strange, and officers of "B" Battery.

The camp at Laprairie was formed on the 21st June. The infantry camp occupied the rising ground on the right of the barracks, and the cavalry were encamped between the barracks and the river, both camps were well laid out, and kept in excellent order. The plan of picketing the horses adopted by Lieut. Col. Lovelace, commanding the Cavalry, was very secure and serviceable; Enclosed is a sketch of the camp.

DRILL AND DUTIES.

The first six days in camp were taken up with squad, troop and company drill, and target practice, the remainder of the time with battalion, light infantry and brigade drill. The troops of cavalry were all new, having been formed in April last, had never been drilled until their arrival in camp, but under the efficient instruction of Lieut. Col. Lovelace, such progress was made, that at inspection they marched past at a walk and gallop in a very creditable manner.

In the infantry there were seven companies all formed within ten days of mustering for camp, viz.: one company 21st Battalion, one Company 52nd Battalion, and five in the 79th Battalion. None of them were armed, and one of them had not received clothing, but spare arms and clothing were furnished by the other companies to all who were in



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

On the 21st June an advanced party from each corps marched to the camping ground, received their camp equipage, staked out the camp for their respective corps, drew and cooked their rations and guarded the camp equipage during the night. On the following morning rations were drawn by the advance party for their corps which were cooked and ready for them on their arrival on the ground. As the corps arrived, guards were posted, tents pitched, latrines and proper cooking trenches made, and by the evening every thing was in working order. There was some inconvenience caused by the short supply of tents, but this was overcome by erecting tents of bark, which proved to be more comfortable than the canvas, and taught the members of the force a good lesson, which may be of use in future. I may mention that sentry boxes were made by placing four poles of young trees about one foot in the ground, securing them at the top by cross pieces, the top and three side being covered in with spruce boughs. The 22nd being Sunday, Divine service was performed in camp for all denominations.

(To be Continued)

CORRESPONDENCE.

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

MONTREAL.

(FROM OUR OWN CORRESPONDENT.)

The sergeants Mess of Prince of Wales Rifles held their third annual meeting last week at their rooms, 81 St. James Street. The following were elected office bearers for the ensuing year.

- President.—Sergt.-Major Johnson.
- Sec. Treas. Sergt. Wilson, (re-elected.)
- Asst. do Sergt. Stuart,

Committee.—Q.M.S. Harman, P. M. C. Young, Sergts. Hill, Jones, Murphy, and Corp'ls Malin and McIntosh.

The report that was read, shewing as it did a surplus on hand, was very satisfactory. Amongst other projects discussed, was to start a circulating library for use of members. The Reading Room is well supplied with papers and is generously thrown open to the public.

The Prince of Wales Rifle Association met at their mess room on Wednesday, and completed arrangements for their annual rifle matches.

The annual prize meeting of the Rifle Association of the Province of Quebec will take place at Point St. Charles ranges, on Tuesday, 12th August. No doubt but there will be a large gathering. From the report of this association for last year it appears that its meetings are as well attended as ever, a matter that must be very satisfactory to those who manage affairs.

At last some decisive action is to be taken in regard to re-roofing of Drill Shed, the matter is to come up at next meeting of City Council.

RIFLE MATCHES.

A rifle match was fired on the morning of the 7th inst. commencing at six o'clock, between No. 1 Company of the Governor General's Foot Guards, and a squad made up from the remainder of the regiment, in which it will be seen that the former were the winners by 33 points. Appended is the score.

Score of Return Match, No. 1 Company  
G. G. F. G.  
No. 1 Company.

	200yds	500yds	600yds	Tot.
Pte. Garry.....	24	21	14	56
" Deslauriers	23	16	12	51
L. Corp'l Boswell.	18	17	15	50
Pte. Thorp.....	19	15	13	47
Corp'l Sutherland	19	18	8	45
	103	87	50	249

Regiment.				
Col. S Cairns, Co 6	25	22	17	64
Ct. Macpherson 2	22	19	13	54
Sgt. Cotton... 5	21	11	16	48
Sgt. Waters... 3	16	13	0	29
Ens. Rute.... 3	9	4	8	21
	93	69	54	216

Majority for No. 1..... 33  
Majority in previous match 41  
Total Majority..... 74

SHERBROOKE RIFLE ASSOCIATION.

The Annual match of the above Association was held at the ranges, East Sherbrooke on Monday and Tuesday last. The weather alternated between hot and wet. At 9.30 a. m. the competitors having formed up, E. T. Brooks, Esq., M. P. stepped to the front and opened the match by firing the first shot at 400 yards, making a good bull's eye. The following is a list of prizes with the names of the winners.

Match No. 1.—Open to 53rd Batt. and members of Sherbrooke Rifle Association residing within the electoral town of Sherbrooke. Ranges 400 and 600 yards, 5 shots at each range, any rifle of Government issue.

	pts.
1st prize, Ladies Challenge Cup and \$10	
Lieut. Loomis.....	27
2nd prize, cash \$6, S. T. Westlake.....	27
3rd Prize, Meerschaum Pipe, H. Winslow	24
4th prize, \$1 Lt. Grindrod.....	24
5th " W. Whitely.....	23
6th " C. Rolf.....	22
7th " J. Cotter.....	20

Lieut. Loomis having won this cup before, takes it for good.

Match No. 2.—Open to all comers and all rifles; 200 and 406 yards, 5 shots at each range.

	pts.
1st prize, \$15, Lt. Loomis	34
2nd prize, Revolver, S.T. Westlake.....	33
3rd prize, \$5, A. Stacy.....	31
4th prize, \$2, Q.M. Thomas.....	31
5th " J. White, G.T.R.....	30
6th " Lt. Morkill.....	30
7th " E. Stacy.....	29

Match No. 3.—Company Match, 200, 400 and 600 yards; 5 shots at each range.

1st prize, silver Challenge Cup, No. 6 Co 53rd Batt, 5 men..... 172

(This decides the future ownership of the handsome company cup, No. 6 having taken it last year without competition.)

The individual scoring resulted as follows:

Lt. Loomis 63rd Batt, \$8.....	44
Capt. Rolf, " 4.....	41
C. Rolf " 4.....	40
J. Fisetto " 2.....	39
S. T. Westlake " 2.....	37

Match No. 4.—Open to members of 53rd Batt. and S.R.A; 300 and 500 yards; 5 shots at each range.

1st prize, Challenge Cup and \$10, J. Fisetto.....	32
2nd prize, Gun, Lt. Loomis, 53rd Batt.....	31
3rd prize, pr of Gloves & \$3 Capt. Rolf.....	30
4th prize, a choice hat, R. P. Doyle, S.R.A	30
5th prize, Photo Album, B. Rolf.....	29
6th prize, \$1, L. Heath.....	28
7th " 1, E. Stacey.....	27

Consolation Match.—Open to all who have competed for any of the foregoing prizes, and have not won a first or second prize; 200 and 400 yards; 3 shots at each range.

1st prize, Tweed Suit, H. Winslow 53rd Bt	18
2nd prize, "Confederation" photo, C. Rolf.	18
3rd prize, 7 yards Flannel, E. Moe, 53rd Batt.....	17
4th prize, barrel crackers, W. Moulton.....	17
5th prize, 3 1/2 yards flannel, and \$1.25, Lt. Morkill.....	17
6th prize, \$1, A. D. Bostwick, S.R.A.....	17
7th " B. Rolf, 53rd Batt.....	17
8th " L. Heath.....	17
9th " E. Stacy.....	16
10th " J. Loomis.....	16

\$10 prize, given by Captain Armstrong, to the best shot in 53rd Battalion, 600 yds 6 shots.

Won by S.T. Westlake..... 15 points.  
—Sherbrooke News.

The *Bassiret*, the official journal of Constantinople has recently published a statement concerning the ordnance and respective armaments of Turkey. According to its report, within the next few months the Turkish government will possess 1,000,000 of the best breech loading rifles. The fortifications of the Hellespont and Bosphorus are both nearly completed. The fortifications now being constructed on the Island of Crete, as well as those at Sinope and Varna, on the Black Sea, will mount 100 pieces of artillery consisting of 300, 450, and 600 prs. Four hundred cannons are being distributed among the forts of Roumania and Anatolia, of calibre from 12 to 72 pounders—all rifled breech loaders. Turkey will soon have 1,000 pieces of artillery as effective as any known and the government is erecting a new arsenal at Matakka.

DOMINION OF CANADA.



MILITIA GENERAL ORDERS.

HEAD QUARTERS,

Ottawa, 11th July, 1873.

GENERAL ORDERS (17).

ACTIVE MILITIA.

Battery of Artillery on Service in Manitoba.

To be Captain in Command.  
1st Lieutenant J. Ernest M. Taschoreau.

Provisional Battalion of Infantry on Service in Manitoba.

To be Lieutenant :  
Ensign John Allan, vice Reed, appointed Adjutant.  
To be Ensign :  
William George Gow, Gentleman, vice Allan promoted.

PROVINCE OF ONTARIO.

Ottawa Brigade of Garrison Artillery.

Captain William Henry Cotton, G. S. from No. 2 Battery of the Ottawa Brigade of Garrison Artillery, at present doing duty with "A" Battery School of Gunnery, Kingston, is hereby transferred from the Ottawa Brigade of Garrison Artillery and promoted to the rank of Major. His commission to date from period of qualification.

To be Major :  
Captain James Egleston, G. S. from No. 1 Company, vice T. Ross, transferred to 1st Battalion Governor General's Foot Guards.

14th Battalion or "The Princess of Wales' Own Rifles."

To be Captain :  
Lieutenant Joseph William Power, M. S. vice William Skinner, whose resignation is hereby accepted.

25th "Elgin" Battalion of Infantry.  
No. 4 Company, Wallacetown.

To be Captain :  
Lieutenant Edward Osborne, M. S., vice Alexander McBeth, whose resignation is hereby accepted.  
To be Lieutenant, provisionally :  
John Wesley Luton, Gentleman, vice Osborne, promoted.  
To be Ensign, provisionally :  
Sergeant Andrew Storey Backus, vice T. A. Parish, left limits.

57th "Peterborough" Battalion of Infantry.  
No. 1 Company, Peterborough.

To be Ensign, provisionally :  
Sergeant Thomas Evans Bradburn, vice Dixon promoted.

PROVINCE OF QUEBEC.

Montreal Brigade of Garrison Artillery.

To be Captain, specially and provisionally :  
1st Lieutenant William Robert Oswald, G. S. 2nd class, vice Wiekstoed, transferred to 1st Battalion, Governor General's Foot Guards.

65th Battalion or "Mount Royal Rifles"

No. 3 Company, Montreal.

To be Lieutenant :  
Napoleon Hudon, Beaulieu, Gentleman, M. S., vice J. A. Ouimet, promoted.

PROVINCE OF NEW BRUNSWICK.

8th Regiment of Cavalry.

To be Veterinary Surgeon :  
M. P. Greene, Gentleman.

PROVINCE OF NOVA SCOTIA.

66th "Halifax" Battalion of Infantry.

To be Captains :  
Lieutenant William Marshall Humphrey, V. B., vice Alfred Browne left limits.  
Lieutenant Frederick Mitchell, V. B. vice Charles H. Hepworth, whose resignation is hereby accepted.

To be Ensigns :  
Arthur Edward Curran, Gentleman (provisionally) vice Graham, promoted.  
Henry St. George Twining, Gentleman, M. S., vice Waugh, promoted.  
William S. Salter, Gentleman, Q.F.O.  
William F. Rogers, Gentleman (provisionally).  
Arthur Fraucklyn Salter, Gentleman, (provisionally)

By Command of His Excellency the Governor General.

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

MACMAHON.

The new President of the French Republic is in his sixty fifth year—y younger than Thiers by some eleven years. He is descended from an Irish family, which is said to have lost all its possessions in Ireland in the cause of the Stuarts. His father was a peer of France, and a personal friend of King Charles. Marie Edine Patrick Maurice MacMahon began his military career by entering, in 1825, the School of St. Cyr as a Cadet, after which he took part in the Algerian wars. He next took part in the expedition to Antwerp, as aid de camp to General Achard; then returning to Africa he distinguished himself at the capture of Constantine,

steadily rising in rank, in 1848 the provinces of Constantino and Oran were placed under his command. In 1855 he succeeded Canrobert in the Crimea, where as commander of a division he took a distinguished part in the siege of Sevastopol, and particularly in the storming of the Malakoff, having succeeded in maintaining his position there. For his brilliant success on this occasion, he received the Grand Cross of the Legion of Honor. He also took a prominent part in the Italian campaign, being at its close made Marshal of France and Duc Magenta. In recent years he was despatched to Algiers, to quell a formidable insurrection of the Arabs there. The part he played in the Franco-German war—so disastrous to France—is well known, and the universal sympathy excited all over France and beyond it, when wounded at Sedan, showed the estimation in which he was held. He now enters a new field while approaching his three score years and ten, and a field, too, which demands a new species of generalship, and which may yield him more honor, than all those on which he has hitherto distinguished himself.

The Bavarian uniform question has made much bad blood in Germany, and at the same time shown that the fraternal feeling which during the war with France ran so high in the southern States, has again given way to the old feeling of indifference towards Prussia; and Bavaria, for one, is, from all appearances, determined to interfere as far as she can with Prussia's purpose of uniting all Germany under a single government. The tendency of modern political movements will prove too strong for her, however; for it remains, in our opinion, only a question of time as to when Germany will be freed from this dead weight of small kingdoms and take a step nearer liberty. The iron rule of a greedy Prussia is only one phase in the development of German unity, as the similar tyranny of our Southern oligarchy was a necessary phase of progress toward nationality.

In reply to a request addressed to the artillery officers by the French Minister of war for their suggestions in regard to the model for a gun adapted to the demands of the present day, the French War Department has received some interesting papers on various guns of breech and muzzle loading patterns, as well as on improved modes of treating the raw material. One of these, deserving the attention of all artillerymen, is by du Pau, chef d'escadron d'artillerie de la marine, who presents a model for a steel gun weighing 450 kilogrammes (1,000 lbs) and mounted, 1,000 kilogrammes (2,222 lbs) with an equipment of six horses. The gun is to have screw lock similar to that adopted in the Reffye system. The length of the bore is 28½ calibre, and that of the cylindrical parts 24 calibre, which is considerably greater than heretofore made. Several experiments will be made during the year with this gun.

REMITTANCES Received on Subscription to THE VOLUNTEER REVIEW up to Saturday the 12th inst.

DELHI, O.—Capt. A. Cryster (to May, 1873).....	2.00
GLANFORD, O.—Capt. A. Bethune (to Feb, 73).....	2.00
HAGREVILLE, O.—Lt. A. A. Almas (to June 73).....	1.00
LONDON, O.—Lt. Col. J. B. Taylor (to Jan. 73).....	6.00
[Per Col. Lovelace—late Agent.]	
LONDON, O.—Capt. & Qr.-Mr. A. G. Smyth.....	2.00
QUEBEC, Q.—Capt. (Major, Mont.) Harder, G.T.B. 2,600	2.00
Colonel Stevenson.....	2.00
Captain Morgan.....	2.00
Major W. W. Scott.....	2.00

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## The Volunteer Review,

AND

## MILITARY AND NAVAL GAZETTE.

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

OTTAWA, TUESDAY, JULY 15, 1873.

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

We give our readers the following article from the *Frontier News* entitled the "Volunteers and Montrealers" for the purpose of shewing how thoroughly the spirit of opposition to the development of the military power of Canada, is manifested by the commercial classes, while it is abundantly evident, that their interests is the first to suffer directly from the effects of political disturbances, which the country would be unprepared to encounter, and also to demonstrate that this feeling is well understood, and appreciated by the agricultural classes who have, in reality, the greatest aggregate interest in the defence of Canada, and its thorough preparedness for any contingency that might arise.

We did not hesitate to fix the quarter whence the mischievous and absurd cry for

economy which has crippled military training for one year at least, came. And we do not hesitate to say now that it was and is a monstrous error to suppose that yielding to such a cry would be a popular act or even be well received by the people of the country who understand distinctly that they have no safety except in constant vigilance and stern preparation.

It is evident that the time has arrived to make all the great commercial centres undertake their own defence, by embodying every man capable of serving, making the duty compulsory, and local drill at stated periods imperative. The traders cry for economy, can be gratified by allowing no pay and compelling the municipality to clothe and arm their own soldiers; thus every city would have its own garrison, while the active army for field operations could be drawn from the rural districts by voluntary service as at present, for which they should be paid the full value of their time.

An arrangement of this description would accomplish the great work of making the commercial class bear the full share of military duty, take their proper place in defence of their own interests, have a force always at hand in aid of the civic police, and would insure that order, in Montreal and other cities which their municipal government at present fail to maintain; there would always be efficient garrisons to prevent such centres being surprised, and as the *strategy of invasion*, as far as Canada is concerned, must be met by an army in the field, it would at once relieve the country of the cost of maintaining expensive garrisons in time of war. Those are considerations for the political economist, and our contemporary is right in stating that the volunteer force is not yet killed, although we believe we need not thank the Montrealers that such is not the case.

"Up to within a few months past it was a favourite cry of Montrealers—men of many who professed to be devoted Ministerialists—that the unpopular course and indifference of the then Minister of Militia, (the late Sir George Cartier) had killed the volunteer movement. We never put much faith in these stories, as we always surmised that a certain class of the community, whose patriotism scarcely extended beyond their own shop-fronts, were striving to shove upon others a responsibility which rightfully belonged to themselves, but any doubts we may have entertained have been set at rest during the last week. The reports of the volunteer gatherings at Havlock, St. Armand and Knowlton, conclusively show that the volunteer movement is not dead, in this military district at least. The men who never had any special favors shown them by the Government, and are now poorly supplied with clothing, are as ready as ever to turn out when called upon, whether it be for a jubilee, a rifle match or for more serious business. The simple truth is, if the volunteer movement be dead in Montreal its demise must be attributed to the hostility of one part of the people and the indifference of the other,

and not to the action nor want of action on the part of the late Minister. We are not prepared to say that the maintenance of the militia upon its former footing is either necessary or expedient; and whether or not Montreal ought to furnish any volunteers at all in times of peace we shall not stop to enquire—our simple desire is to point out that the onus for this altered state of things has not been fairly represented."

This first great principle of the Art of War is *strategy*, and it involves the following conditions:—

1st. The selection of the theatre of operation and the different contingencies consequent thereon.

2nd. The determination of the decisive points.

3rd. The Selection of a fixed base of operations.

4th. The selection of the objective point for offence or defence.

5th. The strategic points, lines of defence and fronts of operation.

6th. The choice of lines of operation.

7th. For given operations the best strategic lines with details of provisions for contingencies.

9th. The marches of armies considered as manoeuvres.

10th. The distribution of depots.

11th. Fortresses regarded as strategical means, as defences and as obstacles.

12th. Points for entrenched camps and works, covering passage of rivers, defiles, &c.

13th. The divisions to be made and the large detachments necessary.

It is also divided into offensive and defensive, or more correctly *the strategy of invasion*, and that of *defence*, as applied in modern warfare it comprehends all operations by land or sea, undertaken for offensive or defensive purposes, and is by far the most important study to which the statesman or soldier can direct his attention, because on a thorough appreciation of all its bearings and the provisions necessary to meet all its contingencies depends the safety as well as the existence of States.

There can be very little doubt that the neglect of this science by the disciples of the Utilitarian School has led to grave disasters, not only in a military point of view but politically and commercially; to it may be traced the periodical recurrence of those panics, which have in a marked manner distinguished the social and commercial policy of Great Britain during the present century, has led to incalculable waste of national resources, and the misapplication of its great mechanical and man power, in attempts to provide for contingencies which could by no possibility occur, and when to this is added the contempt into which her foreign political relations have been brought by the ignorance which forced her statesmen to grope in the dark for remedies against imaginary evils, it can with great force be asserted that

disregard of the plain precepts of political life and of the rules that binds society together has been paid for at an awful price.

If the principles of the *strategy of invasion* were thoroughly understood, ample provision could be made to meet all the possible contingencies leading to the attempt—to frustrate it, if undertaken, and eventually defeat it—(without unnecessarily burthening the time or resources of the people or indulging in costly as well as doubtful experiments), and thereby imparting a feeling of security which would more than realise the dreams of the political economist.

Allowing that the era of aggressive warfare was passed (although that is by no means certain) still a knowledge of the *strategy of invasion* is as much a necessity as when NAPOLEON LE GRAND endeavoured to create a great Western Empire, because it is the science on which a *national police* must be established to be effective, and this knowledge comprises what is known as the "Fundamental principle of war," which is itself comprised in the following axioms.

1st. To throw by strategical movements the mass of an army successively upon the decisive points of a theatre of war, and also upon the communications of the enemy as much as possible without compromising one's own.

2nd. To manœuvre to engage fractions of the hostile army with the bulk of one's own forces.

3rd. On the battle field to throw the mass of the forces upon the decisive point or upon that position of the hostile line which it is of the first importance to overthrow.

4th. To arrange that those masses shall not only be thrown upon the decisive points, but that they shall engage at the proper time and with energy.

Those self evident truths have been deduced from the practice of the art of war by Jomini and are as applicable today as they were in its earliest recorded operations, while they prescribe the conditions following for the assailant.

1st. Control of a portion of the coast if the operations are to be carried on between States separated by the sea or navigable waters, in any case free access thereto.

2nd. A naval force equal or superior to that of the assailed.

With those requisites a convenient base of operations would be established at some favorable port on the coast, from which operations could be carried on against the objective point which would generally be the capital or that position on which the main line of defence was based, in reaching which the manœuvres of the invaders would be directed towards the cutting off all communications both seaward and from the interior and compelling the evacuation of all fortified places on the coast without fighting, as

well as wasting and destroying the resources of the country.

There are two instances of this division of "the strategy of invasion" in modern times, that of the campaigns of Earl CORNWALLIS in Georgia, the Carolinas and Virginia in 1779-80 & eventually culminating in the surrender at Yorktown, and that of General SHERMAN of the United States Army in 1864-5, over the same ground which compelled the evacuation of Richmond and the surrender of General Lee.

With respect to those two great historical events it must be said that if General GRANT was as great a dolt as Sir HENRY CLIXTON SHERMAN, would have met the fate of CORNWALLIS and very nearly in the same vicinity.

The careful student of history will be surprised at the close parallels both those expeditions so clearly furnish, as well as their lucid illustrations of "the strategy of invasion," and on what trivial events the results of each depended, and as both sustain the principle we have laid down it is our intention to compare them generally in future papers.

As noticed in the VOLUNTEER REVIEW of 24th June, the United States Wimbledon came off on Saturday, the 21<sup>st</sup> ult., at the Creedmore Range on Long Island with the results as shown by the following from the *New York World* of 22nd June. We have already given our readers a full account of the range and all its appliances and therefore omit the very useful and elaborate plan published in the following article:—

The National Rifle Association opened their range at Creedmore yesterday. The weather was excellent, the shower of the previous night having cooled the air, making the strong westerly breeze that prevailed all day doubly welcome. The officers and directors of the Association reached Creedmore on the ten o'clock train, accompanied by squads from the Ninth and Twenty-second regiments who were detailed for guard duty on the range. Generals Shaler, Hancock, Siegel, Ward, and the staff officers, with the Eleventh Regiment band, and about 100 contestants and visitors, were aboard of the same train. Upon its arrival, Artillery Company K, of the First Division, New York, which was stationed just south of headquarters, fired a salute of twelve guns, and proceeding up the entrance avenue to the music of the band the party entered the range. Twenty-nine tents were pitched at the upper end of the grounds, which were used by several teams participating in the matches. A large tent was located near the 500 yard firing point, which served for the headquarters, where persons became members, entered the different matches, and received their ammunition. General Shaler, who had general supervision of the range, and the military officials present, took their stand underneath a huge oak tree, where seats were provided, and close by the band dispensed music from time to time. The Range Committee, wearing the red badges, were everywhere attending to the minute details of conducting the match. Many of the contestants were totally ignorant of what was required of them. This lack of foreknowledge on the part of teams from

the National Guards delayed the exercises fully two hours. Register keepers, markers and those in charge of details had to be instructed over and over again, although adequate explanations had been printed in the programmes, which were dispensed at headquarters. Mr. Church, President of the Association, and General Woodward, arrived by the half-past ten train, and were greeted by a salute. The trains, running from Hunter's Point every half hour during the morning, brought about 1,500 persons to the ground. Until about noon the time was occupied by an inspection of the range universal expressions of approbation prevailing.

At noon a gun announced the commencement of the first match, open only to members of the National Association.

Distance, 200 yards; position, standing; weapon, any military rifle; rounds, five, with privilege of two sighting shots; entrance fee, \$1. Prizes—First prize, gold badge and \$20; second prize, \$15; third prize, \$10; fourth prize, \$5.

In this match there were forty-eight contestants, representing the Seventh, Ninth, Twenty-second, Twenty-third, and Seventy-ninth regiments of New York, and the First, Second and Fourth regiments from New Jersey. Targets number 1 to 10 were used. Bull's eyes were signalled by a white disk, and counted 4; centre, red disk counted 3; outers, black disk, counted 2.

This match resulted as follows:

Prize	Won by	Score.
1st.	J. C. Bush	4 3 4 2 3—16
2nd.	C. L. Finke	3 2 3 3 3—14
3rd.	E. H. Madison	3 2 3 3 3—14
4th.	Lieut. Anderson	3 3 2 3 3—14

RIFLES USED BY WINNERS.

Bush—Remington, Spanish model.  
 Finke—Remington, New York State model.  
 Madison—Remington, New York State model.  
 Anderson—Remington, New York State model.

On the first match Finke and Madison made a tie, which Finke afterwards won by a score of 3.

The second match was shot at Targets 11 to 20, open only to members of the Association.

Distance, 200 yards; position, standing; weapon, any rifle weighing less than ten pounds, excluding hair triggers and telescopic sights; entrance fee, \$1. Prizes—First prize, gold badge and \$20; second prize, \$15; third prize, \$10; fourth prize, \$5.

Prize	Won by	Score.
1st.	John Hiller	2 3 4 3 3—15
2nd.	J. C. Bush	4 3 3 2 3—15
3rd.	Lieut. Anderson	2 4 2 4 3—15
4th.	W. L. Smoot	2 3 3 3 3—14

RIFLES USED BY WINNERS.

Hiller—Remington, New York State model.  
 Bush—Remington Spanish model.  
 Anderson—Remington, New York State model.  
 Smoot—Remington—New York state model.

At this point a trial of the renowned Gatlin gun took place. The gun was invented by J. R. Gatlin, and resembles the French mitrailleuse. The one exhibited yesterday was ten-barrelled, 0.42 inch calibre, capacity 600 rounds per minute, and cost \$1,000. It was fired at the target of 200 yards, and every



shot, 400 of which were delivered, struck inside of the outer ring. Those engines of war are manufactured at Hartford, Conn. The Russian Government have purchased 400 of them, and 100 have been ordered to Washington.

In the third match there were 137 contestants, divided into teams of twelve men each. In the absence of some of the men, the shooting went on with a reduced number of contestants.

The conditions were as follows :

National Guard competition at all targets ; open to teams of twelve from each regiment ; all competitors to appear in uniform ; distance, 200 yards standing, and 500 yards any position. Weapon—The particular regimental rifle. Rounds—Five, with two sighting shots. No one failing to score eight points at 200 yards will be eligible to compete at 500. No entrance fee.

PRIZES.

First prize—Gold badge of the Association and.....	\$50
Second prize—A gold-mounted Winchester rifle, presented by the manufacturer, valued at.....	100
Third prize.....	25
Fourth prize.....	20
Fifth prize.....	15
Sixth prize.....	10
Seventh to twelfth prizes of \$5 each.....	30
To the team making the highest average.....	50

The following were the scores made by the different teams representing the various regiments participating :

Regiment.	No. of Men. 200 yards.	Score.	No. of Men. 500 yards.	Score.	Score.
23rd.....	12	104	7	55	*159
24 N. J.....	12	80	5	18	*98
22d N. Y.....	12	136	10	127	*263
21 N. J. Batt.....	12	49	2	4	53
13th N. Y.....	9	73	6	14	*87
32d N. Y.....	12	86	5	25	*111
9th N. J.....	12	65	4	9	74
19th N. Y.....	9	67	5	20	*87
14th N. Y.....	7	19	2	18	76
11th N. Y.....	9	28	8	5	33
79th N. Y.....	12	70	3	15	*85
71st N. Y.....	10	74	4	14	*88
9th N. Y.....	12	30	1	0	30
28th N. Y.....	12	64	2	2	66
55th N. Y.....	7	39	1	7	46
6th N. Y.....	12	30	1	7	37
4th N. J.....	6	16	1	4	20
96th N. Y.....	6	19	1	0	19
84th N. Y.....	11	64	4	21	*85
Engineers, U. S. A.....	11	103	8	38	*141
Gov's Island, U. S. A.....	10	52	2	12	64

\* These are the ten highest scores.

First prize, Private Lockwood, Twenty-second Regiment, New York.

Second prize, Sergeant Major Alexander Roux, Twenty-second Regiment, New York.

Third prize, Lieutenant J. S. Horsfall, Twenty-second Regiment, New York.

Fourth prize, Captain W. J. Harding, Twenty-second Regiment, New York.

Fifth prize, Private Brill, Twenty-second Regiment, New York.

Sixth prize, Captain Head, Eighty-fourth Regiment, New York.

Seventh prize, Private S. J. Kellogg, Twenty-third Regiment, New York.

Eighth prize, Sergeant Brittenhousen, Thirty-second Regiment, New York.

Ninth prize, Sergeant Freeman, Twenty-second Regiment, New York.

Tenth prize, Private J. H. Steins, Twenty-third Regiment, New York.

Eleventh prize, Private Otto Schneelock, Thirty-second Regiment, New York.

Twelfth prize, Sergeant Wagner, Twenty-second Regiment, New York.

Team prize, Twenty-second Regiment, New York.

The fourth match was the Ward breech-loading competition for rapidity and accuracy. Open to all comers; targets number 6 to 10 target size of a man. On a slab 6 by 2 feet. Distance, 100 yards; position, standing; weapon, any military breech-loader; loading from cartridge box; time, one minute from word "fire," the competitor making the greatest number of hits to be the winner. Entrance fee, \$5.

Prizes—First prize, presented by General Ward, \$150; second prize, presented by Association, \$25.

The first prize was won by Major G. A. Strube, of the Twenty-second, who scored 17 points, and the second by W. S. Smoot, who made 13 points.

RIFLES USED BY WINNERS.

Strube—Ward-Burton rifle.  
Smoot—Remingtona rifle.

President Church presented Captain Harding, of the Twenty-second Regiment the \$50 team prize but Captain Harding desired the Association to present his regiment with a trophy instead of the money, which was assented to. It was nearly half-past seven o'clock when the party left the range. Telegrams were received from President Grant, Governor Dix, and General Sherman, expressing their regrets at not being present. The former was obliged to attend a Cabinet meeting. Governor Dix was too unwell.

The results of this inauguration of the National Rifle Association matches are highly creditable to all concerned. We have before us a match recently held at Havoclock, in the County of Huntingdon, and the score made by 12 men of the 50th and 61st Battalions at 200 yards numbers only 184 points, while the 12 in New York registers 136 points, on the first occasion of meeting for a contest.

Our people made four points per man more, but it was to be expected from men who had the opportunity of engaging in those contests. While agreeing with some of our contemporaries that it will be some time before the people of the United States are able to compete in rifle shooting with either British or Canadian soldiers, we hold their first essay to be very creditable indeed, and, as far as we know, successful, as regards the arrangements of the Executive Council of the Association.

Their difficulties are all in details, and a little care as well as patience will set all those right. If local competitions was more frequent amongst the various corps of the National Guard, most of these practical difficulties would vanish at once, and register keepers, markers, and other officials, capable of discharging range duty, would be found in every battalion.

The military Journals of the United States appear to have taken very little in-

terest indeed, in this great effort to make expert marksmen of the militia of the country, but that should not dishearten the exertions of the proprietors and founders of the National Rifle Association, they have begun well and we hope they will persevere.

A novel feature of the first meeting was the introduction of the *mitrailleuse* known as the Gatling Gun. Except as an advertisement, the object in testing it is not apparent. At 200 yards its fire would be deadly, but it could not be worked by human hands in the face of any force having competent marksmen amongst them at that distance. We wish our neighbors all success in the attempt to form a force of good marksmen, and they have taken the right method therefor.

The following is commended to the attention of *Broad Arrow* to be 'dealt with heroically' by the Great Army and Navy Reformers of Great Britain.

The cost of economy and efficiency in this case forcibly reminds us of the story of the North British economist who tried to feed his horse on a diminishing scale, but when he succeeded in reducing him to a straw per diem, "the contrary brute took it into his head to die," the fate of the British Navy is nearly similar.

The state of the navy of the present time is such, says the London *Army and Navy Journal*, as to cause the deepest alarm to all those who either in or out of the service, take an interest in its welfare; for though the outside of the platter may appear clean enough, though we can show a magnificent ironclad fleet, and our flying squadrons traverse the world from one end to the other, but few will deny that the present overcrowded state of the lists precludes all notion of an efficient and contented navy. What right have we to expect efficient captains commanders, and lieutenants, when they are kept on half pay for five, three, one and two years respectively? The country must think ill of a captain's service which only allows him £200 a year when forced into an inactivity he does not desire. Wretched man! if he has a wife and any family. Of course a lieutenant is not supposed to have such luxuries, so it is considered he is quite able to live comfortably on £90 per annum, carrying to his humble home or turning to good account those Spartan qualifications engendered by a seafaring life. Simple justice requires that both full and half pay should be raised. In the American navy a far better system is carried out by placing the services under three heads, viz., "at sea, on shore duty, and on leave, or waiting orders." The latter carries with it the lowest scale of pay. Under the first head a lieutenant in the United States Navy receives \$2,400 or roughly, £480 per annum under the second head £400, and under the third £320. Thus it will be seen their lowest scale is a great deal more than the corresponding rank receives on full pay in the English navy.

The visit of the *Stran of Persia* to Europe, seems destined to mark an important era in the history of that ancient Empire, as well as in the political relations of Russia, Germany

and England. Whatever may be the present condition of the policy jointly and severally of the Governments of those countries, it is beyond a doubt that grave complications will result from a transaction that was first brought to light on the day of the arrival of the Persian monarch in London. It had been generally known that concessions of great value had been made by that Government to the German Baron de Reuter, the great telegraph monopolist of continental Europe, but their extent was not known till the London Times, in a leading article of its issue on 18th June, thus detailed them.

"It was understood in a general way that the Shah had conceded considerable privileges to this gentleman, but no one could have surmised their real extent and comprehensiveness. Briefly it may be said that the whole material resources of Persia are placed in Baron de Reuter's hands for a term of seventy years. The Kingdom is leased to him, to do the best he can with it, and on very liberal terms. He is to begin by constructing a railway between the Caspian and the Persian Gulf, but this is a mere earnest of what is to follow. He is also to be allowed to construct any other railways or tramways he may think fit, and to be protected from all competition for a period of twenty years. For the purpose of constructing these lines any Government land that may be wanted will be handed over to him free of expense, while that belonging to private persons will be appropriated at current prices. He is to have the free use of stone, gravel, or other material in the State domains, and the Government is to see that the persons engaged on the works are supplied with provisions and other necessaries at the ordinary rates. Whatever he may import or export, or circulate within the country—all his material, products and manufactures—are to be exempt from any duty or impost whatever. In return for this privilege, the Government only reserves to itself 20 per cent. of the profits, together, of course, with the right of entering into possession at the end of the seventy years' leave. All mines on Government land may at once be appropriated and worked by the baron on the sole condition of his paying the Government 15 per cent. of the profits; and he is also authorized to appropriate any mine on private land, unless it has been worked five years previously; and the land required for all these works, if belonging to the State, is handed over to him gratuitously. The forests—a term which includes all land not cultivated at the date of the concession—are similarly leased to him for seventy years, at a charge of 15 per cent.; and if he clears a wood, he has the preference in the purchase of the land reclaimed. All canals, wells, and other works connected with the watercourses of the country are rendered his exclusive privilege at the same charge of 15 per cent. When we add that the baron is also to enjoy a right of preference in all enterprises connected with the providing "gas, roads, telegraphs, mills, manufactures, forges, pavements, &c.," including improvements in the capital and the post offices, it would seem that he has an absolute monopoly of all business enterprises in Persia. But even this is not all. The existing customs revenue is farmed out to him for a period of twenty-five years. He is to pay the Shah £20,000 a-year more than he at present receives, and is to have the whole management of the customs. But even

Baron de Reuter, it may be said, will find it no easy task to raise the money needed for all these comprehensive operations. That difficulty has been provided for by the Shah undertaking to pay 5 per cent. interest and 2 per cent. towards a sinking fund on all capital "raised or to be raised" by the baron or his representatives. He will be able to offer capitalists a share in an absolute monopoly of the material development of one of the greatest of Eastern kingdoms, with a guarantee on the part of the Government against a lower return than 5 per cent."

The Times of course merely looks at the whole affair in a commercial light, and is followed by the *Pull Mall Gazette*, and other papers who follow suite, merely speculating on the probability or improbability of the contract ever bearing any market value; at the same time it is clear that the projected Railway "from the Caspian to the Persian Gulf" would change the ownership of the Empire of India.

Whether the will of Peter the Great is a forgery of later days or merely the prophetic lucubrations of an inspired lunatic, it is certain that since the days of CATHERINE the Second of Russia, it has been the guiding chart of the foreign diplomacy of that Empire.

The 9th clause of this famous document reads as follows:—"It is expedient to draw as near as possible to Constantinople and to the East Indies. Whoever rules in these two countries is the true sovereign of the world. Wars are in consequence, constantly to be waged, against Turkey and Persia; great colonies are to be established along the Euxine, in order to get in time the whole Black Sea into the Russian power."

Her action in the East and on Persian soil shews a suspicious coincidence with that of Prussia.

And singularly enough on that same eventful day, the following despatches announced another stranger diplomatic fact, as follows:

"Berlin, June 17.—According to the new commercial Treaty with Persia, Germany engages, at the request of Persia, to tender her good offices towards the settlement of any difficulties arising between Persia and other states.

"Berlin, June 18.—In to-day's sitting of the Federal Council on the Report of the Committee, the Treaty of Amity, Commerce, and Navigation with Persia was sanctioned."

By this treaty it will be seen that Prussia is virtually recognized as the European protector of Persia and Parisian interests, and the carrying out of the provisions of Baron DE REUTER'S concession is likely to give constant opportunities to the Cabinet at Berlin to interfere.

We now know what the peaceable meeting of the KAISER and Czar meant, that meeting which was to secure the peace of the world, as now seen, aims at Universal Empire in the East, with the power of creating endless contests in the West.

English capitalists and the monied inter-

ests are in the seventh heaven of security, and quietly enjoying the *fool's paradise* of speculation on the advance of the universal brotherhood of commerce; it remains to be seen whether with Russia paramount in Asia that state of affairs will be permanent.

The following from the *Pull Mall Gazette* is the species of reasoning that the wise acres of the Manchester School indulgo in.

"As the result when the railways actually are made, the matter must of course have been duly weighed and considered, but we shall be curious to see what sort of traffic there will be between the Caspian and the Persian Gulf. There is only one city in all Persia (Tabriz) which is said to have more than 100,000 inhabitants, and that lies quite out of the road between the two seas. Teheran and Ispahan would probably be on the line, but neither of them has a population of 100,000 or any considerable trade. The country through which the line would have to pass is partly mountain and partly sandy desert."

We wonder it did not strike our contemporary that the proposed line, in all the respects indicated, resembles the strategic or military lines laid down with a ruler by the Czar NICHOLAS.

It is almost a pity to disturb the self-satisfied conclusions of such thoroughly well-informed people, but if the writer of the above would direct his powerful intelligence to a study of what is transpiring on this continent, he would not be at all satisfied that his conclusions respecting the results of the proposed railway, are entirely correct. A fundamental article of belief here is that railways create traffic, and if they do not pay directly, they do so indirectly by filling deserts with industrious populations, and developing the resources of the country. They are built in the United States by grants of Public lands, and Public Monies in quite as unpromising positions, and the Shah has merely done what is usual with the Government of the United States.

We think it would pay the English Press better to be a little more patriotic and not quite so commercial, as the present is not the first instance (to use a slang phrase of our neighbors) they have been *cuchred* by those dear German and Russian friends.

It is evident that the Shah or his ministers have taken a step in the right direction as far as the development of the interests of Persia is concerned. Russia knows what she is about, and the German has a clear idea of his own interest, Manchester is satisfied, and no one seems likely to find fault, but somebody will pay for all.

The sum required to complete the payment of the first 250,000,000 francs of the fifth milliard of the war indemnity has been despatched from Paris to Berlin. Marshal MacMahon has received a congratulatory letter from King Victor Emmanuel, in which the King of Italy recalls his glorious co-operation in the campaign of 1859.

## THE DYING STREET ARAB.

I knows what you mean, I'm a-dyin'—  
Well, I aint no worse nor the rest;  
Taint thom as does nothin' but prayin',  
I recon's as is the best.

I aint had no father nor mother,  
A-tellin' me wrong from the right,  
The streets aint the place—Is it parson?  
For sayin' your prayers of a night!

I never knowed who was my father,  
And mother she died long ago;  
The folks here they brought me up somehow—  
It aint much they've teach'd me I know,

Yet I thinks they'll be sorry and miss me.  
When took right away from this here,  
For sometimes I catches them slyly  
A-wipla' away of a tear.

And they says as they hopes I'll get better,  
I can't be no worse when I'm dead!  
I aint had so jolly a time on't—  
A-dyin' by inches for bread.

I've stood in them streets preclous often,  
When the wet's been a-pourin' down,  
And I aint had so much as a mouthful,  
Nor never so much as a brown,

I've looked in them shops with the winders  
Chokeful of what's t'idy to eat,  
And I've heard gents a-larin' and talkin',  
While I drops like a dorg at the'r feet

But it's kind of you, sir, to sit by me,  
I aint now afeerd of your face,  
And I hopes, if it's true what you tell me,  
We'll meet in that tother place.

I hopes as you'll come when it's over,  
And talk to them here in the court;  
They'll mind what you says, you're a parson,  
There won't be no larkin' for sport.

You'll tell them as how I died happy,  
And hopin' to see them agaln;  
That I'm gone to that land where the weary  
Is free from their trouble and pain.

Now, open that book as you give me—  
I feel as it never tells lies—  
And read me them words—you know Guv'nor—  
As is good for a chap when he dies.

There give me your hand, sir, and thank'ee  
For the good as you have done a poor lad;  
Who knows, had they teach'd me some better,  
I might'n have growed up so bad?

FRENCH OPINIONS ON ARTILLERY  
FIELD ORGANISATION.

In the autumn of the year 1871, certain questions relative to Artillery organisation were proposed by the French War Department for the consideration of the officers of that arm. Despite of the intervention of many untoward circumstances, a considerable number of replies were subsequently received—including one from a general officer, thirty-one from superior officers, thirty-three from captains, and eleven from subalterns. All these answers were transmitted by the Minister of War for the consideration of the Artillery Committee. A *résumé* of the views entertained by the majority of the writers, and which appear to be supported by the strongest arguments, are given, as hereunder, in a recent number of the *Revue d'Artillerie*.

The problem to be considered was the most suitable proportion and composition of the artillery force for four land armies, each army to consist of three *corps d'armée* of infantry and one *corps d'armée* of cavalry.

Each *corps d'armée* of infantry to comprise three divisions of infantry and one division of cavalry.

Each *corps d'armée* of cavalry to consist of two divisions of cavalry.

Each division of infantry to be composed of four regiments of infantry of 2500 men each, and one battalion of Chasseurs of 900 men.

Each division of cavalry to be composed of four regiments of 800 horses (a five

squadrons) each.

1. COMPOSITION OF THE ARTILLERY FORCE FOR  
A DIVISION OF INFANTRY.

*Number of Batteries to an Infantry Division*—According to official programme, each division of infantry was to have four batteries of six-pieces each, i.e., twenty-four guns. This proportion has been accepted by the majority of the respondents without discussion. Some officers, however, regard it as unnecessarily large. In their opinion three batteries, i.e., eighteen guns per division would be sufficient; the increase in the number of guns, which is universally admitted to be desirable, they would give to the reserves, which would play an important part in all serious encounters, when, following up a precise and well concerted plan of operations, they are brought into action at the right moment.

*Mode of Loading best adapted for Field Service*—The majority of writers are in favour of breech loading, the superiority of which is held to have been satisfactorily established during the late war.

*Calibre*—Batteries intended to accompany divisions of infantry, and to manoeuvre with them, should have pieces of uniform calibre throwing a projectile of about 4.5 kilogram me weight, with a heavy charge of powder. A piece of lower calibre would be deficient in power, especially in regard of shrapnel-fire, the importance of which tends steadily to increase. A piece of higher calibre, on the other hand, would certainly be more effective, but this advantage would be insufficient to counterbalance the inconveniences attendant upon its use. It would be necessary to increase the strength of gun detachments, and of the teams; to increase the proportion of ammunition, wagons, so as to insure a sufficient supply of ammunition to the divisional batteries; lastly, the batteries would become less mobile, less capable of accompanying the infantry at all times and all places, less certain of arriving on the field of action at the right moment.

*Mitrailleuses*—It is difficult to observe the effects produced by the mitrailleuse, and to regulate its fire with due rapidity. It would therefore appear that troops who are frequently called upon to change their positions in the course of an engagement would be unable to make effective use of a weapon of this description. When the artillery is provided with a proportion of mitrailleuses, it is best to place them in the reserves, where a definite line of action may readily be assigned to them. In this way the mitrailleuse will do excellent service, and at decisive moments will contribute powerfully to the support of an offensive movement, or to repel an attack. If, on the contrary, these pieces invariably accompany the divisional artillery, they will find themselves committed, as a necessary consequence, to contests at distances superior to their own effective range, and to which they must inevitably succumb.

*Composition of the Divisional Batteries*—To secure the requisite amount of mobility, it is necessary to have in the batteries a sufficiency only of guns and wagons to maintain the combat until the arrival of reinforcements, and to combine all the rest into a divisional park.

The composition of a battery should be as follows:—6 guns, 6 ammunition wagons, 2 store-wagons, 1 forge, and 1 spare carriage.

The ammunition-boxes should hold 30 rounds; so that each piece will be furnished with 120 rounds. The capacity of the store-

wagons of 1863 pattern is insufficient; it would be desirable to replace them by wagons of the reserve pattern.

*Divisional Reserves*—The formation of divisional reserves of ammunition, prescribed by the regulations of 1867, was a good measure, which, nevertheless, was not always attended, during the late war, with the advantageous results that might have been anticipated. The detachments of artillery train entrusted with the conduct of these reserves were too weak in their organisation, and more especially in their cadres. Some officers appear to think that the duty would be more efficiently performed if the ammunition-wagons were permanently attached to the regiments of infantry, who would furnish them with conductors and draught cattle, as regimental reserves, for whose control and safe-keeping the regiments would be responsible. Other officers—and these constitute the majority—reject this solution of the difficulty, which, say they, long experience has condemned, demonstrating the serious inconveniences entailed by the addition of a number of wheel-carriages to infantry battalions. They consider that in each division the batteries of artillery, reduced to the proportions above mentioned, should be followed at short distances by reserve wagons, which, with the wagons containing the divisional reserve of infantry ammunition, should form a divisional park, to be horsed by the train of artillery, and placed under the orders of an artillery officer. A company of artillery train should be attached to each division, or to each *corps d'armée*—in the latter case, it would be organised in three detachments, one for each division of the *corps d'armée*.

The artillery officer commanding the divisional park, should have at his disposal a suitable number of clerks and orderlies; he should conform his movements to those of the troops, keeping himself in immediate communication with the general command of his division, with the batteries of the division, and with the park of the army; and should direct the march of his wagons on such points as may be indicated to him.

At the commencement of an action, all battery carriages not actually required will join the divisional park.

Ordinary repairs to be performed in the divisional park by the artificers of batteries. Extraordinary repairs to be executed in the park of the *corps d'armée*.

*Supply of Ammunition*—The proportion of ammunition, prescribed by the regulations of 1867 for the infantry, has been found sufficient. The divisional park should carry thirty rounds of infantry-ammunition per man, i.e., 327,000 rounds per division, and have an extra wagon for each gun; the gun ammunition carried will therefore amount to 200 rounds.

*Staff of the Artillery of an Infantry Division*—The artillery staff for each infantry division should consist of:—One lieutenant or colonel, two *chefs d'escadron*, one for every two batteries, three adjoints, and a proportion of clerks and orderlies.

When the adjoints are not second-captains of batteries, they should be taken—like the clerks from the auxiliary army. Their duty will be to carry the orders of the commanding officer of the divisional artillery to the battery commanders.

*Personal of Batteries*—The cadres of battery organisation are sufficient. The war strength of the batteries should be completed in the following manner:—Each battery should have three lieutenants, one adjutant, and a *sous-chef* artificer: the number of

reserve men available for the gun detachments, and the proportion of horses, should be increased, and a second collar-maker should be given to those batteries that have but one at present. Not unnecessarily to increase the number of officers in the junior grades, the third lieutenant for each battery may be drawn from the auxiliary army in the event of a mobilisation; but the adjutants should remain permanently with their respective batteries, otherwise it will be necessary, in the event of war, to make a number of fresh appointments, thus removing the senior non-commissioned officers from their batteries at a time when their services are most needed.

The *sous chef* artificer should be included in the number of battery non-commissioned officers, the proportion of which may not be increased.

**Eight-gun Batteries.**—The tactical unit of artillery should remain the battery of six pieces. Relieved by the formation of the divisional reserves, the battery may be handled under all circumstances, by the captain in command. Promotion might perhaps be facilitated, within certain limits, by substituting batteries of eight guns for those of six, but the change would offer no special advantages from a tactical point of view. The new battery, under a *chef d'escadron*, having two captains under him, would be less handy than the old; and although, it is true, it might easily be split into two detachments of equal strength, this advantage which would be chiefly observable from an administrative standpoint, would be counterbalanced by the retention of the captains in a subaltern position, whereby, in the long run, their self-reliance would be destroyed altogether.

**Escorts and supports for Divisional Artillery.**—Many officers, considering that the troops employed in supporting the artillery assure the safety of that arm in, at least, a very imperfect manner, have suggested the formation of a special corps to furnish permanent artillery escorts.

According to this view, each division would have attached to it for the purpose, a battalion of foot artillerymen, who would be entrusted with the duties of fascina and gabion making, battery building, &c. The mounted duty would be performed by squadrons, specially told off for the purpose armed as mounted riflemen, and equipped so that their horses could be used for draught whenever required.

Others, again, whose number, it is true, is small, hold that standing escorts would, at the best, perform with difficulty the duties thus entrusted to them. When the artillery supports consist of infantry, they observe, the latter are frequently unable to keep with the guns in rapid movements, when they are composed of cavalry the latter are often brought upon ground where they are unable to act. It is for generals to make such tactical dispositions, according to the circumstances of individual cases, as will secure the artillery against sudden and unforeseen attacks.

The German military press says that the new Prussian Manser rifle carries with extraordinary exactness at long distances. It is sighted up to 1,600 metres. The maximum rapidity, in isolated cases, is 18 shots per minute, and 12 in salvoes in exercise. In campaigns these numbers will probably decrease to 12 and 8 respectively. The Manser can be charged in half the time taken for the needle-gun, and three fourths of that occupied in loading the Chassepot.

THE KHIVAN EXPEDITION.

The latest intelligence from the seat of war confirms in general the previous news, referred to in our last impression, of the progress made by the Russian columns in Central Asia. Telegrams have arrived from St. Petersburg, dated the 18th and 19th instant, from which it appears that the Mangushlak detachment, commanded by Colonel Lomakine, effected a junction on the 26th of May with the Orenburg detachment, commanded by General Verevkine, and that the next day the Russian forces took Khodji Ili by storm, and put the enemy to flight. The Khivans numbered 6000 men, and had six guns. A second time, namely, on the 1st of June, the Khivans, numbering 3000 men, with three guns, made a stand at the fortified town of Mangit, when again they were defeated, and the town captured. General Kaufman had crossed the Amou Darya, and was only two days' march from Khiva. General Verevkine was at the distance of three days' march. He occupied Kungrad on the 20th of May, the Khivans flying before the Russian troops. The Russian flotilla from the sea of Aral was unable to get beyond Kungrad, on account of the shallowness of the water.

A telegram from Teheran, dated at noon, June 19, states that Colonel Baker, Captain Clayton, and Lieutenant Gill have arrived at that place, after having visited Tchikishlar and the Attreck. The statement in the same telegram that the Russians have abandoned Tchikishlar, and have no posts on the Persian frontier, except at Ashurade, confirms the former announcement that the men of Colonel Markosoff's command were too much exhausted to retrace their steps, and had retired on Fort Krasnovodsk. Tchikishlar, nine miles north of Hassam Gouli Bay, into which the Attreck runs, is said to be unimportant as a military position and is now reoccupied by the Turcomans.

With respect to the future of Central Asia as likely to be determined by this campaign should it end in the complete success of the Russians, it seems pretty evident, as pointed out in the Petersburg *Golos*, that Bokhara, surrounded on three sides by the frontiers of Russia, will also be occupied. "The Bokharians evidently know what is coming, and are already afraid of it, but come it must, although, perhaps not so speedily as they imagine. In addition to Bokhara, we shall require the densely inhabited and very rich Provinces of Marshi, Hissar, Kundush, and some others in that quarter. Without the annexation of these districts, Turkestan is worth nothing to us; but a single glance at the map suffices to that if we extend our frontiers in that direction we shall only be doing what is inevitable." As for our own Imperial interests in the matter, the *Russian World* publishes a Constantinople letter, in which the writer says that after taking Khiva the Russians could invade India in three months, marching the distance to Herat in twelve days. The correspondent adds that the English Ambassador at Constantinople is in conference with the Envoy of Kashgar, with a view to a joint English and Turkish protectorate of that province. This must be accepted *quantum valeat*. We would only add, on the impulse of the moment that the old policy of keeping a sort of hedge and ditch of weak States between our own frontiers and those of other Powers which threaten our security in the East, appears to be played out.

Some interesting information has been

sent by the Teheran telegrams quoted above relative to the Attreck. The river, it appears, though broad and deep a short distance from its mouth, is cut off from the Caspian by a bar with only two feet of water. About one hundred miles from its mouth it narrows greatly, and becomes unimportant, variable, and it can only be navigated by the light Turcoman boats of about six tons, and only two feet draught of water. There is bad anchorage along the shore of the Caspian from Tchikishlar to near Ashurade. Vessels of twelve foot draught cannot approach within three miles of the bay of Hassam-Gouli. Finally, the Russian Consul at Astrabad maintains Russian influence along the frontier.

How keenly Russia is watching her own interests in these regions may be judged of from the report which reaches by way of Brussels that on account of the Persian Concession to Baron de Reuter—which is the subject of remark in another column—the Russian Government has decided to impose a transit duty on all goods crossing the Caucasus.—*Broad Arrow*, 21st June.

"MONCRIEFF" SYSTEM OF MOUNTING ORDNANCE.

On Monday evening, the 9th inst., Major Moncrieff read a most interesting and able paper at the United Service Institution, entitled, "Further Observations on the Moncrieff System of Mounting Ordnance," to a large and influential meeting of officers and gentlemen, Colonel Right Hon. Lord Waverley, A. D. C., presided. In explaining the precise object of the paper, reference must be made to the report which was made in our column of a lecture by Lieutenant English on this system a short time ago, the paper produced by Major Moncrieff being in reality an explanation of defects and disadvantages alleged against his system by Lieut. English. The lecturer first referred for his explanation to the tables produced by Lieutenant English at the lecture, which showed that the 9 inch 12 ton gun, which was used for the Moncrieff carriage as compared to the 11 inch gun, had a mean error of 81.1 yards against 16 yards, and difference of deflection of 4.4 against 1.5 yards; but he stated that particularly, as there were so many of the 9 inch 12 ton guns in the Service, he was glad to find that the tables used related to an experiment of the rifling and shot, and not of the gun. It was evidently, he thought desired by Lieutenant English to reduce the advantage of horizontal exposure, by his recent lecture; but it was well known by simple experiments only that a miscalculation of range which might only cause an error of inches against a vertical target, would give an error of yards in a horizontal one. In answer to a statement as to the cost of foundations being a necessary evil in his system he remarked that he could at a much smaller cost establish his batteries on the Thames and Medway than could be done by the old system, and also without the need of men being permanently stationed there. In answer to the statement of Lieutenant English that "the one advantage of extreme lateral range is to provide against the rather improbable case of one of a small number of vessels attacking a number of heavy batteries," he remarked first if it was a true assertion, and if so, would it be true on other cases also. He thought that there would be a great advantage in the guns besides bearing over the range as allowed by firing from behind iron shields, to do so over as large a lateral range as possible as in his system, by

which the silencing of a few batteries would not reduce the exposure of the enemy's position. He was convinced that the risk in his method would not be so great in the case of bombarding as in that of a fort, and also would not be so encumbered with smoke. He advocated the increased lateral range as procured by his system, for the following reasons—that any method which enables the same number of guns to efficiently perform more work is a great gain, and the number of men would be reduced, which would enable a large reduction in works, guns, and the garrison, to be made with safety, in times both of war and peace, the latter being of the greatest importance in effecting enemy, without destroying efficiency. The special committee on Moncrieff carriages reported that *one gun mounted on a Moncrieff carriage may do equal work with two or more guns mounted behind shields*, and that it was superior in economy and efficiency. Major General F. Eardley Wilmot was the president of the committee, and was assisted by six distinguished officers of the Royal Artillery and Royal Engineers. The lecturer also read extracts and opinions to the same effect, from General Sir J. L. Simmons, K.C.B., Colonel Jervis, the late Sir John Burgoyne, and His Excellency Baron von Schell. With regard to the chances of exposure of casemated forts composed of those of the batteries on his principle, he was of opinion that, in the case of casemates, not only should the iron shields be taken into account, as was done by Lieutenant English, but that the chance of ricochet off the glacis should also be considered, and this he reckoned would take place over half of the vertical area of 200 ft., and he remarked that it was common sense to suppose that the enemy would prefer to attack objects of which they could see the damage as in forts with swelling embankments than to attack with no elevation above the line of glacis. Lieutenant English stated that he desired concealment of the Moncrieff batteries, because the whereabouts of any battery would be given within fifty yards by the newspapers, and the position of a battery would be discovered by the enemy by the puff of smoke from the gun; the lecturer appeared to put no faith in either of these arguments, which he answered by stating that sailors would undoubtedly prefer to lay their guns by a reliable observation on the parts of casemates or shields rather than trusting to reading the newspapers, or taking angles on puffs of smoke during action from a number of guns, and perhaps with a breeze blowing. The lecturer emphatically stated that the casemates were sometimes desirable, but he thought that that expensive form of fortification should only be used where there was no alternative. He stated that the counterweight carriages had answered beyond expectation, and that every thing was satisfactory except the delay, which was caused, he alleged, by opponents of his system, whose influence had hitherto been exercised without open expression; he therefore felt that Lieutenant English had done him a good service in expressing these opinions so ably, and openly bringing the subject before the public and out of the slough of despond. He concluded by recognizing the support received from the Government, and testified to the advantages which they would procure from his system.

The chairman, Sir Lintorn Simmons, Admiral Byder, Captain Selwyn, and Major Knolly, confirmed the arguments adduced by Major Moncrieff, and spoke greatly in favour of his system. The meeting terminated after the usual vote of thanks had been passed and acknowledged.—*Broad Arrow.*

The visit of the Heir of all the Russias to England appears to have been tuned singularly well to coincide with that of the Shah of Persia, and, considering the delicacy of the relations between the three Powers in the East, it is curious to read of the future Czar visiting the Eastern potentate in the London palace of Queen Victoria. The uneasiness of the Russian Press on the subject of the Shah of Persia's visit is also noteworthy. We read in last night's *Globe*—“The *Invalide* foresees that the stay of the Shah amongst us will have political results. The official Russian paper thinks the English Government will take advantage of this occasion to fix definitely the limits of the Persian frontier on the side of Afghanistan. Russia's progress and the Khiva expedition have alarmed the Afghan States, whose security greatly interests England. For long, as is known, Persia has coveted the Khanate of Herat, and the annexation of the independent territory of Seistan has been accomplished. According to the reports of the English officers sent in 1870 to Beloochistan to arrange for a telegraphic line, the Persian frontier should be considerably extended to the south. Now, as Afghanistan is the key to England's Indian possessions, the interest of England (the Russian paper says) in a definite arrangement of frontiers that will give her security for the future, is naturally very great.”—*Broad Arrow.*

The British Admiralty have issued orders that for the future, when ships are commissioned, the old plan of rigging them by the crew is to be resumed, as it has been found that the practice of rigging and storing the vessels by the men of the steam reserve and dockyard was attended with much inconvenience to the officers and crews placed on board a few days only before the ships sailed for a foreign station, and necessarily left them in ignorance of the manner in which the ship was rigged or her machinery gear stored or the vessel stored.

Admiral Mahan, lately French Minister of Marine, recently issued a circular warning insurance agent that an American was trying to sell a machine, a small torpedo, for destroying or insured ships with impunity. It looks like a block of coal of about six inches by three, and could be put into the coal bunker without the slightest suspicion. Once there, it would, when once thrown into the furnace explode after a fixed time, thus enabling the captain and crew to get away, or might explode as it lay. The *Birmingham, England, Daily Post* claims to have received one of these infernal machines, which will, it alleges, perform the duties required of it.

In order that every iron ship in Her Majesty's Navy shall possess the means of temporarily stopping a flow of water into the ship through a shot hole or leak, the Admiralty has issued directions that in future all such vessels shall be supplied with small thrummed mats, made in accordance with patterns supplied to the dockyards, to be placed over the shot hole or leak on the outside as quickly as possible, so that the damage may be got at inside and repaired in a more permanent manner.

An interesting work has been published at Leipzig giving an account, by a German student, of the part taken by members of the different German universities in the late war. Out of the 13,765 German students matriculated in the summer term of 1870, 4,510—that is, a third—went through the campaign, about 3,500 of whom were in the ranks, and 1,000 attached to the ambulances. Out of 1,505 university professors, 15 were under arms, 253 devoted themselves to the care of the sick and wounded, and 129 worked for the national cause by speech and pen.

The value of gun cotton as an explosive has been further advanced by the investigations in progress at the Chemical Department in the Royal Arsenal, Woolwich, presided over by Professor Abel soon after the terrible explosion at Stowmarket it was discovered that gun cotton could be securely kept in water without depriving it of any of its virtue, and that even when soaked with moisture, it can be exploded with a detonating fuse just as readily as if perfectly dry. Professor Abel proposes to use it for the bursting charges of shells instead of gunpowder, the remarkable part of his plan being to fill the shells with water, in which a few skeins of the gun cotton are placed. It has been found on experiment that the combined action of the gun cotton and water is to break up the shell into many fragments, so that corrosion should be almost as effective as shrapnel. Professor Abel even goes further than this, and proposes to use the gun-cotton and water mixed in solution to charge shells, and his projects are at present receiving the earnest attention of the officers who conduct such scientific inquiries on behalf of the government.

It will be remembered that an inquiry into war contracts by a special committee in the French Chamber, led to a statement by the Duc d'Audiffret Pasquier, that when the recent war was declared with Germany the French had only 2,050 guns. It seems there were only 236 batteries, representing 2,376 guns, and that waggons were wanted for some of these, and horses. The same report, which publishes these figures, states that the French during the war lost over 7,000 guns, so that there must be some error, unless the enemy carried away a great deal of unserviceable material, guns found in the forts, and pieces purchased abroad, or manufactured during the course of the war. France will have to lay out about £40,000,000 to replenish her arsenals, give weapons, etc., to her new army, and place herself in a position to enter upon a campaign.



### Notice to Contractors.

SEALED TENDERS, addressed to the undersigned, and endorsed, "Tender for works at Ste. Anne, Ottawa River," will be received at this office, until noon of THURSDAY, 15th day of JULY next, for the formation of a channel through the shoal below the Rapids at Ste. Anne, Ottawa River.

Plans and Specifications of the works can be seen at this office, and at the Machine Canal office, Montreal, on and after WEDNESDAY, 2nd day of JULY next, where printed forms of Tender will be furnished.

The signatures of two solvent and responsible persons, residents of the Dominion, willing to become sureties for the due fulfillment of the contract, must be attached to each Tender.

The Department does not, however, bind itself to accept the lowest or any Tender.

By order,

F. BRAUN,  
Secretary.

Department of Public Works,  
Ottawa, 28th June, 1873.