

Technical and Bibliographic Notes / Notes techniques et bibliographiques

The Institute has attempted to obtain the best original copy available for filming. Features of this copy which may be bibliographically unique, which may alter any of the images in the reproduction, or which may significantly change the usual method of filming, are checked below.

L'Institut a microfilmé le meilleur exemplaire qu'il lui a été possible de se procurer. Les détails de cet exemplaire qui sont peut-être uniques du point de vue bibliographique, qui peuvent modifier une image reproduite, ou qui peuvent exiger une modification dans la méthode normale de filmage sont indiqués ci-dessous.

- Coloured covers/  
Couverture de couleur
- Covers damaged/  
Couverture endommagée
- Covers restored and/or laminated/  
Couverture restaurée et/ou pelliculée
- Cover title missing/  
Le titre de couverture manque
- Coloured maps/  
Cartes géographiques en couleur
- Coloured ink (i.e. other than blue or black)/  
Encre de couleur (i.e. autre que bleue ou noire)
- Coloured plates and/or illustrations/  
Planches et/ou illustrations en couleur
- Bound with other material/  
Relié avec d'autres documents
- Tight binding may cause shadows or distortion along interior margin/  
La reliure serrée peut causer de l'ombre ou de la distorsion le long de la marge intérieure
- Blank leaves added during restoration may appear within the text. Whenever possible, these have been omitted from filming/  
Il se peut que certaines pages blanches ajoutées lors d'une restauration apparaissent dans le texte, mais, lorsque cela était possible, ces pages n'ont pas été filmées.
- Additional comments:/  
Commentaires supplémentaires:

- Coloured pages/  
Pages de couleur
  - Pages damaged/  
Pages endommagées
  - Pages restored and/or laminated/  
Pages restaurées et/ou pelliculées
  - Pages discoloured, stained or foxed/  
Pages décolorées, tachetées ou piquées
  - Pages detached/  
Pages détachées
  - Showthrough/  
Transparence
  - Quality of print varies/  
Qualité inégale de l'impression
  - Continuous pagination/  
Pagination continue
  - Includes index(es)/  
Comprend un (des) index
- Title on header taken from:/  
Le titre de l'en-tête provient:
- Title page of issue/  
Page de titre de la livraison
  - Caption of issue/  
Titre de départ de la livraison
  - Masthead/  
Générique (périodiques) de la livraison

This item is filmed at the reduction ratio checked below/  
Ce document est filmé au taux de réduction indiqué ci-dessous.

10X	12X	14X	16X	18X	20X	22X	24X	26X	28X	30X	32X
									✓		



# 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. V.

OTTAWA, CANADA, MONDAY, NOVEMBER 20, 1871.

No. 47.

### THE AUTUMNAL MANOUVRES OF THE BRITISH ARMY.—NO. III.

(From the *Brouil Arrow*.)

The Transport Service is managed in the field by the Deputy Controllers of the divisions, who have each under them five commissaries. To each company of the Transport Branch of the Army Service Corps are attached forty-five hired wagons, making the total of hired transport sent out with the two divisions last Friday, 270 wagons. In the Transport Branch, there are bad officers as well as good: some of the former showed a plentiful lack of forethought and capacity, and are accountable for the straggling, the late breakfasts, &c., while the zealous exertions of the latter made the success of the march. The Troop of the Royal Artillery Auxiliary Transport Service attached to each division transported eight steam ovens, five travelling bakeries, three general-service wagons with field ovens, three general service wagons with scales, &c., eight bread wagons, three general-service wagons with preserved meat, eight water carts, and one spare general-service wagon. The 3rd Troop of this corps has been organized into a small-arm ammunition train, directed by the Control Department, and divided into three parts, each carrying the whole reserve ammunition of one division.

The field telegraph is again out of order, probably cut, between Hartford Bridge and Aldershot. It was an oversight not to have made some provision for its safety in the Military Manœuvres Bill. At present there is a doubt whether the person cutting it can be convicted under any graver charge than that of the willful destruction of property. A couple of months imprisonment, or better still, a couple of dozen lashes, would have stayed his hand.

The correspondent of the *Times* remarks that the divisional manœuvre executed to-day before His Royal Highness the Duke of Cambridge and a numerous Staff (the visitors including General Blumenthal), was not all that could be wished. The Duke himself had occasion to find fault both with the infantry and artillery for the old fault—not making the most of broken ground. It is very unsatisfactory to learn that so palpable an error has not yet been corrected. Nor did the reserve troops show to advantage in their advances and changes of front. Let us hope that there may be rapid improvement, and that the faults most wisely pointed out by the Duke to-day may never again appear during the autumn manœuvres.

The invitations of Her Majesty's Govern-

ment, conveyed through the British representatives at the various Courts of Europe, have been accepted generally, and several officers have already arrived. The Government desire to spare no expense in the treatment of their distinguished guests, but the Queen's Hotel is not an extensive establishment, nor can a camp furnish the luxuries of a great city. Captain Keith Fraser, however, assisted by Captain Brydges, R. A., is doing his best to provide a fair table, and cabs, chargers, horses and orderlies are to be had by all that need them. The first officer who arrived was Baron von der Smissen, Colonel of the Regiment of the Guards of the King of Belgium—an officer who commanded the Belgian contingent in Mexico, and who has seen service in Africa and elsewhere. Next came Brigadier General the Marquis of Bassecourt (Artillery), and Baron de Renzis, of Montanaro (Cavalry) from Italy. Saturday night, Lieutenant-Colonel the Baron de Berge (Artillery), Lieutenant-Colonel de Mauray (Infantry), and the Baron de Grancy (Cavalry) arrived to represent the French Republic. Major Sumner of the 5th United States Cavalry, also came informally on the part of the Republic of North America, and the Army of the United States will send a distinguished member of the Ordnance Corps, Major General Barnard to attend the manœuvres. Austria will be represented by Lieutenant-Colonel Weikard and Major Von Kodolitsch, who was attached to headquarters in Abyssinia; Baron Preobrajenski (bearer of a famous natak), and Colonel Lanz will come from Russia. Turkey is to send Colonel Riza Bey and Hursury Bey; Spain accredits Colonel Martin Lopez and Don Noeli y Upto; and last, but certainly not least, Lieutenant-General von Blumenthal is expected to-night along with Major von Alten, to whom will be added Major Roerdanz, to represent the armies of the German Empire. The hospitalities of the camp are large and generous. On Saturday night Sir Hope Grant and several members of his Staff—Colonel Lord Abinger, Colonel Fletcher; Mr. Robinson, Controller; Mr. Crookshank, Assistant Controller; Captain Hozier, Col. Reilly, and others, dined at the Queen's Hotel to meet the foreign officers who have already arrived; and a party was asked to meet General von Blumenthal and other distinguished guests of the country on Sunday evening. There is a meeting of the nations there at the North camp, not altogether realizing the *beau idéal* of the Peace Society or the realisms of the International; and strange uniforms perplex the British soldier, who is, however, ready with his sa-

lute, and whose respectful demeanor has so far, favourably impressed the visitors who wear them.

TUESDAY, SEPTEMBER 12TH.

The whole of the forces are now in the field, the First Division under the command of Sir H. Grant, having left Aldershot this morning for Chobham ridge, moving as a force in retreat towards London. This had become a strategical necessity in consequence of the "enemy" having, since Friday, established themselves at Woolmer and Hartford Bridge Flats. The special correspondent of the *Times* says, "Look at the map, mark Staveley's Division at Woolmer, as A, and Carey's at Hartford Bridge, as B, and you will see that Sir Hope Grant's Division at Aldershot (C) would have a very poor chance against the enemy, for if he moved to attack either he would expose his flank and his standing camp to the other. He is not strong enough to be sure of beating whichever force he attacks. Napoleon would certainly make such an attempt. He made more than one like it in his greatest campaign, when he tried to prevent the junction of the allied armies, and to save Paris before his abdication. But the programme required that Sir Hope Grant should move from his camp and occupy Chobham, as the preliminary to the manœuvres which are to end in the salvation of the capital—or, at all events in the security of its south-western approaches. March Sir Hope Grant did accordingly (the corps moving in three columns) and for once the gallant officer had to command a retreating though not beaten Army. The two corps doing duty now as separated—and widely separated—divisions of an enemy did nothing to molest his retreat, but the movement was executed as if a force had actually got so near Aldershot as to press Sir Hope Grant severely and to bring to bay at least one brigade of his division again and again on the road.

"A spectator on the Farnborough Road, would have been struck by the immense amount of baggage which belonged to the division, and yet it was in fact very small indeed with the usual allowances—not more than 150 wagons, all told perhaps. The contractors' carts proved their excellence as a rule by exceptional breakdowns, which delayed the whole column. The last of the wagons had however passed Church Road before eight o'clock. While the Household Cavalry were moving off in beautiful order, Tod Brown's guns, covered by a squadron, protected their left flank; Lysons being strengthened by Lukin's Battery, A Battery 11th Brigade. Once on the road, it might have been remarked that there was no off

cer of the Quarter-master-General's Department visible to give orders as to the baggage, and that the duty seemed to devolve on the officers of the Control Department, who are not fairly chargeable with it. When all the baggage with its advance guard had passed, the Household Cavalry, in columns of march, followed—1st Life Guards, Lieut.-Colonel Bateson; Blues, Lieutenant Colonel Williams; 2nd Life Guards, Lieutenant Colonel Stewart; officers and men in helmets with cuirass and overalls, with the exception of the 2nd, who were provided with boots. Perhaps the camping out has somewhat dimmed the excessive lustre and polish to which some foreign critics are supposed to except, of steel, and buckle, and button. But horses and men look wonderfully well, and all we think a friendly foreign critic could say would be, 'It is a pity there are no more of them.' The baggage belonging to these regiments was not at all heavy, and the number of officers servants, &c. who marched on foot with it was very small. But Colonel Tower seemed to have allowed a larger proportion of dismounted men to his regiment than were furnished by the Household Cavalry. As the column passed along it filled pretty nearly the whole roadway, the distance between the troopers being much aggravated by the hay nets carried on each side of the saddle bow. The road, as long as the column stuck to the turnpike, was all that could be desired: but at a mile or so beyond Frimley Grove a very bad route lay before the horsemen, which tried, only too successfully, the mettle of contractors horses and wagons. At 9.50 the head of the column had reached a projecting spur of the indented plateau which runs nearly north and south over the swampy bottom of Coldingley and Hagmore. Some time previously Colonel Marshall had received an order, which in its way, and in what appeared its vagueness, recalls a memorandum of Sir Richard Airey on the 25th of October; the cavalry being then in rear of the baggage, Colonel Marshall was directed to advance, which would certainly justify the supposition that the cavalry were to pass the baggage and get in front of it, for the baggage columns was at the time going as fast as it could. When the cavalry arrived at the edge of the plateau, they wheeled to the left, Tod Brown's Battery, with a squadron, being posted on the right of the steep descending road towards the camping ground, a mile further in advance. As soon as the column had entered the cross road from the turnpike, vedettes were sent out upon the right flank, through the very broken and dangerous ground, to observe the country, a duty which they generally performed very well, leaving themselves only open to the hypercriticism of exposing themselves too much on the skyline of the enemy. The way in which these great Life Guardsmen pressed their horses, carrying two and twenty stone on their backs, up heathery hills and down many old ravines, was a matter for alarmed wonder. While the cavalry were halted the defile of the baggage was going on, and on looking down on the plain, it could be seen that the company of Militia which was to be the advance of the baggage guard had forged a long way ahead, on its way to the green patches in the heathery waste which marked the neighborhood of the camping ground. The view from the ridge is very extensive, but the eye searched it in vain for any trace of Lyson's column. The Guards and the rest of Prince Edward's Brigade were supposed to be in the rear, but it was not known that they were executing a series of manœuvres carrying out the theory that the division

was pressed in its retreat, and therefore, some apprehension was expressed that the brigade had gone wrong, or had come to grief, while the non-appearance of the other brigade was announced for by the supposition that General Lysons was displaying his usual ability in concealing his movements. The wagons had hard work in getting down the road, just rendered passable by the Sappers, whose tents could be seen in the distance, and who had been at work since the previous night. One after one however, they slid down towards Coldingley Bottom. At half past ten the baggage of the Army was safe, at any rate. Lysons was cunningly dodging from Purbright to Kitley, Prince Edward displaying a formidable front of battle from time to time towards an advancing enemy. From the Jolly Farmers at Bagshot to the Farnborough Road the country was watched and the roads guarded by the 2nd Life Guards, while the 3rd Dragoon Guards completed the line of observation over the whole rear of the retreating force. At about eleven o'clock a dark coloured thread seemed to be pushed out from under the cover of the woods in advance of Risley, and an officer came to report that a vidette had seen a regiment approaching, but he added that the trooper did not say what it was. In a very little time, however, it was evident enough that this little thread represented the advance guard of Lysons's column, and about 11.45 the line had thickened and swelled out into broad bands, which broke up after a time into columns of regiments, and through the glass one could make out the Black Watch and the Rifles, and the 'dirty half Hundred' and the Duke of Wellington's preparing to pitch their tents on ground which is easier to look at than to get at. About this time Marshall's Brigade, with their guns, moved along the edge of the plateau towards the left and executed some movements to cover the retreat of Prince Edward's Brigade, over ground of a most distressing character, seamed with ruts, made probably by the chariot-wheels of ancient Britons, which led to the overthrow of more than one trooper. But the retreat was accomplished. The Duke of Cambridge and his Staff came to a spur of the plateau and surveyed the scene just as the tents had risen in order, and then went down to inspect the camp."

The work to-day at Woolmer consisted of a divisional drill on Weaver Downs; which was more interesting than things of the kind usually are, as it was worked throughout in two lines. The divisional parade was at 8 a. m., the parade ground being along the road below the Divisional Headquarters, and on the open space on the south of the camp. The 1st and 2nd Brigades have been divided for manœuvring purposes into demi-brigades. The right demi brigade of the 1st division is commanded by Colonel Hawley, of the 4th Battalion 60th Rifles, and consists of that regiment, the Dorset Volunteers, the Elthorne Militia, and the 100th Regiment. The 2nd demi brigade, commanded by Col. Spurgin, of the 102nd, consists of that Regiment, the 94th, and the Royal London Militia. The 2nd or right demi brigade of the 2nd Brigade, is retained under the personal command of Colonel Stephenson, the officer commanding the whole of the brigade, and consists of the 17th Regiment, the 22nd Regiment, and the 2nd Wilts Volunteers. The left demi brigade is commanded by Colonel Watson, 82nd Regiment, and consisted of that corps, the 1st and 2nd Surre Militia, and the 1st Hants Volunteers. These details being given, the reader will understand the nature of operations to-day, which were exclusively of the character of a

drill, to familiarize the Militia and Artillery with brigade and divisional evolutions, and were in no respect intended as a sham-fight of even the most modest kind. The advance guard was headed by the 7th Hussars, who performed their duty in a most creditable manner, followed by the Troop of Royal Horse Artillery, the 100th Regiment the Hants Militia, and a detachment of the Royal Engineers, while the task of keeping open communications with the main body was entrusted to a company of the 60th Rifles. The Bays and 9th Lancers took a different route by Landfordbridge, and the 82nd marched by the same road, but independently of the cavalry. The following particulars are from the account given of the day's proceedings by the indefatigable correspondent of the *Daily News*:

"On reaching the foot of the swell which Weaver Down rises to the summit of the broken and roughly serrated ridge known as Bridgers Hill, the 7th Hussars at once proceeded to scatter over the front in skirmishing order, pushing on a line of videttes to the top of the hill, backed by supports of troops. It struck more than one spectator that the intelligence displayed by the 7th in this duty was not of a high order. While in places videttes exposed themselves out on the skyline, others being on the slope, where they might as well have been in the next county, while the videttes did not observe uniformity in their motions some circling while others remained stationary. Either an enemy was supposed to be in sight or he was not; it is certain that an enemy could scarcely have been in sight of one man and out of sight of another. The advance guard formed up on the crest of an intermediate knoll, the artillery on the left, the 100th taking up position on the right as it came up, with the Hants on its right again, and the Royal Engineers on the right of everything. As the main body came in it was formed into two lines of demi-brigades, the first brigade on the right the battalions standing in line of quarter columns, with the two regiments of cavalry, not as videttes, forming a third line in rear of the second; the whole formation facing southward. The several regiments fell into their places as they came up for the most part with neatness and absence of confusion, although the General was compelled to check a tendency to too much talking in the ranks of a Militia battalion. The advance guard was withdrawn, the Hussars found their way to the rear with the Horse Artillery, completing the cavalry brigade in reserve. For some little time, until the whole had arrived on the ground, the regiments piled arms, and lay down. After about half-an-hour's halt the manœuvres began, the cooks of the different kitchens meanwhile engaged in breaking grounds for field kitchens; each regiment, it ought to be remarked, having with it in its rear its own rations, no baggage column being formed. The brigades changed front to the right on the right battalions of brigades, the field-artillery taking a position on the right of the new alignment, while the cavalry merely altered its position to conform thereto. After a short distance at the left incline, the regiments reassumed their original front and disposition of demi-brigades a regiment of cavalry coming up on to each flank of the second line. Sir Charles Staveley's next order was, 'Change front half right on the right battalion,' a manœuvre executed with the most praiseworthy precision on ground more broken perhaps than any other part of the theater of the evolutions, and the nature of the whole of the ground was not to be realised by any one

who did not attempt to ride over it at a gallop. The manoeuvre just described was only carried out by the first line, the second remaining stationary, until the first by changing front half left on the left battalion of right brigade reassumed its original relation to the second line, when the latter merely moved up into proper distance. The division next advanced in double mass from the centre, an imposing evolution carried out with more minute accuracy, although a somewhat long time elapsed between its being ordered and its being executed. There are Colonels, to get into whose heads an order not of the simplest character, seems to require a process of the character reputed as needful to get a joke into a Scotchman's head. But slow and sure, is better than flashily quick and wrong. The division advanced some distance in this formation, and then retired, the Horse Artillery advancing from the right at a trot up the steep and rugged ground, to cover what as the result of an interim change of front on the part of the division, was now the right flank. The battery took to the rough ground with great determination, but there is ground too rough even for British artillery. One of the guns capsized, while the remainder unlimbered and came to action front; but the gunners were all engaged in righting the upset gun, which was speedily effected. The 7th Hussars went out in skirmishing order to cover the new front while the division advanced. Nothing could have been finer than the dash with which the 4th and 60th on the right of the first line of the division reconnoitred a dense tract of high furze, and the adroitness with which the regiment picked up its formation after the inevitable disrapture of its ranks spoke volunms for the pains taken in its drill. The Hussars having been recalled, the Bays went out on the hill to cover the rear as the division retired to its original position. The splendid regiment went out in troops at a hand canter, without a single mishap, over some atrocious ground. Then alternate troops broke into skirmishing order, while alternate troops remained behind as reserves. The skirmishers of the Bays went to the front as if each man had a couple of spare necks in his wallet; but so well did they ride that there was no occasion for a man to draw on his reserve. On the brigade halting nearly on the ground on which it had formed up on the march, the Bays were recalled, arms were piled, belts taken off, and fatigue parties despatched to the camp kitchens on the knoll by the wood to bring up the dinners. The men carried biscuits in their haversacks; the Control sent out the meat and distributed it on the field.

At 2.30 the manoeuvres were renewed, this time as a sham fight. The 9th Lancers three guns Royal Horse Artillery, under Colonel Williams, the Dorset and the Hants Volunteers, under Colonel Addington, were sent as an enemy over the brow of the high ridge of Bridger's Hill. The first line of the defending force under General Brownrigg consisted of 4th 60th, Elthorne Militia; 100th Regiment, 17th and Wilts, 19th Surrey, 22nd A, 14th Battery, Royal Artillery; and H, 11th Battery, Royal Artillery. The second line consisted of the 102nd, the Royal London Militia, 94th, 1st and 2nd Surrey, 82nd, and three guns Royal Horse Artillery on left flank. On the right flank of both lines were the Bays and the 7th Hussars. The front line advanced in quarter distance columns covered by 60th and 100th as supports, and deployed, the rear line forming mass of columns in two demi-brigades. The enemy's guns opened on the

right flank, and skirmishers were seen on the hill pressing on to the attack. A Field Battery of Artillery moved to the left rear, and, gaining the edge of a wood on some rising ground, replied to the enemy's fire from this commanding position; while the defence hurried out skirmishers. The second line having opened out to deploying distance, a change of front was effected half-right from right of brigades on right battalion (60th); the Bays and 7th Hussars formed columns of troops. The defending skirmishers, having felt the enemy, opened a vigorous fire all along the line; a sharp reply coming from the enemy's skirmishers. The defenders' skirmishers fell back firing, torn by the enemy's artillery on the right flank of the attack. The left, being pressed by the enemy, was opportunely strengthened from the second rank. The recall suddenly sounded, the skirmishers scuttled in (the 60th showing wonderful smartness), and the defence advanced into échelon of battalions from the left, the échelon advancing from the left covered by skirmishers on the left and left centre. The enemy's skirmishers held a strong position in the gorse, and his guns pounded heavily the right of the defence, and partly enfiladed its line. The line of the defence halted, and an independent and volley firing was commenced at 200 yards distance. The Bays and Hussars formed two lines in rear of right battalion. The defence was, however, forced still to retreat, its baggage having, in anticipation of this necessity, already moved off by the road the advance had been made. The troops followed the baggage, and the enemy may be considered to have won the day. The division did not return to camp until after 6 p.m., after ten hours' work."

Speaking of the operations generally, the *Standard* observes that the Staff worked steadily, unceasingly, and in quiet business-like manner, which is a great improvement on the traditional purposes dash and flash of the British cocked hat. The Engineers preceded the division by two days, and the result of their labour in improving the communications, by laying down turf and branches on soft ground, filling up ruts, &c., was everywhere visible. Fortunately, the day was fine, otherwise not all their exertions could have hindered the wagons from experiencing great difficulty in passing over the boggy ground which extended along a great part of the front of the camp. The retreat would appear to have been covered skillfully, and in due conformity with the rules of war, by the 2nd Brigade. The extreme rearguard was furnished by 1st Battalion 4th Regiment, who extended two companies in skirmishing order, said skirmishers passing through fields and enclosures, except where serious damage would have resulted from their passage, just as if a real enemy had been at their heels. Close in front, that is to say between the skirmishers and the rest of the column, was a troop of cavalry. The cavalry were freely used indeed throughout the day, but it seemed to us that their activity and energy were not properly directed. One glaring defect in the arrangements for the outposts was that they were left at a long distance from the main body, without proper means of communicating with it, and without due support. As a whole, however, the day's work was an immense improvement on that which has hitherto taken place, owing perhaps in some measure to the presence of the Duke of Cambridge. It is, however, only fair to ascribe the merit to Sir Hope Grant himself, who certainly handled his division better than the officer commanding the force at Hartford Bridge Flats.

## FOREIGN MILITARY AND NAVAL ITEMS.

Great activity continues to be displayed in the production of artillery in France. In the Loire district the cannon foundries are very busily employed. Some breech loading cannon, upon a system introduced by Colonel Reffye, have been successfully submitted to very severe tests. Some of the cannon made of late, have a range of 3-4 miles.

When all the works of construction and repair are finished, the German navy will comprise seven iron-clads with an aggregate of 4,800 horse power, and carrying 77 guns: one vessel of the line (steam), five corvettes (steam), seven despatch boats (steam), twenty-two gun boats (steam), one transport, (steam), one training brig, three other brigs, three frigates, and a ship used as a floating barrack. All these vessels, taken together and adding the iron clads, carry between them an aggregate of 532 guns.

Referring to the rolling experienced in the British iron clads during the recent cruise of the combined squadrons, the *London Standard* asks what compensation would there be for the loss of fighting power occasioned by half the fleet being unable, on account of the weather, to use its guns, and when the fight was over being, from the same cause, barely able to keep the sea? It is, of course, possible that the iron-clad navies of neighboring countries may possess similar properties. Things being thus equalized, we should, in the event of war, feel no apprehension as to the result. But the reverse might prove to be the case; and it is evident that an admiral who knows that his ships can be trusted to fight in all weathers must possess an enormous advantage over one who is conscious that after the wind has obtained a certain force, half the ships in his fleet are likely to inflict more injury upon their own crews than upon the enemy. In saying so we desire to exhibit no desponding spirit. That iron-clads can be built to sit the water steadily even when it is blowing a gale is evident, since the *Monarch*, whose rigging is exceptionally heavy, only rolled at the outside fifteen degrees through the arc, to the *Lord Warden's* sixty-two degrees.

"Send me men, not boys," wrote the great Napoleon on one occasion, when he required more soldiers in his Italian campaign. So quotes the *Broad Arrow*, and goes on to apply the remark thus: "He had found from experience that the youthful conscripts could not bear the fatigue and privations of war. The raw levies and volunteers who endured such hardships and privations under Dumouriez were men, not boys. The experience of our Indian Army exemplifies in a remarkable manner the importance of sending to our Eastern Empire the full-grown and knit man. The *Pioneer* furnishes us with the following facts in illustration: In January, 1870, a draft composed of one officer, one sergeant, two corporals, and sixty-eight privates arrived at Thayetmyo, Burmah, from England, for the right wing of the Seventy-sixth regiment. Their average age was twenty years and twenty-three days. From January to November, 1870, there were of this number eight admissions to the hospital; eighteen men of this draft were sent to India for change, nine died—eight from cholera and its effects. Of the eighteen men who were sent to India for change not one exceeded twenty-one years of age, and the ages of those who died of cholera did not exceed twenty."

## MILITARY ORGANS AND THE VOLUNTEERS.

The characteristic of every genuine organ is a complacent satisfaction with the tunes ground on its barrel. The handle may move jerkily, the little brass pins may be bent or broken, may even have been misplaced by the maker, or by some ambitious and unskillful tune mender—*n'importe*—the repertoire is ground from first to last while little clicks between each tune, and a snort as of triumph from the bellows when the whole round is accomplished.

Organs are generally, like children of this world, wise in their generation; thus there be organs ecclesiastical with the Old Hundred and Luther's Hymn for respectable and quiet neighbourhoods, and "Ancient and Modern" tunes and "infallible" chants for St. Albans and St. Barnabas. There be also organs political, rejoicing in "Croppies lie down" and "Boyne Water," or the "Shan Van Vocht," but of all the organs ever ground, the organs military are to us the most interesting. Some are new and some are old, some are large and some are very small, some are loud and some are very soft, some are preternaturally deep, and some whistle their little tunes, like Pandean pipes; but organs, however proud of their tunes, are neither musicians nor composers, they are organs and nothing more, ground to order, and subsidised by the grateful pence of their discriminating patrons.

Now this happy and contented state of organic life is just the very condition that the *Broad Arrow* does not aspire to. It is not the organ of the Army, for it thinks first of the nation, secondly of the Service; and were it advisable to bespeak a barrel, the tunes to be set on it would be more in the spirit of the "writing on the wall," than appropriate to the toast of "our noble selves." It is not the organ of the Navy, for with that the old tunes are a thing of the past, and of new ones, where are they to grind? With this negation of such ambition, how therefore can it be possible, as stated by a contemporary, that the *Broad Arrow* has striven to become "recognised as an organ of the Volunteers'?"

From the day of its first publication up to the present time, the *Broad Arrow* has been "a paper for the Services," but an organ for no one. Bound to the chariot wheels of no clique or interest, it has not even claimed the privilege of a calculating neutrality. Fearing neither to attack what is powerfully supported when the attack is a duty, nor to defend what is unpopular though just and proper, we never aimed at greater credit and *éclat* than to be deemed honest and impartial, telling the truth, however bitter to our friends—when needful—and not begrudging to our enemies, those deserters who are not of the stern stuff to welcome wholesome correction. As we have been, so we design to remain, content with the infallible sign of approval given by the Services at large, when the circulation of the *Broad Arrow* first became greater than that of every other military paper published in London:

But why this peroration? Is it to glorify the success of the *Broad Arrow*? Yes, partly, since it may be useful for many to know that "a paper for the Services" may far outstrip its fellows in the contest for public support, without pandering to the great or truckling to the small, without expressing an admiration of abuses which it does not feel, or professing to deem a grievance that which is in truth a necessity.

Our recent remarks on the lack of zeal evinced by the Volunteers in hanging back from the Autumn Manœuvres, were written in this spirit, and not, as suggested by the *Volunteer News* of the 4th instant, from a feeling of antipathy to the Volunteers. As justly might it be said that a feeling of antipathy to the Whig Government dictated our strictures on those responsible for jeopardising the lives of our sailors in the *Megara*, or that antipathy to tall men suggested our opinion that the Household Troops are not the most useful regiments in Her Majesty's Service.

Unfortunately no supernatural antipathy need be suggested as the active motive in either of these cases.

The Volunteers are a splendid material, by turns petted and neglected. Sprung from the military spirit and patriotism of the nation, they have been permitted (after many long years of tentative probation) to remain without any organisation worthy of the name—to subside into a sullen sense of wrongs undeserved, and thus to fail at a crisis of their history in that active zeal and readiness for self sacrifice which have always hitherto been their main claim to the admiration of their fellow-countrymen.

'Tis useless to talk of money considerations as satisfactorily accounting for such a state of things. The lack of increased Government support may certainly have led to the decreased zeal and spirit of our Volunteers, just as the lack of increased remittances from the governor may be quoted as a fair ground for Young Hopeful's decreased wine parties at Oxford; but just as the latter has no right still to claim *éclat* as a lud of spirit for the wine fountain which has ceased to flow, so must the Volunteers be content to part with their character for romantic patriotism, when but five thousand out of the hundred and seventy thousand of our Volunteers respond to an offer of a seven days' training under canvas in mimic war. It may be the duty of a Volunteer organ to discourse sweet music to the absentees, but "a paper for the Services" has to tell the truth and warn the Volunteers of their position.

The first great impulse which was given to the Volunteers came from the desire to avoid the Militia Ballot, and indeed many a young man of good family took a commission in the Militia for the same reason. Since that time compulsory service has, year after year, most unwisely been postponed. The fear of being drawn for the Militia has consequently lost its terror. The Volunteers have been allowed to linger on still unorganized, as if they were looked upon by the Government not as available troops, but simply as a spontaneous happy-go-lucky school of elementary drill.

By this means a very large proportion of the manhood of the middle classes has been passed through the ranks of the Volunteers and obtained that amount of military training which will undoubtedly leaven the whole mass of the population, and make it comparatively easy to raise reliable troops, should the crisis requiring their employment occur. But although this great object, if object it was, has been so far accomplished although the best blood of the middle class will not, in case of future need, be found wholly untrained to arms, there is something further to be done by and for the Volunteers before they can with justice take and hold the place to which they have honorably aspired, and which they have a right to acquire.

The organization of the Reserve Forces within the several Military Districts is now in process of development, and we may be

permitted to hope that in the future the Volunteers may be enabled to benefit within a reasonable distance of their headquarters by those "Autumn manœuvres" of which the late campaign was merely an experiment.

It is to be hoped also that the Government will gradually wean itself from the policy of throwing the cost of zealous attempts to promote the efficiency of the several corps, on those commanding officers whose pride it is to see their men smart and efficient, and give them the opportunity of drill and experience at a distance from their own headquarters. But whatever the short comings of the Government, however ill-calculated the pittance they afforded, to secure a full proportion of Volunteer corps from distant stations, the fact remains the same, however accounted for, that there was no enthusiastic rush of Volunteers to avail themselves of the first great occasion which has been offered them, to experience for seven days a foretaste of the life which all must be subject to if ever they are called upon to serve their country in earnest.

The truth must be spoken. The bud and flowering of the Volunteer movement has passed away. The fruit must now set and be allowed to ripen; and those who deem this process to be aided by the flattering notes of the most dulcet of organs, debar themselves wilfully from the benefit of that honest criticism which we trust will always be the characteristic of our "Paper for the Services."—*Broad Arrow*.

## BRITISH COLUMBIA.

By private advices from Lost Creek, Ominica, British Columbia, it is said that an experienced miner states that the benches in that district will all pay largely, and that he has seen miners pack a flour sack of dirt to a creek and wash out fifty dollars of gold. Let those who are starving and struggling at a dollar a day think of this. How desirable it would be to transport the thousands of people who are at present starving in Europe to such a country as that! It is probably true that provisions are at present very high in British Columbia, but when the railroad is completed they will be as cheap as anywhere else in the Dominion. Here is a country where every one who is industrious may make a living if not a fortune, and this is the same province which the Opposition informed us last session was not worth having in our Dominion being made up of mountains inaccessible and of no value, with not ten acres of arable land in the whole colony. The "ten acres of arable land" in British Columbia will hereafter become a by-word. There is one plain alone, namely, the Chilcote plain, which is one hundred and twenty miles long by forty miles wide, is as picturesque as an English park, and as capable of cultivation as any portion of the Saskatchewan Valley. The timber of British Columbia is acknowledged to be the finest in the world. Some of the trees are three hundred feet high, and frequently as many as ten hundred of them to the acre. In fact no finer lumber district exists anywhere than in British Columbia. Then the Fisheries are considered of such importance as to induce the Dominion Government to place at the disposal of the Provincial Government a couple of vessels for their protection. The salmon fishery is profitable beyond description. A consignment of salmon from San Francisco to Sidney, has just been spoken of most favorably. Salmon are so extraordinary plentiful in British Columbia that whole ship loads could be procured and forwarded to our southern colo-



nies without in any manner damaging future supplies.—*Leader.*

The London *Spectator* informs us that "Admiral Yelverton's cruise from Cork harbor to the Tagus has furnished a partial answer to the over-captious critics who think small things of the modern seamen and detest the modern ship-of-war. Practically the new fangled sailor, aided, by his potently in the engine room, and because that ally leaves Jack less dependent upon wind and canvas, must be somewhat different in his manners and customs from the old-fashioned salt who could go anywhere and do anything in a coffin or a clipper. But we have yet to learn that the new race of sailors are not as apt for their work as the old, and after all, aptness for the business in hand is the one thing needful."

CORRESPONDENCE.

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

To the Editor of the VOLUNTEER REVIEW.

SIR:—I observe in a late issue of your valuable Journal that the possibility of the whole force of the Dominion being placed in the field is looked upon as a fact. Now the general acceptance of the phrase "40,000 men" is this: that this number of well equipped and trained, properly and efficiently officered men, are in readiness at short notice to take the field against invaders of our country, with a fair chance of repelling an equal or greater number of such, wherever met, either as a main body of an army or as detached portions of the same. A few facts regarding the force in this Province may not be out of place, which may have the effect of disabusing the public mind of the fallacy which it is prone to accept as truth. The present organization was formed chiefly as independent companies, by men who in some instances never had performed officers duty, and who were induced to undertake the same merely for the sake of a claim to a portion of doubtful honour and a chance to cut a figure in this particular way which would surprise a few admiring friends and perchance themselves as well, donning a Red Coat, which fact accomplished they seemed to think that was all could be expected of them, and that so long as the services of a Government Instructor were available they were doing their duty by occasionally bullying the men to endorse the sentiment of the Instructor, or performing other acts which in their ideas were worthy of the "officers" they were by virtue of a Red Coat—often Government property, a rusty sword, the supreme command of some two scores of country lads or city swells, and last but not least the right to the high-sounding cognomen of "Captain," which in a majority of cases was the only distinctive honorary title they ever had a claim to. These isolated companies after a year or two became amalgamated into Battalions, and it was understood that it now became necessary for officers to qualify themselves, either at the military school in

the city, or by examination by Boards of officers at the different camps of Instruction, and it has happened that officers who had been "coached" through the school or had obtained a Board certificate by means of the same kind of chicanery, were not unfrequently given Staff or Field officers commands in these Battalions, and indeed officers who had never passed at all were in some instances awarded high positions by virtue of a pretended "interest", manifested in the force some few months previously, which "interest" in some cases would imply interest in Government funds available for Militia purposes. Now would come the test *i. e.* at time of Camp, the system of "coaching" pursued at school or other examinations or inspections, must per consequence be still employed if at all available, and I myself have frequently heard my comrades sneer and jeer at a "Staff officer" receiving his orders from an inferior or subaltern officer for the next movement, previous to trusting his own extensive amount of military knowledge to the criticisms of the men in the ranks.

Fancy if you can a man of this kind making a burlesque of a parade by exhibitions of the most consummate ignorance, giving orders the exact reverse of what they ought to be, getting the Battalion hopelessly entangled till it became necessary to form again on the markers; fancy a man falling back from his proud place at the head of a column to the centre or rear to enquire of some Captain or subaltern what the next order ought to be, only to gallop to the front to have a repetition of the former farce. Fancy again, and the picture is of rather a sad description, the corps marching in the presence of an enemy, and an officer of the above calibre, centering in himself all the importance due to his position *i. e.*, the speed of retreat, being mounted, arrogating to himself knowledge he does not possess,—hopelessly involving the troops under his *mis*-guidance,—allowing his presumption, ignorance and self-conceit to overcome his better judgment and leading his men to death and destruction, only, as is to be imagined, to leave them and save his own worthless carcass by disgraceful retreat. "Look on this picture and then on that."

Is it to be wondered at, Mr. Editor, and I ask this as an humble unit of this great "40,000," if a man placed in such a position would be induced, as I fear I would under such circumstances, to make a skirmisher of himself for his own safety, trusting rather to his own ability than to risk himself to the imbecility and wretched incapacity of "officers," such as these, falsely, so-called? I have for some time past been so impressed with the above ideas, that I fancy one Rifle at least, will change hands for the next term of service.

It behooves our military authorities to move in this matter, to exercise a greater amount of judgment in giving place and

power to men, some of whom are eminently unfit for the coveted positions, and who are stimulated to their attainment for the purpose of gratifying a mistaken ambition, to gain a "little brief authority" and make that a plea for further advancement, or worse still from pecuniary motives. Our lately disbanded Battalion had some examples of the kind above described, and I understand the other Battalions and organizations in the Province are not altogether free from such; some, it is affirmed, make their Corps political engines for the purpose of promoting their party designs. It is time the organization was thoroughly purged of all these worthless incumbrances, now that we are left to protect ourselves. The Dominion Militia Law has had high encomiums passed upon it at home and abroad, this is upon the form of compilation of it, embodying good sound reason upon a basis best adapted to the condition of the country, let it then be put upon such a footing in its various ramifications that it may be shown the praise and compliments were not undeserved, and also that we may be in such a position as to uphold the glorious name and fame which attaches to the Dominion as the fruit of the noble strivings of our forefathers while the confederation was afar off in the vista of the future. You may hear from me again upon this same subject at no distant day.

I remain, yours etc.,

A VOLUNTEER.

New Brunswick, 6th Nov. 1871.

To the Editor of the VOLUNTEER REVIEW.

SIR:—By inserting the following in your valuable paper you would confer a great favor. Hearing that the Dominion is about to form an army, it occurred to me that the Dominion has a claim on a Regiment that is second to none in the British army, *viz.*, the 100th Royal Canadian Regiment. And as the Imperial troops are being withdrawn from Canada I would suggest that the 100th Royal Canadian Regiment be handed over to the Dominion as the nucleus of its army, and I am confident that if our government requested the transfer of the 100th Regiment to Canada the request would be complied with, and if an objection should be raised on the ground of there being so few Canadians at present in the Regiment, then there are sixty or seventy of us including about thirty N. C. Officers who claim Canada as their home, and who would be only too glad of returning to their own country to join her army, and against which arrangement the Imperial government could not have any very serious objection as their places could so easily be filled up. In the above number of N. C. Officers are about 20 Sergeants whose services in drill, accounts, etc., would be invaluable. Trusting that I have not trespassed too far on your space,

I remain, etc.,

BEAVER.

Aldershot, 31st Oct., 1871.

## NEWS OF THE WEEK.

Mr. D'Israeli has been elected Lord Rector of the Glasgow University.

Scott Russell has published a letter defending and explaining the alliance of the Peers and workingmen; he says if the late lamented Prince Albert was alive he would have headed the movement; all true gentlemen and Christians will well believe that.

Large deputations from Paris waited on the Empress Eugenie on her birthday (15th Nov.) with addresses; the officers and men of the late Imperial Guard sent bouquets and other presents.

Mr. Gladstone assured his constituents at Greenwich that England was at peace with the world and repeated the sentiment at the Lord Mayor's banquet on 9th Nov. The inference to be drawn is that a stiff contest is imminent.

The Royal Warrant re-organizing the army has been issued; it is very voluminous, not very revolutionary, but its promoters say it is a mere provisional measure.

It is reported that the British Government is about to purchase the Atlantic Telegraph Cable.

Pigott, editor of the Dublin *Irishman*, has been convicted of libelling the Chief Justice, and sentenced to six months hard labor.

Hundreds of persons attended the fete of the Madeline in Paris, on 15th Nov, in expectation of participating in the celebration of the mass for the health of the Empress Eugenie; for some reason not given it was not celebrated.

The trial of Blanqui had commenced before the court martial.

It is said the Pope is about to proclaim himself King of Rome and to take up his residence at Paris.

The appointment of French Ministers has been made, Guizot to England, Duc de Brogli to Austria, Picard to Belgium, Fleury to the United States, and Goulard to Italy.

President Thiers proposes at the meeting of the Legislative Assembly next month to end the Provisional Government and establish a definite Republic. Take care *M. le President*, December is an Imperial month, has seen *coup d'Etats* before 1871, and the star of the Bonapartist is generally in the ascendant.

The Moscow *Gazette* counsels Russia to demand the restoration of Northern Schleswig to Denmark as a means of neutralizing Prussian power on the Baltic.

The arbitrators under the Washington Treaty have met and organized.

In the United States public attention has been aroused to the doings of the Tammany ring, the Klu Klux Klan in the Southern States and the Mormons at Salt Lake.

The new Attorney General of the State of New York intends to prosecute the authors of the New York frauds and President Grant is said to be determined to put down the other nuisances. Great disappointment is felt at the non-arrival of the Russian fleet.

Sir John A. Macdonald is recovering from his illness.

A great dinner was given to the Hon. Mr. Pope at Sherbrooke and it is reported that the Hon. Dr. Tupper is about to exchange offices with the Hon. H. J. Langevin.

Affairs are quiet in Manitoba; the reinforcement is expected to get through easily.

## RIFLE MATCHES.

## RETURN RIFLE MATCH - HALTON vs. GUELPH.

The return match between the Halton and Guelph Rifle Clubs came off at Stewarttown on the 9th inst., 8 men a side, 200, 400 and 500 yards, 5 rounds to each range. The day was an exceedingly beautiful one and very favourable to marksmen. The Halton marksmen were anxious to retrieve the laurels lost by them at the match in Guelph and felt pretty confident of being able to do so. As will be seen from the score, however, the keen eyes and steady nerves of the Guelphs were again too much for them, the result being 345 to 313. After the match the competitors sat down to a first-class dinner at Mr. Duncan Stewart's hotel, where the men of Guelph proved themselves as adept at the use of the knife and fork as they are known to be in handling the rifle. The following is the score.

GUELPH.			
	200	400	500
	yds	yds	yds
George A. Bruce	15	14	10
John Stewart	12	11	14
John C. Evans	15	18	15
Alfred Strowger	14	14	14
James Stirton	15	18	15
James Hazelton	13	17	15
Martin Deadly	14	13	13
H. L. Walker	15	18	13
Totals	113	123	109
345			
HALTON.			
	200	400	500
	yds	yds	yds
Captain Johnson	15	16	11
Ensign Cooper	11	15	15
H. Post	14	15	10
Sergt. H. Spiers	13	17	14
Thos. Boll	16	12	9
W. Barnes	13	17	7
D. McKerlie	11	10	8
Walter McKay	11	19	14
Totals	104	121	88
313			

## THE GUELPH RIFLE CLUB AND RIFLE SHOOTING.

To the Editor of the *Mercury*.

DEAR SIR.—The "Sharp shooters" of the Town of Guelph have again maintained their reputation as marksmen, having won every challenged match this year, beating the men of Elora, Fergus, Galt, and Halton, and defeating all opposition whether on their own range, or the ranges of their opponents!

The Guelph Rifle Club is well aware that this noble Dominion of ours must be protected by our citizen soldiers, and our brave volunteers.

They are also well aware that Napoleon First always feared the deadly aim of the Tyrolese Rifle-men, for he said, they gave him more trouble than all the rest of the Austrian army. They know too, that Montenegro, with a population of only one hundred thousand, maintained its independence

in spite of that warlike nation the Turks, who conquered and possessed all the surrounding country. In the year A. D. 1796 the Turks invaded Montenegro with this manifesto, "Unconditional surrender or extermination," but the brave mountaineers with rifle in hand, obeyed the summons by making each Turkish heart a bull's-eye, until thirty thousand Turks lay dead on the mountains, peaks and ridges of the land they had invaded, and those who escaped retreated in great disorder till they were completely out of range of the ever after dreaded and feared Montenegro Riflemen.

Yours &c.,

A SUBSCRIBER.

Guelph Nov. 6th, 1871.

—Guelph Mercury.

## CONCLUDING REMARKS ON THE AUTUMN MANOEUVRES.

(From the *Saturday Review*.)

A desire to preserve due logical sequence in our criticism of the autumn manoeuvres has led us to abstain hitherto from taking up several loose threads which however important in themselves, were not necessary to our immediate purpose. We shall now notice briefly some of these. For instance, one of the great features of the recent campaign has been the topographical ignorance it has disclosed. The ignorance has been exhibited both by the Staff and by those who have assumed the task of censuring, correcting, and educating them. Not only quartermasters-general, but their friends, philosophers, and guides, the Special Correspondents, have been at fault in this respect. For about a month all the newspapers were crowded with letters headed "The Hampshire Campaign." The public may therefore be somewhat surprised to learn that only a very small and the least important of the operations took place in that country.

The War office authorities seem to have profited little on this head by the experience of the French, and to have almost ignored the importance of providing an army with good maps. They did, it is true, issue maps, but these were on too small a scale to be very useful, and were moreover obsolete. It is not, however, to be expected that large-scale detailed maps of an enemy's country should always be available, and it is part of the duty of the Quartermaster-General's Department to cause supplementary sketches to be executed before the commencement of operations. During the recent manoeuvres but little field-sketching seems to have been attempted, save by a few students of the Staff College, who were chiefly employed on reconnaissances performed only a few hours before an action. The result was that columns occasionally became involved in what, without the aid of good maps, constituted a labyrinth of roads, and that frequently distances were so miscalculated that large bodies of troops arrived too late to execute the task assigned to them. Indeed, the opportunities of obtaining an intimate topographical knowledge of the district seem to have been terribly wasted, except perhaps in the case of the Prussian officers, who, we may be sure, did not fail to gather and arrange information which they may hope to turn some day to practical account. We are inclined to think that, though all officers should be taught to execute rough, and Staff officers comparatively finished, sketches, yes, on the principle of a division of labour, there should in every army in the field be a regular topographical corps to which should also be assigned the duty of collecting statistics.

We have, it must be admitted, gained many useful lessons in the art of how not to do it, and amongst the most useful is one which relates to what is called "the general idea." Some theory must, of course, be accepted by both the contending parties, but it ought not to extend beyond the object of the campaign and the circumstances under which the operations are commenced. When the general idea is at all expanded, it at once loses its true character, and the campaign becomes little more than a string of large field-days. Our arrangements are in this respect extremely open to censure. So many instructions were issued by the Headquarters Staff, so much was assumed, so frequently were events pre-arranged, that the generals had but little opportunity of showing any strategical talent. Again, the forces were so unequally divided that the tactical contests were unsatisfactory and unprofitable to the last degree. In real war 10,000 men often beat 20,000, but then the superior qualities of the smaller body and the moral effect of the blows dealt by it counterbalance the arithmetical inferiority. In a sham campaign, however, the troops are assumed to be of equal excellence, and moral effect is altogether eliminated; unless, therefore, there would be wonderful incapacity on the part of the general of the larger army, the latter cannot fail to defeat one of half its own strength. We may here observe that it is because of the elimination of the moral element from a peace campaign that we can never accept the training of the latter but as a very imperfect substitute for the education of real war. If battles were like games of chess, and soldiers were made of boxwood or ivory, then the test and training of peace manœuvres would suffice. As it is, there must be much of what children call "make believe," accompanied by not unfrequent absurdities due to an over-liberal indulgence in imagination. Yet it is difficult to steer clear of these absurdities. A general officer removing his plume and gravely crawling forward to the edge of a bank for the purpose of reconnoitring the enemy is a grotesque sight, yet without such precautions he would in war be inevitably picked off. It is clearly necessary, therefore, that on these occasions everybody should exert his imaginative powers to the utmost; but unluckily the results of the imaginative faculty are not uniformly identical—nay, they are frequently contradictory. The cavalry in the last battle were convinced that they had sabred every Highland skirmisher in their front; no doubt the Highlanders were as strongly convinced that they had shot down every dragoon who had charged them, and the actual result would have depended more upon the moral than the material circumstances of the contest. Umpires cannot weigh the morale of troops. Leaving this subject, we regret that not only were matters too much pre-arranged, but that in most cases the troops were allowed to glean no lessons from the manœuvres in which they had taken part which must often have appeared to them a meaningless part. That they felt the greatest interest in the operations was evidenced by the eagerness with which newspaper accounts were devoured. This interest might have been turned to profit had the remarks of the Duke of Cambridge on the manœuvres performed been daily published to the army. Another defect in the arrangements, and one which militated much against the realism of the affair, was that the Control Departments of the two hostile armies made use of Aldershot as their common base, thus arranging the conditions of their operations so that they should be as different

as possible from those of real war.

While on the subject of the Control, we may take the opportunity of urging the propriety of changing the title of this department. The term Control and the title Controller are most obnoxious to the Army, and tend in no slight degree to a misapprehension of both the position and duties of the department. "The Supply Department" would be a much more suitable and popular name. The Volunteers might also perhaps with great advantage adopt a new title, if a satisfactory one could be found. The name frequently affects the nature of a thing, and the word Volunteer has already to some extent come to be looked upon as the title of a man who does a little soldiering because he likes it, but need not do more than is agreeable to him. We do not mean to say that all, or many, Volunteers entertain this feeling; but we suspect that some do, and, at any rate, the name is misleading. The volunteering should cease from the moment when a man has assumed military duties, otherwise the ostensible addition to the force of the country, being uncertain and variable, may be rather an inconvenience than the contrary. By a natural connexion of ideas we pass from the Volunteers to the Militia. We have already remarked on the contingent sent by the latter force to Aldershot, and have now only to draw attention to the great necessity of some arrangements for distinguishing one Militia regiment from another. At present this is a matter of impossibility for a stranger without direct inquiry. It is easy to conceive how many dangerous mistakes, how much fatal delay, might be caused on service because a Staff officer was compelled to pull up his horse and put the question, "What regiment is that?"

It is not only the Militia who require that attention should be paid to their dress; we want in that respect a general reform throughout the whole army. To a true soldier's eye nothing which is not serviceable is really handsome, but there is no reason why the two may not be to a certain extent combined. A few removable ornaments in the shape of lace or epaulets, would on the shortest notice convert a dress fit for the jungle into one suitable to a guard of honour, and a handsome uniform undoubtedly does exercise a wholesome influence over soldiers, and much facilitates recruiting. Still every thing must be made to give way to service considerations, and the soldier uniform is simplified and loosened the better. To one conclusion we have come with regret. The bearskin caps of the Guards and Fusilier regiments, and the feather bonnets of the Highland corps, are very handsome, but are utterly unsuited to skirmishing. As therefore there will in future wars be a very great deal of that sort of work, it is to be hoped that some more convenient head-dress may be invented for these corps.

Among other reforms which we trust may result from our little campaign near Aldershot, is one in the manner of performing the duties of command. Some of our generals seem to think that if they are not perpetually rushing about they are doing nothing. They appear incapable of appreciating the nature and extent of their own duties, and are constantly encroaching on those of commanding officers. The consequences are to be seen in fussy, spasmodic operations, incapacity to modify manœuvres and an absence of combined action. Save in emergencies, a general of brigade should direct only, leaving command to the colonels.

Our remarks on the autumn campaign are

now completed. We have certainly indulged in very frank speaking, and, having awarded blame more frequently than praise we have no doubt wounded many susceptibilities. Our view of the campaign, however, has been, that it was intended to test our Army, and to find out defects rather than excellences. If you test a cannon, you spare no trouble to ascertain if there is any flaw in the metal. You do not allow your attention to be diverted from faults of the bore by the strength and lightness of the carriage, or *vice versa*. In like manner we have deemed it our duty to confine our attention almost entirely to defects, because that which is perfect needs no further consideration, but faults and shortcomings may be remedied.

The naval strength of Russia as it was at the latest dates, not including the additions ordered during the present year, stood as follows: Cuirassiered turret ships, 21; frigates, 8; monitors, 10; corvettes and clippers, 32; gunboats, 68; steam-tugs, 12; other vessels 145—total, 296. To man these were—Admirals and holders of separate commands, 117; under officers, 3,035; seamen, 23,184; reserve, 14,194—total, 45,526. These vessels are all either in active service or can be made ready for sea in a short time.

The *Japan Times* says that in the interior of Japan there are to be found shops exclusively for the sale of the European goods, and that where few, if any, Europeans have visited or passed through. Soap, perfume, clocks, colored engravings, and beer seem to be in general demand, while some shops deal exclusively in tables and chairs after the European fashion. Gas will shortly be introduced in the principal commercial town of Japan—namely, Yokohama, and in part of the city of Yeddo, the seat of Mikado's government.

It is now re-affirmed—this time with much show of circumstantial proof—that President Grant still holds pertinaciously to that pet object of his, the annexation of San Domingo. His professed submission of the same to the will of the people is it seems but a cloak for a certain course of "masterly inactivity" through which he hopes to secure his ends by and by. Nor is he altogether inactive about it, after all, for he still keeps an American fleet in the Bay of Samana to overcome the Haytiens. It is just possible that Grant's tactics may succeed, the more so as neither Haytiens nor Dominicans have yet proved competent to the task of governing themselves.

The Russians appear to consider that by the conquest of Turkestan they have gained a second India, and to be earnestly bent upon improving the natural resources of the new province. The chief improvement on which they pin their hopes is extensive irrigation, by means of which they expect to raise large crops of silk and cotton. A project for irrigating the steppe of Drizack is at present under consideration, several engineers having been employed by Government in surveying the plain and working out a plan, which if approved will be put into operation at once.

DIED—At Berlin, Prussia, from the result of wounds received at the siege of Metz, COLONEL EDWIN VAN KAYSER, Prussian Horse Artillery, brother-in-law of Lieut. Colonel Robert Lovelace, late Ottoman Irregular Cavalry, and formerly Captain H.M. 19th Regiment; General Agent VOLUNTEER REVIEW, Provinces of Quebec and Ontario, Dominion of Canada.



THE VOLUNTEER REVIEW

And Military and Naval Gazette.

VOLUME V. 1871.

THE VOLUNTEER REVIEW enters on the fifth year of its existence. When it was first projected fears were entertained for its ultimate success, as two efforts of a similar kind had been made and failed for want of support; but we are happy to say these fears were groundless, and that the VOLUNTEER REVIEW may now be said to be firmly established, thanks to the support it has met with from the hands of the Volunteer Force of the Dominion. It now circulates largely through Ontario, Quebec, New Brunswick, Nova Scotia, and even the new Province of Manitoba has extended its generous support. Nor is it confined to these Provinces only, but in the Mother Country, and even the United States it has subscribers and supporters. No other journal in the Dominion has so wide and extended a circulation as the VOLUNTEER REVIEW, and therefore it offers unparalleled facilities to general advertisers. Our terms for advertising will be found liberal on application, either personally, or by letter post paid.

The VOLUNTEER REVIEW will be supplied to clubs at the usual reduced rates, viz:

CLUBS of Five and upwards will be supplied at \$1.50 per annum for each copy.

CLUBS of Ten and upwards at the same rate, the getter up of the Club to receive one copy free for one year. Payment strictly in advance.

No Volunteer officer can be well posted concerning the condition, movements, and prospects of the Force unless he receives the VOLUNTEER REVIEW.

We number amongst our Correspondents and Contributors some of the ablest writers on military subjects in America.

Full and reliable reports of RIFLE MATCHES, INSURRECTIONS, and other matters connected with the Force appear regularly in our Columns.

AGENTS.

Liberal terms will be offered to Adjutants, Instructors, and others who act as agents for us in their several corps.

LT.-COL. R. LOVELACE, is our General Agent for the Provinces of Ontario and Quebec.

MR. ROGER HUNTER for that of New Brunswick and Nova Scotia.

REMITTANCES should be addressed to DAWSON KERR, Proprietor VOLUNTEER REVIEW, Ottawa.

THE VOLUNTEER REVIEW

is published EVERY MONDAY MORNING, at OTTAWA Dominion of Canada, by DAWSON KERR Proprietor, to whom all Business Correspondence should be addressed.

TERMS—TWO DOLLARS per annum, strictly in advance.

TO CORRESPONDENTS

All Communications regarding the Militia or Volunteer movement, or for the Editorial Department, should be addressed to the Editor of THE VOLUNTEER REVIEW, Ottawa.

Communications intended for insertion should be written on one side of the paper only.

We cannot undertake to return rejected communications. Correspondents must invariably send us confidentially their name and address.

All letters must be Post-paid, or they will not be taken out of the Post Office.

Adjutants and Officers of Corps throughout the Provinces are particularly requested to favor us regularly with weekly information concerning the movements and doings of their respective Corps, including the fixtures for drill, marching out, rifle practice &c.

We shall be obliged to such to forward all information of this kind as early as possible, so that it may reach us in time for publication.

CONTENTS OF No. 46, VOL. V.

Table with 2 columns: Article Title and Page Number. Includes sections for Poetry, Editorial, Correspondence, Rifle Matches, Selections, Remittances, and Miscellaneous items.

S. M. PETTINGILL & Co., 37 Park Row, New York. GEO. P. ROWELL & Co., 40 Park Row, New York. Are our only Advertising Agents in that city.



The Volunteer Review, AND MILITARY AND NAVAL GAZETTE.

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

OTTAWA, MONDAY, NOVEMBER 20, 1871.

We are indebted to the courtesy of the Broad Arrow for the proof slips of its article on "Military Organs and the Volunteers," which appeared in its issue of the 21st, and which we reprint, the more readily, because it is an answer to a charge of unfair dealing towards the English volunteers, brought against that journal by our spirited contemporary, the Volunteer News. Our sympathies are decidedly with the latter; both by the people, press and government of Great Britain the Volunteers have been unfairly treated, and even in this article it is alleged that the movement arose out of a desire to avoid the Militia Ballot. The Broad Arrow in this must surely be mistaken, as it would be as comparatively easy for men of good family and ample means to find commissions in the Militia and be paid for their services, as to voluntarily take on themselves the duties of soldiers and pay dearly for the privilege as English Volunteers do.

If the patriotism of the great English nation has dwindled to the miserable considerations which the Broad Arrow asserts, we are sorry for the prospects of the country, and do not wonder that they should entrust their military administration to Calico

Field Marshals like Cardwell, but it is just possible that in its extreme zeal for army reorganization, its contempt for civilian soldiers, and its complacency at the abolition of purchase, that able journal may in this case have overshot the mark. If we know anything of the English people we are satisfied that thirty-nine years of Manchester domination has not succeeded in grinding all patriotic feeling out of their minds, nor stifled the military spirit which has made Great Britain what it is, and we believe that with all the radical doctoring of its expensive but very small military force, it will be found that on Volunteers alone the country must rely for home defence. Even in an economical point of view, how long can England afford to pay some sixteen millions sterling annually for what the Whig-Radicals are pleased to call an army, but which, in point of numbers, would make two respectable divisions. It is laughable to read of Cardwell's eighty-eight thousand men on paper when France numbers 320,000 and Germany 540,000 as peace establishments. If anything could open people's eyes it would be the result of the autumn campaign; the exhibition on that occasion was the most ridiculous on record, 22,000 regular soldiers were collected, after six months hard labor, and even then the Control failed. Of what use, in the face of such an exhibition, is the abuse of the Volunteer contingent; instead of speaking slightly of the members of the force the Broad Arrow should have enquired whether Cardwell could have provided for another man; we are satisfied he could not, and if the people of England do not see that their interests lie not in reducing their regular army to the condition of French conscripts, but in developing the Volunteer spirit, we sincerely pity them. In writing of these matters our English contemporaries will remember we do so from experience. We have an army three times as large, in proportion to our population, as that of Great Britain, and when we claim that for all purposes of defence it is quite as effective, we indulge in no boast; it costs us less than a fortieth part of what the regular troops costs the British people. There can be no doubt that in the circumstances of the two countries there are contingencies which require different modes of treatment, but after every provision has been made there is nothing to prevent a force of 600,000 men being available in Great Britain and Ireland drawn wholly from their own people by voluntary service and costing the state no more than its very expensive and inefficient army now costs, and neither need the industries of the people be interfered with. But in order to achieve this it will not do to sneer down the Volunteer force, choke their energies with bureaucratic red tap, or stifle them with the official insolence and neglect of great commanders like Cardwell. The Broad Arrow viewing the whole situation from a professional stand point, is quite satisfied "there is nothing like leather," and

while keenly alive to the interests of the country thinks this interest will be best served by reorganizing the army, choosing the officers by selection, or as Cardwell is as great a philosopher as Darwin, by natural affinity, possibly, and by a compulsory militia law. But we cannot understand how the burthen of military service will be equalized under such a system (for let us at once state that while our militia law is compulsory it is only so for the proper regulation of drafting fair quotas in the case of necessity, and as long as our ranks are filled by Volunteers will not be resorted to at all), while in England the distinction in society would make compulsory service peculiarly hard. The Volunteer organization, on the contrary, by leaving a choice of corps to the individual, and enabling him to terminate his service when inclined, provides for the rapid leavening of the mass of the people with trained soldiers as the *Broad Arrow* admits, and is, therefore, the most effective form any organization can take to produce effective soldiers.

We do not believe the annals of history contains more fearful accounts of human suffering or disaster than were crowded into the past month of October as occurring in the North Western States. Parts of Wisconsin, Illinois and Michigan have been swept with destruction by fearful prairie and bush fires; those have been especially severe and disastrous on the west shore of Lake Michigan, involving fearful loss of human life. On Sunday, 8th October, a tornado of fire about ten miles in width swept over the lake shore destroying forest, field, houses, mills, cattle and human beings indiscriminately within its path; in one village alone the charred remains of 475 persons were buried, many of them past recognition, but fearful as all this was, it was exceeded in horror by the devastation of the settlement known as Williamson's Mill, which contained a population of nearly one hundred souls. The settlement contained only four buildings, a shingle mill, boarding house, store, and barn; a good many of the mill hands lived in neighboring towns and as some danger was apprehended several did not return as was customary on Sunday evening. There appears to have been about sixty-five or seventy persons in the settlement which was situated in a clearing of five or six acres. Three brothers of the name of Williamson owned the mill, their aged father and mother living with them. Early on Sunday night a terrific tornado drove the fire, which had been smouldering in the woods, in a sheet of flame right on the settlement; it was at once evident that no property could be saved and the terrified crowd were advised to break for the timber, a belt of which around the clearing had been carefully burned out for such a contingency, but they seem to have got panic stricken and rushed to a pit, about six feet wide and two deep, in the centre of the clearing;

here forty seven wretched creatures crowded on one another were literally roasted to death, the light clothing of the women helping to accelerate their misery. The blacksmith of the settlement perished in endeavouring to save his wife and three children while eight or nine lost their lives by suffocation in a well, five or six heavy sleepers darted into the timber and with their faces to the ground escaped that death which the writhing mass of human beings were undergoing within 100 yds. of them. To any person who has not seen a bush fire it is almost impossible to convey an idea of how hopelessly and rapidly a settlement would be involved, nor what distance fire will travel with a gale of wind. Twelve months ago last August this vicinity was swept by one of those fires, and a village over a mile distant from the nearest wood totally destroyed; in loss of life, however, it differed from the Wisconsin fires, not more than two or three people were suffocated, while in Williamson's settlement alone, 59 persons perished, the aged mother and one son of the proprietor's family alone being saved. The strangest part of the transaction is the panic which seized the people; one of the survivors labored hard to separate them and get them to the bush, but they clung together and perished, (a sad example of want of presence of mind), in the sight of safety. So fierce was the fire that the gallant fellow had to desist the flesh being burned off his hands and face, his clothes on fire and himself utterly unable to do anything although his betrothed wife, a beautiful girl, was in the doomed pit, and he was barely saved by throwing himself into a well. Impelled by the wind, the fire ran along the ground destroying everything in its way and leveling the gigantic forest trees as if they were reeds.

The following review of the season's military operations is particularly gratifying from the fact that the excellence of the system under which our military force has been organized is forcing itself on the attention of that portion of the Canadian press which hitherto were doubtful as to the success of the experiment. The much abused Militia Bill has vindicated its claim to be considered as the highest effort of statesmanship of the present day, and the people of Canada cannot be too thankful that they had a man who so thoroughly understood their social and political requirements as Sir G. E. Cartier. The following is from the *Toronto Telegraph* of 7th November:—

"Let croakers croak as they please, but it is an undeniable fact that we possess a military organization which is in a thoroughly efficient state. From the official report of last summer's campaigning, we learn that in the 16 day camps (Districts 1 to 9 inclusive) 22,544 officers and men and 1,900 horses were exercised; in the 3 day camps, 5,210 officers and men and 318 horses. In addition 1,700 garrison artillery have done duty at forts and garrisons, 3 artillery batteries on gun boats, and the Grand Trunk Brigade,

2,155 strong, at the respective headquarters. At Niagara on the immediate frontier, a force of 4,743 men, with three field batteries (12 guns), three squadrons of cavalry and 605 horses from Military District No. 2, under command of Lt. Col. Durie, D. A. G., was concentrated in twelve hours with ample supplies for sixteen days and there formed into a division. At Laprairie, in front of Montreal, the corps from Military Districts No. 5 and 6 being brought together, were formed into another division of 5,310 men under command of Lt. Col. O. Smith, D.A.G., C.M.G., with one field battery, two squadrons of cavalry and 254 horses—they were concentrated with almost equal rapidity and trained for a similar period. Early on the morning of the 8th July, this division left camp and crossed the river St. Lawrence to Montreal (the men carrying one day's provisions) being there joined by the Montreal Garrison Artillery and two battalions of the Grand Trunk Brigade. A force of between six and seven thousand men with cavalry and artillery was massed in Logan's Farm by 11 a.m., for a field day and review, on the termination of which the troops from Laprairie returned to camp the same day after marching an average distance of sixteen miles, and twice effecting the passage of the River St. Lawrence. The cavalry present at the camps were well mounted and formed a fine looking body of men. The field and garrison batteries of artillery were practised in artillery exercise and their skill in manoeuvring, and at shot and shell practice was favorably reported on.

Coupled with the above creditable record the fact that in a week's time an expedition was organized and despatched to Manitoba, and we have pretty substantial proof that the Department over which Sir George Cartier presides is a very long way from being Dunkinised. When men can be found who will rush in scores, where only tens are wanted, to join an expedition bound for a remote region, through a wild and inhospitable country, and with a rigorous winter at their heels, we need never despair of Canada's ability to take her own part when necessity requires. The perfection to which our military system has been brought, is attracting the attention of those who imagined that nothing good, in a military point of view, could come out of the colonies. Alarmed at the evident failure of Mr. Cardwell's army policy, as shown in the Berkshire campaign, the English press urges the Gladstone ministry to take a leaf out of our military book. Our cousins across the Lake, seldom eager to give credit where credit is due out of their own country, are also loud in their commendations of our campaigns of peace. We have shown the world that it is quite possible for a nation to have a competent host of citizen soldiers without resorting to the almost tyrannical measures of Germany. We expect that from the experience of this summer, our military authorities will be able to add to the efficiency which now exists. An improved hospital system, a more expeditious commissariat and a weeding out of those officers who either through press of civil business or laziness, do not attend closely to their own duties and to the interests of the men under their command, would, we think, make our Volunteer force as near perfection as military perfection goes."

At the close of the autumnal manoeuvres of the British army the VOLUNTEER REVIEW pointed out in what essential particulars that campaign of peace fell short of the actual experience of warfare, so far as imita-

tion was possible, and those were that the plan reflected great credit on the strategical ability of the Commander in Chief His Royal Highness the Duke of Cambridge, but that it was not carried out so as to give any high opinion of the strategical knowledge of the officers engaged, and was a failure as far as grand Tactics and Logistics were concerned. In an article reprinted from the *Saturday Review* in the present issue, we find that even the engineering, as far as the topographical knowledge of the country was concerned, was seriously at fault, in fact, that this vitally essential element in the science of modern warfare, as France has found to her cost, had been totally neglected, which is the more surprising as good Ordnance maps of England ought to have been easily procurable with a scale of six inches to the mile amply sufficient for all practical details; but the staff appears to have been as ignorant as inefficient. The failure of the notorious humbug called Control will surprise nobody and the suggestion that its name should be changed is only one of the least of the many reforms it needs. We cannot, however, agree with the idea put forth about changing the name of the Volunteers: it does not convey the same idea to a person who has seen the system worked out intelligently and to those who have only known it as it has been modified by official mismanagement in England. To us it means a body of troops who voluntarily take upon themselves the perils of the soldier's life and should not be allowed to do so at their own loss, while others, more selfish, profit by their spirit and patriotism. We think English army reformers have altogether mistaken the mode of dealing with this question, the subject, under their manipulation requires, instead of trying to leaven the mass of the population with military spirit and training by offering inducements to the settled population to employ their leisure hours in acquiring the rudiments of military knowledge without interfering with their industrial pursuits, they take the men for their army from amongst that population, make them serve until they become thoroughly drilled machines, useless for any other purpose, and then send them back on an overcrowded labor market to put in another period in the reserves.

It is just the reverse of this process which would be valuable; increase the Volunteers, fill the ranks of the army by voluntary service therefrom, and, if Cardwell can be induced to give up promotion on the Darwinian system, take the officers from the corresponding ranks in the Volunteer corps, there would always, under this system, be a home and foreign army equal to all Britain's necessities—under the present she has neither. The ideas about militia uniforms are excellent; we want distinguishing regimental marks in Canada which can be effected by assigning to each regiment different colored flings, as suggested by our

gallant correspondent "G.W." some time ago. But it is, after all, in the matter of military engineering that the Canadian army is deficient; and here let it be distinctly understood, that the need is not now for a highly scientific corps such as the Royal Engineers by long standing and unlimited command of large sums of money have become; that will do well enough for future developments, but we want now a good corps of topographical engineers who would be the staff (apart from the Deputy Adjutant General and Brigade Major) of each Military District, in fact, we want a Quartermaster General and Department before our force is at all complete.

On the 24th October last there was a grand display of siege operations at Chatham in which the science and ability of the Royal Engineer Corps had ample opportunity of signaling its value to the country; the following extract from the *Volunteer News* of the 1st inst. will give some idea of the value and utility of this arm of the service. Referring to the operations, which were highly satisfactory, it says:—

"From all the accounts, the experiment was a most successful one, and one that cannot fail to have afforded much instruction and matter for study to those engaged in, or who witnessed and took intelligent note of, the operations. In everything, even to assault of the walls by escalade, the operations of a siege were regularly gone through. These warlike experiments will doubtless cost the nation money, and if war has ceased from the earth, it may be money thrown away; but if war has not ceased upon the earth, money so expended is only invested and not wasted. The art of war hitherto, at least in our own times, seems to have been acquired at haphazard. Soldiers were taught the goose step, to form company sections, to mass themselves into battalion columns, to wheel, deploy, and change front in the barrack yard; the officers were told to study military history and to evolve therefrom theories of strategy and tactics; but it was left to the time when some impudent enemy called them to the field to learn by bloody and disastrous experience the practice of their profession. It was as if an engineer were to learn his trade in school by studying the theory of mechanics, the nature of steam and the strength and properties of iron, and then turned adrift on the world as a model engineer, and when a steam engine was wanted, to lay before him the rough materials, and tell him to proceed with its construction without the practical instruction that alone can make him a workman. If war was so learned till recently, it has not always been so. We find in a periodical work now on our library table, and published 132 years ago, that camps of instruction were formed in that year in the vicinity of London. The motto of the camp was "*Pax in bello*," and the enterprise was, as in our own day, made the butt of much opposition—was sneered and scoffed at, and had to bear the brunt of cutting sarcasm by the wits and politicians of the age. Is the art of fighting one that should only be learned when the enemy offers us violence? Assuredly not! The very scientific preparedness to resist aggression keeps the aggressor at arm's length. Wars of former times seldom expended themselves in a single campaign; but since the days of the Crimea we

have seen great results accomplished in a few weeks and even days, and the effect of these short episodes in contemporary history has been the various changes which have taken place in the map of Europe since our school-boy days. Science has done as much in economising time in warfare as it has done by its inventions in the arts of peace. If we will retain peace within our borders, and dispel all fear of warfare from without, we must possess the knowledge and the art of exercising the forces which nature places within the reach of friend as well as foe. The operations of the military Engineer hitherto may, to a certain extent, have been studied in mathematical problems, but chemistry and telegraphy have now become quite as potent in the art of war as mechanics, and the diversities of offensive and defensive appliances are now such that no single operator can be expected to command a knowledge and a mastery of the whole; consequently military engineering has become complicated in proportion to the diversified scientific field from which its resources are drawn. Therefore the great and supreme utility of experiments such as those of last week. The success of these operations are consequently calculated to give unmitigated satisfaction to the country that should the skill and potency of military Engineering ever be called into active exertion, it may be depended upon for the highest development of its attributes.

The letter of "A Volunteer" which appears in our issue to day discloses a state of matters which we had hoped ere this would have ceased to exist, but as our present organization is hardly three years old it is not to be wondered at if abuses prevail in odd nooks and corners. The remedy for this state of affairs is simple enough; the duty of the District Staff Officer is to find out such cases of incompetency and take immediate measures to have it remedied. The commander of a battalion is as liable to removal as any private in the ranks, but it is a matter of surprise to us how such a case as our correspondent points out could occur. The General Orders and Regulations provide that every officer should be duly qualified and if the offending individual had passed a regular examination it is hard to imagine he could be so grossly ignorant, although it is possible such a case might happen, or can it be that the individual could not master the new drill. In whatever light the subject may be viewed it is wholly and indefensibly wrong, and "A Volunteer," instead of leaving the service, should bring the matter under the notice of the Brigade Major or the Deputy Adjutant-General. The process of organization described is laughable, but we must dissent from our correspondent's view that it was by any means common. It was no craving after a doubtful honor that animated Canadian gentlemen when they obeyed the call of their country in her hour of need.

The good people of Manitoba need not be much afraid of Fenians while they can make such musters as those contained in the following list which we take from the *Manitoba Liberal*.

Statement showing strength of Companies, etc., enrolled in accordance with the Proclamation issued by the Lieutenant Governor, 3rd Oct., last:

St. Andrews S., Lieut. Hay.....	57
Mapleton, Capt. Piton.....	53
Popular Point, Capt. Newcombe.....	61
Winnipeg, Capt. Kennedy.....	25
St. Paul, Capt. J. G. Stewart.....	41
St. James, Capt. E. Burko.....	57
St. Andrews N., Capt. Beddome.....	58
Winnipeg, Captain Mulvey.....	103
I. B. Co., Ft Garry, Capt Smith.....	58
Kildonan, Capt. McMurtchie.....	73
Headingley, Capt. John Taylor.....	45
St. Andrews, Rapids, Capt. Sinclair.....	39
Winnipeg, Home Guards, Capt J. F. Bain.....	50
Poplar Point, Capt. Wilton.....	34
White Mud River, Capt. E. Field.....	31
Baie St. Paul, Capt. De Montigny.....	28

**MOUNTED SCOUTS.**

Capt. Plainval.....	30
Capt. W. Dease, Jr.....	30
Capt. Nolin.....	10
Capt. Lagemonine.....	10
Capt. Parsneau.....	10
Capt. Berland.....	21
Headingley Cavalry, Capt. Cunningham.....	15

Total strength..... 942

*Vive la Republic* is an enticing cry, very! but to live under it is an experience the reverse of pleasant, the Russian despotism seems to be preferable although there is no accounting for tastes:

"The natives of Behring and the adjacent islands were freemen under the rule of Russia but since the islands were leased to Americans they have been reduced to miserable servitude. For years past these honest and industrious people have hunted and killed fur seals, and sold the rewards of their labors to the best advantage and to the highest purchasers. From the proceeds of their toil as hunters they built for themselves comfortable houses and educated their children. They sold their fur seal skins at from 2 to \$3 each to whalers and traders who visited the islands, receiving in return cash, or such goods as their necessities demanded. The American monopoly pays them only thirty-seven cents per skin for the first quality. They can only trade at the stores of the agents, and purchase at the prices asked, or starve and go naked. The unfortunate people are about to petition the Czar to liberate them from their oppressors.

Our readers will be pleased to learn that the indefatigable and enterprising military tular and outfitter, N. McEachren, of 191 Yonge street, Toronto, has published a new circular containing lists of prices and catalogue of military uniforms and accoutrements which he is prepared to furnish on short notice. In the variety given his patrons to chose from there is the notable announcement of *Ribbons kept in Stock*, which refers to the peculiar ribbons appropriate for all orders, decorations, &c., in use in the British or colonial armies,

The Queen's health has so considerably improved that she has been enabled to dine with her family for the first time since her removal to Balmoral. The Regency praters can now cease their howling.

**ANSWERS TO CORRESPONDENTS.**

NOTICE.—All communications addressed to the Editor of the VOLUNTEER REVIEW must be accompanied by the correct name and address of the writer.

Our correspondent "Beaver" makes a very good suggestion; we should like to hear from him on the subject mentioned in his private letter.

We have to acknowledge the receipt of both the communications of our gallant and talented correspondent "Centurion," and regret they arrived too late for insertion in this issue, but we promise our readers a literary treat next week, as both communications contain most valuable practical suggestions on the completion of our military organization.

**REVIEWS.**

The *Westminster Review* for October has been received, it contains the following articles:—The Pilgrim Fathers, Greek Democracy, Faraday, Geoffrey Chaucer, Bearing of Modern Science on Art, the Authorship of Junius, the Baptists, Gotthold Ephraim Lessing, the Session of 1871, and the usual criticism on Contemporary Literature.

The prospectus of a very extensive weekly paper to be known as the *Chicago Phoenix* will be found in our columns. Any of our readers who wish to invest in a readable newspaper had better patronise it.

We have to acknowledge the receipt of that valuable periodical, the *American Agriculturalist* for November.

The *Canadian Magazine*, for November, the current number, contains:—Hannah, Chap. IX. and X.; November Musings; the Fifth of November; the Sun and the Worlds around him; to Papa; Thoughts at Niagara; Behind the Footlights; the Civil List; Royalists and Loyalists, Chap. VI.; A Canadian Village and School.

We have to acknowledge the receipt of a *Manuel of Survey of the Crown Lands of Manitoba*, from the Surveyor General, Lt.-Colonel J. S. Dennis, a most valuable and comprehensive work, designed to do away with the reproach of looseness and inaccuracy heretofore attached to public surveys of wild lands.

We are indebted to the courtesy of Lt. G. A. Raikes, Helsize Park, Hampstead, for the appendix to the journal of the "Royal United Service Institution.—The fourth annual Report of the Council," together with a pamphlet describing the "design" of the Institution, and another, published in 1869, entitled "Brief description of the Royal United Service Institution," from which we learn that the Institution was founded in 1831 under the auspices of William IV. and incorporated in 1869 by Royal Charter, that the "design" is the promotion of naval and military art, science and literature, and "that object is carried out by means of a library, the delivery of lectures, the exhibition of inventions, the publication of a

journal, a museum containing naval and military models, a collection of arms of all nations, relics and trophies connected with distinguished officers and warlike operations and other objects affording professional information." Those who are eligible as members are "Princes of the Blood, Lord Lieutenants of counties, Governors of colonies and dependencies, officers of the army, navy, marines, Her Majesty's East Indian military and naval forces, militia, yeomanry, royal naval reserve and volunteer corp' without ballot. On 31st December, 1870, there were 3831 members and the Institution had 18,654 visitors, the income from all sources being £3,493 sterling, (\$17,465).

To the officers of the Canadian army the value of such an institution would be incalculable, but as it will be some years before they could possibly support one, it would be better for those who wish to avail themselves of its advantages to endeavor to become members of the "Royal United Service Institution;" whether they are within the qualified list should be first ascertained, they are in Her Majesty's service and are undoubtedly as much the forces of the crown as the Middlesex Volunteers; this is, however, a matter of detail which could be settled by an appeal to the council. In order that Canadian officers should be able to take full advantage of the benefits of the Institution it would be necessary that a sufficient number should become members to warrant an appeal to the Council to have the "Journal" enlarged, illustrated with engravings of the arms, models, &c., belonging to the Institution, plans and diagrams of noted operations. The entrance fee is £1 ster., (\$5), and annual subscription of a like amount, the latter being reduced to ten shillings sterling if the member does not choose to receive the "Journal." We need only say to our readers that Her Majesty is patron, the Prince of Wales, Duke of Edinburgh, *our own* Prince Arthur, and the Duke of Cambridge, vice patrons, to make that Institution popular amongst them. We may add in this connection that Lieut. Raikes, to whom we are so much indebted, and who is well known in Canada as the author of the "Reserve Forces of the Crown," and other works, is now writing an "Historical Review of the British Army," for our contemporary the *Volunteer News*, which we mean to republish from the columns of that talented journal for the use of our readers at a future day.

**REMITTANCES**

Received on Subscription up to Saturday, the 18th, inst.

WATERDOWN, Ont.—Lieut. Jas. McMonies, \$1.  
KINBURN, Ont.—Ens. Mills, (Per Mr. Ryan) \$2.  
STANBRIDGE, Que.—Major A. H. J. Gilmour, \$2.

(Per Agent.)

KINGSTON, Ont.—Lt.-Col. Jarvis, D.A.G., \$6.  
COBOURG, Ont.—E. H. McNaughton, Esq., \$2.  
MONTREAL, Que.—Capt. A. Macpherson, \$2.

## THE BLACK ALPACA LADY.

## HIS WIFE'S MOTHER.

He stood on his head on the wild sea-shore,  
And danced on his hands a jig,  
In all his gesticulations, as never before,  
A madly hilarious gig.

And why? In that vessel which left the bay  
His mother-in-law had sailed  
To a tropical country some distance away,  
Where tigers and serpents prevailed.

He knew she had gone to recruit her health  
And doctor her rasping cough,  
But wagged himself a profusion of wealth  
That something would carry her off.

O, now he might look for a quiet life,  
And even be happy yet;  
Though owing to no end of neurotic wife,  
And up to his collar in debt.

For she of the specs and curled false front  
And the black alpaca robe,  
Must pick out a sailor to suffer the brunt  
Of her next daily trial of Job.

He watched while the vessel cut the sea,  
And bumpishly upped and downed,  
And thought if already she quitted the sea  
He'd consider the edifice crowned.

He'd borne the old lady through thick and thin,  
Till she'd lectured him out of breath;  
And now, as he gazed on the ship she was in,  
He howled for her violent death—

Till over the azure horizon's edge  
The bark had retired from view,  
When he leaped to the crest of a chimney stack,  
And pranced like a kangaroo.

And many a jubilant yell he sent  
O'er the waves which had made him free,  
Then cut a last caper ecstatic and went  
Turning somersaults, homeward to tea.

—N. Y. World

## THE GATLING GUN.

The conspicuous absence from the Autumn Manœuvres of the newly-adopted "Gatling Battery" has been commented upon by more than one military critic, who only knew of its introduction into our Service without being aware that as yet it has no existence in England, with the exception of one American specimen which has lain, *perdu*, in the Control Department of the Woolwich Arsenal since autumn of last year, when it was submitted to a series of crucial tests before a select committee of which Col. Wray, C. B., R. A., was president; and one other which has been "on view" at the Crystal Palace during the last few months. It is this latter "Battery" or "Pellet-driver" we propose in the first instance to describe, as being more open to public inspection, and because the puzzled looks of spectators who examine the gun vacantly from time to time, and pass on in happy ignorance of its use or construction, prove that some account of it may be welcome to many.

The Gatling in question is one of the old or model specimens approved by the addition of a lateral arrangement so as to give it a sweep of twelve degrees. This traversing is effected, without moving the trail or changing the wheels of the carriage whereon the gun is mounted, by means of a crochets actuated by a spring on a brass right and left screw, fitted with a shoulder in a recess to tighten or relax as required. When this latter screw is tightened, the apparatus forms part and parcel of the crank that revolves the gun; when lateral direction is undesirable, it is simply relieved. The barrels are ten in number, of 0.50 calibre, and of heavier metal than ordinary rifle-barrels. They are rifled rather rapidly, and are arranged parallel but separately around a central or main revolving shaft, and are held secure near the muzzle and at the breech by strong iron circular plates. In combination with the chambers of the barrels is placed a grooved "carrier" or chun-

nel block, and behind this again is an enclosed cylinder, in whose cavities the blocks work on a line with the axis of the barrels playing backwards and forwards like a weaver's shuttle, and performing their functions of loading and firing from their impingement on a stationary incline plane. There is a partition in the casing, through which there is an opening, and into which the main shaft (whereon are affixed the lock-cylinder, carrier, and barrels) is journaled. In front of the partition is placed a cam provided with screw surfaces. This cam is rigidly attached to the casing, and is used to impart a reciprocating motion to the locks when the gun is revolved. Each barrel is furnished with its own independent lock mechanism, consequently the locks revolve with the barrels, whilst at the same time, they each and all have the reciprocating motion indicated. Within the rear-casing are also situated the cocking-device and gear-wheels, the latter being simply a pair of ordinary cogged wheels, which, actuated by a crank in the operator's hand, set in motion the main shaft carrying with it the lock-cylinder, carrier, barrels and locks. The gun is loaded from a drum pivoted above the breech on a hinged hopper or brass curved plate, secured by a lock in the framework wherein the entire apparatus is firmly imbedded. The drum is furnished with sixteen divisions, holding twenty five cartridges each, a small running weight being placed above the latter to keep them in proper position and facilitate the loading. The 400 cartridges thus contained can be discharged in a continuous stream within sixty seconds!

On the lower sides of the drum there are slight projections for revolving and locking it when loaded, an operation effected by the manipulation of the thumb and forefinger of the left hand while the right is engaged with the crank handle. On the base of the drum a couple of ribs are so fitted into the hopper, as to bring the opening of each division over the cavity down which the cartridges slide successively into the grooves of the channel block, where they are taken instant possession of by the locks, forced into the barrels, discharged by impact of the needle, and finally the empty cases are extracted and fall through an opening, or "shoot," into a canvas bag affixed for the purpose by one and the same movement. When the gun is being fired there are five cartridges at all times in process of loading and firing, and five of the cartridge-shells, after they have been fired, are in different stages of being extracted. In other words, so long as the gun is supplied with cartridges (and an empty drum can be replaced in a moment) these several operations of loading, firing, and extracting the cartridge-shells, are carried on "automatically, uniformly, and continuously." Notwithstanding all this the lock mechanism is extremely simple, consisting of four parts (1) the bolt, (2) firing-pin, (3) extractor hook, (4) spring. The extractor protrudes slightly beyond the bolt and runs into a slot in the base of the cartridge when forced into the barrel, and thus withdraws the case after the needle has exploded the charge, and as these cases can be loaded forty or fifty times without injury, the device seems profitable as well as ingenious. The several parts of the lock are of course made strong and durable, but should any portion of the mechanism get out of order, the casable plate in the rear of the gun is removable at pleasure, disclosing the gear wheels, divided from the cylinder by a diaphragm plate, wherein the main shaft is journaled, and upon the slight projection of which beyond this plate the wheel

itself is keyed. In the plate is a plugged hole for the purpose of roaching or taking out a damaged lock, when a fresh one can be inserted without delay. The exterior appearance of the "Gatling" is, we presume, sufficiently familiar to all our readers. At first sight it looks like a sectional or anatomical arrangement to disclose the mechanism of some monstrous cannon; a skeleton-like deformity rendered necessary to afford free circulation of air and radiation of heat during such rapidity and continuity of firing as the gun can accomplish. The barrels being thus isolated, too, make their expansion and contraction equal and uniform, and being open from end to end they can be easily kept clean.

Such then is the gun as seen at the Crystal Palace, but as many and important improvements have been added, and as the Gatlings shortly to be supplied to our Government from the Elswick Works are different in detail and construction, it may be well to enter more fully into the subject.

Let it once for all be understood that the Gatling calibre ranges from .42 to one inch; but for practical purposes the inventor has subdivided them into four classes as follows:—

The 1st or smallest size has ten steel-rifled barrels, and is made of any proper calibre to suit the rifle cartridges used by different Governments. Total weight, 3cwt.

The 2nd has similar barrels, but of .63-inch calibre, and discharges solid elongated leaden bullets weighing 3½ ounces.

The 3rd in exterior dimensions is precisely the same as the last named, excepts its calibre is .75, and it discharges a bullet weighing 4½ ounces. Weight of each gun, 5cwt.

The 4th is of one-inch calibre, is made with six, sometimes ten, barrels, and discharges solid projectiles weighing half-a-pound. A canister cartridge containing sixteen balls can be used with this gun. It discharges explosive bullets with terrible effect. Total weight, 6cwt.

The larger guns are loaded from metal feed-cases, and can be fired at the rate of from 150 to 200 shots a minute, but we believe the use of feed cases will ultimately be discontinued in favour of the drum, protected by a steel mantle. In the 2nd or .63-calibre gun, a noteworthy improvement has been experimentally introduced, designed to provide ready access to a damaged lock. A small worm wheel supersedes the use of cogged-wheels, and admits of the required space for the operation of repairing or inspecting a lock, without unscrewing the casable plate. Entrance is effected through an aperture cut in both casable and diaphragm plates, the perforation being closed from the outside by a plug. This plug carries at its front end a sleeve with a projecting arm, a slot being cut on the under side. When the plug is in position, this slot forms a continuation of a groove, cut in the end of the cam, in which a lug, formed at the end of each lock, revolves. When the lock is brought into line with the plug, by means of the crank-handle, the lug engages with the slot in the arm of the plug, which being withdrawn, the lock—guided in its passage by a tube—follows in due course. Nor is the gun disabled by the displacement of one or more of the locks, for the remaining barrels can be used quite as efficiently, but at all events, the several parts being interchangeable and spare ones always at hand, the loss of only a few moments is incurred while the substitution is being made.

This is a peculiar feature of the Gatling, rendering it second to none in a most essential particular, for machine guns are natur-



ly dependent for their effectiveness on the lock-mechanism as being most liable to get out of order.

In all the later-built Gatlings the cocking arrangement has been rendered less complex. It is simply an inclined cooking-plate, projecting on the inner side of the breech-assembly, so that when the lock is moved forward, a lug, formed upon the spring bolt, is rested by it, and the spring of the lock is thus gradually contracted. "As the gun is rotated, the cartridges one by one drop into the grooves of the carrier—from the feed-trays in the larger and from the drum in the smaller guns—and instantly the lock, by its impingement on the spiral cam surfaces, moves forward, pushes the cartridge into the chamber, and when the but-end of the lock gets on the highest projection of the cam the charge is fired, through the agency of the cocking device which at this point liberates the lock, spring, and hammer, and explodes the cartridge."

It will therefore be seen that it is also an essential characteristic of the Gatling, that although the time between each shot is inappreciable, it does not fire in volleys, and aware as we all are that the ordinary velocity of a bullet is 1450 feet a second, it follows that each projectile is far ahead of the other in a continuous stream, thus preventing an accumulation of recoil, avoiding deflection, and admitting of larger charges, heavier bullets, and consequently securing a flatter trajectory and greater range—which in other words means simply increased accuracy and more effective killing power—than that attained by any other machine-gun yet invented. This peculiarity of no recoil is also of special value in cases of a night attack, or defence, or when the thick smoke of battle envelopes the field. No resighting or relaying are necessary, once the range and direction are determined, and by the use of the attainable as before alluded to.

Having thus, as briefly as possible, touched upon the technical description of the Gatling, it remains to exhibit its capabilities as proved before the Committee which was charged by the Government to undertake an exhaustive inquiry respecting it last year and by whose report Mr. Cardwell was guided in preferring the Gatling to its rival, the Montigny system. In our limited space we cannot give the result of all the experiments (which were duly reported at the time), but the following are the totals of the work performed by the mitrailleuses as compared with field-guns: four distances, two minutes to each:—

	Weight	Expended	Hits.
		of ammu-	
		nition.	
Small Gatling.....	3 cwt.	492 lbs.	2303
Montigny Mitralleur.....	8 cwt.	472 lbs.	1708
12-pdr. breech-loading gun..	8 cwt.	1232 lbs.	2288
9-pdr. muzzle-loading gun..	8 cwt.	1013 lbs.	2207

And again, in a competitive trial between mitrailleuses, firing deliberately, the following was the result:—

	10 Targets, 9 by 9.	Time.	No. of
		min. sec.	Hits.
At 600 yards, 720 rounds:—			
Montigny Mitralleur.....	4	0	538
Small Gatling.....	3	31	018
At 800, 655 rounds:—			
Montigny Mitralleur.....	3	8	292
Small Gatling.....	2	26	439

But, after all, in any consideration of machine-guns, deliberate firing should not be so much taken into account as rapidity, combined with a due degree of accuracy (for it is possible to be too accurate); and, in this respect, how has the Gatling answered expectations? At Shoeburyness the 1-inch gun, throwing a 4lb. projectile over 2000 yards, made 90 hits out of 238 shots, fired in two minutes at three rows of target 36

feet by 9; while the medium-sized gun made 163 hits out of 348 rounds, discharged within the same time at the same range! Substitute in the mind's eye a close column of cavalry or a square of infantry for the three rows of targets, and judge the result! The other day, at Wimbledon, a Volunteer earned the *soubriquet* of the "Berkshire Mitralleuse" from having got off sixty-eight rounds in two minutes from a breechloading rifle—and wonderful manipulation it was; but how insignificant it sounds besides the hailstone performance of the Gatling! Now that field-guns have been emancipated from the thralldom of the "Field Exercise," and will in future be allowed to act independently, or as nearly so as the general object in view will admit of, we may expect great changes in the art of war. Instead of keeping on the flank of infantry, artillery will now support an advance by retiring so as to keep without the range of the enemy's small arms, and within their own. Up to 1500 or 2000 yards infantry stand no chance against artillery, and, *mutato nomine*, the latter would be simply unmanned within that distance by the stinging rifle-fire of a line of skirmishers. But why should not the "gun of the period" occupy this debatable ground? Why should not the mitralleur play its part, in its peculiar fashion, at these doubtful ranges? It is the larger-sized battery, such as we have above alluded to, that will be suitable for the purpose we mention, while the medium gun, firing Government ammunition, would be employed at close quarters to enfilade a trench, clear a bridge, or defend a pass. There is little doubt but that in all future wars the machine-gun will make itself felt. The French experimental use of it in their war was scarcely a reliable criterion of its capabilities, but enough was done to show clearly what such a gun, properly constructed and handled in action, can effect. As a matter of fact, most of the Continental Powers have adopted some modification of the mitralleur, and we observe that in their recent autumn manoeuvres, these death-dealing machines have been employed as a recognized arm of the Service, and a needful accessory of modern warfare. Our own Government have, therefore, only followed suit, and we may express the hope that next year will see these ideas carried into practice, and the mitralleur taking its proper place in the front of the battle. In big wars this gun must, however, be content to play a secondary part; but who will deny that such a battery might have shortened by half the time, expense, and necessary equipment, such minor affairs as the expeditions to Abyssinia, Red River, and British Honduras, or, in fact, wherever a small band of English were called upon to resist a savage horde? It is, therefore, particularly in our ultra-marine dependencies—Australia, New Zealand, the West India Islands, and the West Coast of Africa—that the utility and good-service nature of this economical engine of war will be most appreciated. For the present, we believe, thirty-six "Gatlings" have been ordered from Sir W. Armstrong's foundry, twenty-four of them being the '57 calibre, and twelve of the '75 inch. The former will cost £245 each, the latter £325 only, and we may naturally expect that their superior finish will secure even greater results than have been yet attained.

Before we close, it may be well to mention that Gatlings are so constructed as to admit of being taken to pieces, packed on mules and carried separately across mountains to their destination where they can be readjusted. This is an important consideration, but still better is in store for us. A new

model gun is now in process of experiment and construction at Colt's Armoury in America, under the direction of the patentee, Dr. Gatling. It is furnished with ten barrels, the calibre is the same as that of a rifle, and its weight is only 125lbs. It is designed to be carried on the backs of mules, camels, or elephants, and will be particularly useful in impracticable country. It can also be mounted on a tripod, and so pivoted as to sweep all the points of the compass at the will of the operator. When in this position, it can be fired at the rate of 300 shots a minute. There yet remains one other essential for the thorough success of machine guns, and we are happy to observe it is likely to be added.

In an article on this subject in the April number of the *United Service Magazine*, the writer says, *apropos* of a steel mantlet designed to sustain the pellet-drift of mitrailleuses:—"But for the protection of mitrailleuses themselves, something more than mere shields are required. Mounted on massive carriages as they are, they present a wide enough mark for a rifleman, and are still more exposed to the distant fire of large field guns in position; consequently, until some Moncrieff of the future shall invent a suitable apparatus for lowering the gun out of sight when not engaged, it must continue to share the fate of an unentrenched howitzer." This hint has, it appears, been already acted upon by Captain C. P. Stone, late 77th Regiment, who has invented a method by which "atmospheric pressure is used as a motor for giving the gun an elevating and depressing action above and below the parapet, characteristic of the Moncrieff principle."

Surely, then the Gatling offers every condition needful in a national arm. It is drawn and worked with facility in the most difficult country. It obviously tends to the economy of life and labor, and while inflicting the severest loss on the enemy, is capable of management by the fewest and least instructed of gunners. It is less costly than a field gun, and is admirably adapted to supplement and act in concert with the Snider, or Martini-Henry, in the hands of our Militia and Volunteers. With a small detachment of Infantry proceeding on special service as well as for the dismounted men of cavalry (as suggested by the "Old Shekarry"), it would be the right gun in the right place; and generally, no battery of artillery, no regiment of cavalry, no battalion of infantry, no fort, no village on the coastline, no colony, no defensible position at home or abroad, no outpost of our ubiquitous emigrants, should remain unprovided with their due compliment of these guns of the future, ready to be taken into action at a moment's notice, and as useful in attack as defence.—*Broad Arrow.*

The widest plates hitherto made in Yorkshire were rolled on the 2nd ult., at the works of the Farnley Iron Company, near Leeds, in one of their mills, without reversing motion. One of these plates, which is sheared square, measures 8 ft. 2 in. each way, and is only 1/4 in. thick, is on view at company's warehouse, Bank street, Leeds, together with a large semicircular front plate for a marine boiler, 12ft. 6in. in diameter, with a flange round the outer circumference 6 1/2 in. deep, and three holes for flues about 3ft. in diameter, cut and flanged 4in. deep, by special machinery.

Col. Maude has measured a birch tree on Wood Lake Creek, Muskoka, which had been chopped by beavers, which measured 7ft. 6in. in circumference.

Go where you will! Anywhere in the United States, you will see the results of advertising through Messrs. Geo. P. Rowell & Co.'s Advertising Agency, No. 41 Park Row, New York. The name of the firm is in every town and city. Through this advertising house you can reach every person in the Union. They are the best organized house, and the finest men to deal with.—*Clarion, Hartford, Conn.*

**LAUREORE.**—This French weekly paper was founded in 1866, and has just received new strength by the addition of three gentlemen to its editorial staff; namely: Rev. T. LAFLEUR, pastor of French Baptist Church; Rev. D. Cousirat of France, late pastor in Philadelphia, and now professor in the Presbyterian College; and Rev. C. A. Doudlet of Geneva, Switzerland, pastor of French Presbyterian church, all of Montreal. Being the only French Protestant journal in America and published on strictly catholic principles it ought to reach every Protestant French Canadian, Frenchman, Swiss or Belgian, on this Continent; every house of education where French is taught should also receive it. It contains Literature, Music, Poetry, and Political and General News, as well as articles on Science, Agriculture, Temperance, &c.

Terms: \$1.50 (United States, \$2.00) per annum, payable in advance.

Address

LAUREORE,  
MONTREAL, CANADA.

### TO THE SUFFERING.

The Rev. William H. Norton, while residing in Brazil as a Missionary, discovered in that land of medicines a remedy for CONSUMPTION, SCROFULA, SORE THROAT, COUGHS, COLDS, ASTHMA, AND NERVOUS WEAKNESS. This remedy has cured myself after all other medicines had failed.

Wishing to benefit the suffering, I will send the recipe FREE OF CHARGE.

Please send an envelope, with your name and address on it. Address,

Rev. WILLIAM H. NORTON,  
676 BROADWAY,  
NEW YORK CITY.

**BREAKFAST.—EPPS'S COCOA.—GRATEFUL AND COMFORTING.**—The very agreeable character of this preparation has rendered it a general favorite. The CIVIL SERVICE GAZETTE remarks:—"The singular success which Mr. Epps attained by his homœopathic preparation of cocoa has never been surpassed by any experimentalist. By a thorough knowledge of the natural laws which govern the operations of digestion and nutrition, and of a careful application of the fine properties of well selected cocoa, Mr. Epps has provided our breakfast tables with a delicately favoured beverage which in many cases save us many heavy doctors' bills." Made simply with boiling water or milk. Sold by the trade only in 1lb., 1/2 lb., and 1lb. tin-lined packets, labelled—JAMES EPPS & Co., Homœopathic Chemists, London England.



**SEALED TENDERS,** addressed to the undersigned, and endorsed, "Tender for Removal of Snow" will be received at this office until FRIDAY next the 17th Inst., at noon, for the removal of Snow &c., from the Walks and around the Public Buildings, Ottawa.

Specifications can be seen at this office where other information can also be had.

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

The Department will not be bound to accept the lowest or any tender.

By order,

F. BRAUN,

Secretary.

Department of Public Works, }  
Ottawa, 10th Nov., 1871. }

[46-31n.]

## BAPTISED IN FIRE.

THE  
CHICAGO PHENIX.

A UNIVERSAL NEWSPAPER.

### READ THE FOLLOWING.

A popular weekly paper for the times, embracing the leading features of those journals destroyed by the terrible conflagration, and combining just such a corps of writers as will give the public all the news of the week, in a condensed compilation of the leading journals of the nation, and the world.

### A TRUTHFUL RECORD.

THE PHENIX will be the most truthful and reliable recorder of incidents and facts concerning the great fire, ever published.

### ACCOUNTS OF THE FIRE.

It will contain only such accounts as are vouched for by reliable witnesses, and will correct the erroneous and fabricated statements of sensational writers.

### CHICAGO AND THE NEWS.

It will, for a time, be devoted especially to the past, present and future of Chicago, besides being the most complete weekly newspaper in the world.

### FIRESIDE COMPANION AND NEWSPAPER.

Its columns are devoted to News, Commerce, Science, Literature, Art, Drama, Music, Humor, Pastime, Poetry, Fashion, Society news, and enough of Romance to make it a most desirable fireside companion, as well as the most reliable and complete newspaper for the business man in the counting-room.

### BEAUTIFUL ILLUSTRATIONS.

It will be illustrated with engravings taken from Photographs of the Chicago Ruins, instead of sketches "By Our Special Artist" who was not "on the spot," and thus give a series of PERFECT VIEWS, not obtainable elsewhere, and the first number will contain the only correct map of the burned city.

### HAPPY HOURS.

That beautiful literary journal, "HAPPY HOURS," whose publisher was the first to issue a paper to meet the public demand, after the awful fire, has been merged into the literary department of the PHENIX, which will embrace the contributions of more than sixty of the most popular writers of the day.

### A SPECIAL FEATURE.

THE PHENIX will contain, as an especial feature, a more complete record of incidents and results of the late terrible fire, than can be found in any book, paper or other publication in the country. So numerous and inaccurate have been the accounts sent forth, that something reliable and readable is eagerly sought at this time, and THE PHENIX will fill the bill.

### A PAPER FOR THE PEOPLE.

THE PHENIX is the cheapest paper in America, being an eight page, forty column weekly, at only two dollars a year; in fact it shall be the paper for the people and the times.

### THE FIRST NUMBER.

The first number will be issued on Saturday, Nov. 11th, and will be the paper wanted by every body, as a record worth preserving or to send away, and for its accurate illustrations.

### ITS BASIS.

It is a consolidation of other journals, and therefore on a solid foundation, continuing their former circulation.

### NEW SUBSCRIBERS.

To any person who gets us three new subscribers, we will send THE PHENIX for one year free, or one of our beautiful prize steel plate engravings worth \$2.50.

### PREMIUMS.

For the purpose of rapidly increasing our subscription list before the close of the present year, we will give to every person who subscribes for the PHENIX during the month of November, a beautiful steel plate engraving, worth \$2.50, half a dollar more than the price of subscription. No such opportunity was ever before given, and probably never will be again. Avail yourself of it. Engravings will be promptly and safely sent by mail or delivered at this office, as subscribers may wish.

### SUBSCRIBE NOW.

Send in your names and subscriptions at once, and sustain this great newspaper enterprise. Price of subscription only \$2.00 per year. Single copies 5 cents. Agents wanted everywhere.

PHENIX PUBLISHING Co.,  
52 West Madison St.,  
Chicago, Ill.

TO ADVERTISERS.—All persons who contemplate making contracts with newspapers for the insertion of Advertisements should send to

Geo. P. Rowell, & Co.

for a Circular, or inclose 25 cents for their *One Hundred Page Pamphlet*, containing Lists of 8,000 Newspapers and estimates, showing the cost of advertising, also many useful hints to advertisers, and some account of the experiences of men who are known as *Successful Advertisers*. This firm are proprietors of the American Newspaper Advertising Agency,

41 Park Row, New York,

and are possessed of unequalled facilities for securing the insertion of advertisements in all Newspapers and Periodicals at lowest rates.



GOVERNMENT HOUSE, OTTAWA,

Monday, 6th day of November, 1871.

PRESENT:

HIS EXCELLENCY THE GOVERNOR  
GENERAL IN COUNCIL.

ON the recommendation of the Honorable the Minister of Customs, and under the authority of the Act 31st Vic., Cap. 6, Sec. 4, entitled: "An Act respecting the Customs," His Excellency has been pleased to order, and it is hereby ordered, that from and after the date hereof, the following articles when imported into Canada, or taken out of Warehouse for consumption therein—that is to say: Spirits and Strong Waters mixed with any ingredient or ingredients, and although thereby coming under the denomination of Proprietary Medicines, Tinctures, Essences, Extracts or any other denomination, shall be, and they are hereby declared to be chargeable with the duty imposed by the 3rd Section of the Act 33 Vic., Cap. 9, and with no other Customs duty.

WM. H. LEE,

[47-31n.]

Clerk, Privy Council.



## NOTICE.

CUSTOMS DEPARTMENT,

Ottawa, 6th November, 1871.

NOTICE is hereby given that His Excellency the Governor General, by an Order in Council, bearing date the 30th of October last, and under the authority vested in him by the 3rd Section of the 31st Victoria, Cap. 10, has been pleased to order and direct that the following article be transferred to the list of goods which may be imported into Canada, free of duty, viz:

"Unmanufactured Ivory."

By Command,

R. S. M. BOUCHETTE,

Commissioner of Customs.

47-3



CUSTOMS DEPARTMENT

OTTAWA, November 10, 1871.

AUTHORIZED DISCOUNT ON AMERICAN  
INVOICES until further notice, 10 per cent

R. S. M. BOUCHETTE,

Commissioner of Customs

**THE PICTORIAL  
PHRENOLOGICAL JOURNAL,  
A FIRST-CLASS  
FAMILY MAGAZINE.**

**T**HE SCIENCE OF MAN, and his Improvement by all the means indicated by SCIENCE, is the object.

**Phrenology**—The Brain and its Functions; the Mind and Natural Language of the Organs, directions for cultivating and restraining them; and the relations subsisting between Mind and Body described.

**Physiognomy**—with all the "Signs of Character and How to Read them," is a special feature.

**Ethnology**—or the Natural History of Man, Customs, Religions and Modes of Life in different Tribes and Nations, will be given.

**Physiology**—The Organization, Structure and Functions of the Human Body; the Laws of Life and Health—what we should Eat and Drink, How we should be Clothed, and How to Exercise, Sleep and Live, in accordance with Hygienic Principles.

**Portraits, Sketches, and Biographies**—of the leading Men and Women of the World in all departments of life, are also special features.

**Parents and Teachers**.—As a guide in educating and training Children, this Magazine has no superior, as it points all the peculiarities of Character and Disposition, and renders government and classification not only possible but easy.

Much general and useful information on the leading-topics of the day is given, and no efforts are spared to make this the most interesting and instructive as well as the best Pictorial Family Magazine ever published.

**Established**.—The Journal has reached its 52nd Volume. The form is Octavo. It has steadily increased in favor during the many years it has been published, and was never more popular than at present.

**Terms**.—Monthly, at \$3 a year, in advance. Single numbers, 30 cents. Clubs of ten or more, \$2 each, and an extra copy to Agent.

We are offering the most liberal premiums. Inclose 15 cents for a sample number, with new Pictorial Poster and Prospectus, and a complete List of Premiums.

Address

S. R. WELLS, *Publisher*,  
339 Broadway, New York.

**THE RED RIVER ROUTE MAP**

Will be ready for delivery

On the 25th of April, 1870.

**LAURIE'S MAP OF THE  
North-West Territories!**

This map supplies a desideratum long felt, and shews:—

I.—The whole of the Fertile Belt, and those parts of Wisconsin, Minnesota, and Dakota through which the waggon roads pass to Fort Garry.

II.—The actual survey of the Selkirk Settlement with all the roads, churches, etc., including the New Government Road from Fort William to Fort Garry.

III.—The Canoe Route from Fort William to Fort Garry.

IV.—A Sectional Map giving all the Railway or Steamboat Routes by which St. Cloud can be reached.—(St. Cloud is the present terminus of railway travel).

V.—Table of distances on the Overland Route. Emigrants can see at a glance where every good camping Ground or Station (Hotel) on the road is situated, and calculate the rate of travel accordingly.

Newspaper readers will find it an invaluable aid to a proper understanding of the news from that interesting region.

The map has been compiled by D. CODD, Esq., of Ottawa, from official maps and reports never yet made public; and in this work he has been assisted greatly by a practical knowledge of the country laid down.

The Map is 24 by 48 inches, beautifully lithographed, and will be furnished at the following prices:—

- Bound in Cloth, plain, (pocket size) . \$1 00
- colored . . . . . 1 50
- Mounted on rollers, plain . . . . . 1 50
- colored . . . . . 2 00

The pocket size mailed, free of postage, on receipt of price.

Five mounted maps, to one address, sent by express prepaid.

Address orders to

Windsor, April 6, 1870.

P. G. LAURIE,  
Windsor.



**N. MCEACHREN,  
MILITARY TAILOR.**

**UNIFORMS OF EVERY DESCRIPTION**

Made to Order on the Shortest Notice and in Strict Accordance with Existing Regulations.

EVERYTHING NECESSARY TO AN OFFICER'S OUTFIT SUPPLIED.

**LIST OF PRICES SUPPLIED ON APPLICATION.**

Also Cards for Self-Measurement.

YONGE STREET, TORONTO, ONT.

April 8th, 1871.

15-ly-4\*

**\$875,000**

In Cash Gifts to be Distributed by the Metropolitan Cash Prize Co.

**EVERY TICKET DRAWS A PRIZE!**

1 Cash Gift \$100,000	50 cash gifts, each \$1,000
5 cash gifts each 40,000	200 " " 500
10 " " 20,000	100 " " 200
20 " " 5,000	350 " " 100
50 Elegant Rosewood Pianos, - each \$300 to \$700	
75 Melodeons " 75 to 100	
350 Sewing Machines, " 60 to 175	
500 Gold Watches, " 70 to 200	
Cash Prizes, Silver Ware, etc., valued at, - - - - -	\$1,200,000

A chance to draw any of the above prizes for 25cts. Tickets describing Prizes are sealed in Envelopes and well mixed. On receipt of 25cts. a Sealed Ticket is drawn without choice, and sent by mail to any address. The prize named on it will be delivered to the ticket-holder on payment of One Dollar. Prizes are immediately sent to any address by express or return mail.

You will know what your prize is before you pay for it. Any Prize exchanged for another of the same value. No blanks. Our patrons can depend on fair dealing.

REFERENCES.—The following lately drew Valuable Prizes and kindly permitted us to publish them:—Andrew J. Burns, Chicago, \$10,000; Miss Clara Walker, Baltimore, Piano, \$800; James N. Mathews, Detroit, \$5,000; John T. Anderson, Savannah, \$5,000; James Simmonds, Boston, \$10,000.

PRESS OPINIONS.—"The firm is reliable."—*Weekly Tribune*, Dec. 25. "Deserve their success."—*N. Y. Herald*, Jan. 1. "Just and Honorable."—*News*, Dec. 9.

Send for Circular. Liberal inducements to Agents. Satisfaction guaranteed. Every Package of 200 Sealed Envelopes contains ONE CASH Gift. Seven tickets for \$1; 17 for \$2; 50 for \$3; 100 for \$5. Address,

HUNTER, MILLS & CO.,  
32 Broad St., New York.

**R. MALCOM,**

181 KING Street East, Toronto, Manufacturer of Saddles, Harness, Horse Clothing, Collars, Trunks, Valises, Travelling Bags, Satchels, &c. Military equipments in general. Government contracts undertaken, and promptly executed 19-ly.

**TO PRINTERS.**

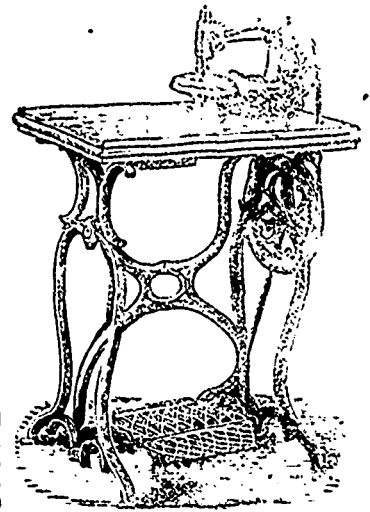
FOR SALE, a Second Hand, No. 3 PRINTING PRESS will be sold cheap for cash. Apply at this Office,

**E. H. ARMES'S  
NEW SHUTTLE OR LOCK-STITCH  
SEWING MACHINES,**

For Family Use and Light Manufacturing

PRICE . . . . . \$28.

SIMPLE AND COMPACT



EFFICIENT AND DURABLE

PRICE . . . . . \$28.

THE MOST SIMPLE MACHINE IN THE MARKET—ONLY ABOUT ONE-FOURTH the parts in its construction that is in other Machines, therefore only ONE-FOURTH as liable to get out of order. It is Durable in all its parts, and every motion positive. It has the under or four motion feed—The best in use, and will pass from the finest Muslin to the coarsest of work without change of either TENSION or STITCH. It makes the genuine SHUTTLE or LOCK-STITCH, alike on both sides, so famous for its Strength, Beauty, or Durability, and WILL NOT RIP. It runs rapidly and uses a Short, Straight Needle, which is easily adjusted into place and not near so liable to break. It is highly ornamented, equal to any of the high price Machines. It will

FRINGE, HEM, FELL, TUCK, CORD, BIND, FRILL, GATHER, QUILT, BRAID or anything that any other Machine will do.

IT IS JUST THE MACHINE FOR

PRIVATE FAMILIES, MILLINERS, DRESS

MAKERS, TAILORS, and FARMERS.

There are many points of excellence about the machine, superior to others, which we cannot explain here, but will be pleased to forward Circulars and Samples of work everywhere on application. DISCOUNT TO CLERGYMEN.

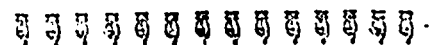
MACHINES FULLY WARRANTED.

AGENT wanted in Ottawa, and in every other Town where we have not got one already established. Larger inducements than any other company.

J. C. TODD,

General Agent

No. 7 Rossin House Block, Toronto, Ont.  
Ottawa, June 10, 1870. 21-1f.



**TO THE WORKING CLASS**—We are now prepared to furnish all classes with constant employment at home, the whole of the time or for the spare moments. Business new, light and profitable. Persons of either sex easily earn from 25c. to \$5 per evening, and a proportional sum by devoting their whole time to the business. Boys and girls can neatly run machines. That all who see this notice may send their orders, and test the business, we make this unparalleled offer. To such as are not well satisfied, we will send \$1 to pay for the trouble of writing. Full particulars, a valuable sample which will do to commence work on, and a copy of *The People's Literary Companion*—one of the largest and best family newspapers published—all sent free by mail. Address, if you want permanent, profitable work, address E. C. ALLEN & CO. CORCORAN MAIN.

THE GREAT  
ENGLISH AND SCOTCH QUARTERLIES  
AND  
BLACKWOOD'S MAGAZINE.  
REPRINTED IN NEW YORK BY  
THE LEONARD SCOTT PUBLISHING  
COMPANY.

QUARTERLY:  
The Edinburgh Review, London Quar. Review  
North British Review, Westminster Review.  
MONTHLY:  
Blackwood's Edinburgh Magazine.

These periodicals are the medium through which the greatest minds, not only of Great Britain and Ireland, but also of Continental Europe, are constantly brought into more or less intimate communication with the world of readers. History, Biography, Science, Philosophy, Art, Religion, the great political questions of the past and of to-day, are treated in their pages as the learned alone can treat them. No one who would keep pace with the times can afford to do without these periodicals.

Of all the monthlies *Blackwood* holds the foremost place.

TERMS.

For any one of the Reviews.....\$1 00  
For any two of the Reviews..... 7 00  
For any three of the Reviews..... 10 00  
For all four of the Reviews..... 12 00  
For Blackwood's Magazine..... 4 00  
For Blackwood and one Review..... 7 00  
For Blackwood and any two of the Reviews..... 10 00  
For Blackwood and three of the Reviews..... 13 00  
For Blackwood and the four Reviews..... 15 00

Single Numbers of a Review, \$1. Single Numbers of Blackwood, 35 Cents. Postage two cents a number.

CLUBS

A discount of TWENTY PERCENT. will be allowed to Clubs of four or more persons. Thus, four copies of Blackwood, or of one Review, will be sent to one address for \$12.50. Four copies of the four Reviews and Blackwood, for \$48, and so on. For clubs of ten or more persons, a copy gratis to the getter-up of the club, in addition to the above discount.

PREMIUMS TO NEW SUBSCRIBERS

New subscribers to any two of the above periodicals for 1871 will be entitled to receive, one of the Reviews for 1870. New subscribers to all five may receive, any two of the Reviews for 1870.

Neither premiums to Subscribers, nor discount to Clubs, can be allowed, unless the money is remitted direct to the Publishers. No premiums can be given to Clubs.

Circulars with further particulars may be had on application.

THE LEONARD SCOTT PUBLISHING CO.,  
140 Fulton St., N. Y.

Postmasters and others disposed to canvass, rally dealt with.

The Leonard Scott Publishing Co.

ALSO PUBLISH;

THE FARMER'S GUIDE

To Scientific and Practical Agriculture.

By HENRY STEPHENS, F.R.S., Edinburgh, and The late J. P. NEWTON, Professor of Scientific Agriculture in Yale College, New Haven.

Two vols. Royal Octavo, 1,600 pages, and numerous engravings. Price, \$7; by mail, post paid

TO PRINTERS.

The Subscribers manufacture TYPE REVOLVING Double and Single Cylinder Printing Machines, BED AND PLATTEX POWER PRESSES, FOR NEWSPAPER, BOOK, JOB, AND CARD PRINTING.

They would call attention of Publishers of Newspapers to their new

STOP CYLINDER

HAND NEWSPAPER PRESS,

Which is especially designed to supply Newspapers of moderate circulation with a plain but serviceable Printing Machine, and one capable of doing also Job Work of every description. It can be run easily by one man, at a speed of 800 impressions per hour, and by steam will give 1000 or 1200 per hour, without noise or jar.

The Press occupies a space of 5 1/2 x 10 feet, and can be worked in a room 7 feet high. Weight, boxed, 1,000 lbs.

THE SINGLE LARGE CYLINDER

HAND PRINTING MACHINE,

COUNTRY PRESS,

Is also a convenient and durable Printing Machine, capable of doing the entire work of an out-of-town office.

It is designed to run by hand, at a speed of 800 per hour.

Each machine is warranted, and will not fail to give entire satisfaction.

We manufacture almost EVERY ARTICLE REQUIRED FOR LETTERPRESS, LITHOGRAPHIC, OR COPPERPLATE PRINTING, BOOKBINDING, ELECTROTYPING, and STEREOTYPING, and furnish outfits complete for each.

We would call attention to our Patent SECTIONAL STEREOTYPE BLOCKS, MECHANICAL QUOINS, PATENT LINED GALLEYS, NEW COMPOSITORS' STANDS, CABINETS of new designs, and of all sizes, STANDING GALLEYS, PATENT POCKET BODKINS, PRINTERS' KNIVES, &c., &c.

Blanketing and Type of our own importations, and made expressly for our Newspaper and Cylinder Printing Machines.

Estimates in Detail Furnished.

A new CATALOGUE, containing cuts and descriptions of many new machines, not before shown in their book, with directions for putting up, working, &c., and other useful information, just completed, and can be had on application.

R. HOE & Co.,

New York, and Boston, Mass

THE CANADIAN ILLUSTRATED NEWS,

A WEEKLY JOURNAL of Current Events, Literature, Science, and Art, Agriculture and Mechanics, Fashion and Amusement.

Published every Saturday, at Montreal, Canada By Geo. E. DESBARATS.

Subscription, in advance.....\$4.00 per an., (Including Postage.)

Single Numbers..... 10 cents.

CLUBS:

Every Club of five subscribers sending a remittance of \$20, will be entitled to Six Copies for one year.

Remittances by Post Office Order or Registered Letters at the risk of the Publisher.

Advertisements received, to a limited number at 15 cents per line, payable in advance.

JAMES HOPE & CO.,

MANUFACTURING Stationers and Bookbinders, Importers of General Stationery, Artists Materials, School Books, Bibles, Prayer Books, and Church Services, Corner Sparks and Elgin Streets OTTAWA

Always in stock—A supply of Riflemen's Registers and Score Books; also Military Account Books, Ruled, Printed and Bound to any pattern with despatch.

WANTED

AN Intelligent Boy, to learn the Printing Business. Apply this Office. Volunteer Review Office, Ottawa, March 8, 1871.

SCIENTIFIC AMERICAN

For 1871.

TWENTY-SIXTH YEAR

THIS splendid weekly, greatly enlarged and improved, is one of the most useful and interesting journals ever published. Every number is beautifully printed on fine paper, and elegantly illustrated with original engravings, representing

New Inventions; Novelties in Mechanics, Manufactures, Chemistry, Photography, Architecture, Agriculture, Engineering, Science and Art.

Farmers, Mechanics, Inventors, Engineers, Chemists, Manufacturers, and people of all Professions or Trades will find

THE SCIENTIFIC AMERICAN

OF GREAT VALUE AND INTEREST.

Its practical suggestions will save hundreds of dollars to every household, Workshop and Factory in the land, besides affording a continuous source of valuable instruction. The Editors are assisted by many of the ablest American and European writers, and having access to all the leading scientific and mechanical journals of the world, the columns of the *Scientific American* are constantly enriched with the choicest information.

An OFFICIAL LIST of all the Patents Issued is Published Weekly.

The Yearly numbers of the *Scientific American* make two splendid volumes of nearly One Thousand pages, equivalent in size to Four Thousand ordinary Book pages.

SPECIMEN COPIES SENT FREE.

TERMS: \$3 a Year; \$1.50 half year; Clubs of Ten Copies for one Year, at \$2.50 each, \$25.00.

With a splendid Premium to the person who forms the Club, consisting of a copy of the celebrated Steel Plate Engraving, "Men of Progress."

In connection with the publication of the *Scientific American*, the undersigned conduct the most extensive Agency in the world for PATENTS, procuring

The best way to obtain an answer to the question—*Can I obtain a Patent?* is to write to *Munn & Co., 37 Park Row, N. Y.*, who have had twenty-five Years Experience in the business. No charge is made for opinion and advice. A pen-and-ink sketch, or full written description of the Invention, should be sent.

For Instructions concerning American and European Patents—Caveats—Re-issues—Interferences—Rejected Cases—Hints on Selling Patents—Rules and Proceedings of the Patent Office—The New Patent Laws—Examinations—Extensions—Infringements, etc., etc., send for *INSTRUCTION BOOK*, which will be mailed free, on application. All business strictly confidential. Address,

MUNN & CO.,

Publishers of the *Scientific American*  
47 Park Row, New York.

WANTED.

A YOUNG MAN, recently arrived from the Royal Small Arms Factory, Enfield Lock, near London, England, is desirous to obtain a Situation as Armourer in a Volunteer Corps. Apply at this office.

Ottawa, December 21, 1870.

52-5m.

A POSITIVE REMEDY

MORTIMER'S

CHOLERA MIXTURE,

A PURELY VEGETABLE COMPOUND—is a sure and safe remedy for Diarrhoea and other Bowel Complaints.

At a season when the system is liable to prostration from these weakening disorders, this valuable remedy should be kept in every household. No one can afford to be without it. Price only 25 cents a bottle.

GEO. MORTIMER.

Chemist and Druggist,  
Sussex Street.

Ottawa, July 20th, 1863.