



The Volunteer Review

AND MILITARY AND NAVAL GAZETTE.

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

VOL. VIII.

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No. 8.

NEWS OF THE WEEK.

Mr. Gladstone was received by the Queen at Windsor this afternoon, Feb. 15, when he formally tendered his resignation and that of his colleagues.

Mr. Disraeli has been summoned and the new Government is already partly constructed, and will probably be completed within a week.

All the members of Parliament for Ireland have been elected, and are classified as follows:—Liberals 15, Conservatives 30, Home Rulers, (nearly all of whom may be considered as Liberals) 53.

The *Times* says the final result of the elections may be exactly stated as follows:—Conservatives, 351; Liberals and Home Rulers 302; of these 466 were returned after a contest.

The total number of votes polled in the United Kingdom and Ireland was 2,500,000. This is a considerable falling off from the last general election.

All the parliamentary elections have been held except in Wexford. The House of Commons stands as follows:—Conservatives, 348; Liberals and Home Rulers, 302.

Mr. Gladstone has nominated Viscount Enfield and Messrs. Cardwell, Hammond, and Chichester Fortescue, for peerages.

The *Times* this morning says that we must be prepared for a time to see Mr. Gladstone to decline the guidance of his party, and withdraw from the duties which he has discharged.

The London *Times* of the 20th says the new Ministry has been constructed as follows:—Benjamin Disraeli, First Lord of the Treasury; Baron Cairns, Lord High Chancellor; Earl Derby, Secretary of State for the Foreign Department; Duke of Richmond, Secretary of State for War; Marquis of Salisbury, Secretary of State for India; Earl Carnarvon, Secretary of State for the Colonial Department; George Ward Hunt, Secretary of State for the Home Department; Gathorne Hardy, First Lord of the Admiralty; Sir Stafford Northcote, Chancellor of the Exchequer. The *Times* says Lord Linnox will be Commissioner of Works, and Captain Stanley Under Secretary of State for War; John Charles Hay, Secretary to the Admiralty, and Lord Hamilton, Under Secretary for the Foreign Department.

The *Daily News* correspondent writes that there is still much sickness among the troops of the Ashantee expedition. In the Fusiliers detachment alone, at the date of the letter, there were 200 invalids.

The London *Pull Mail Gazette* publishes the cheering intelligence that the British forces took possession of Coomassie, the capital of Ashantee, on the 29th of January, and would commence their march back to the coast on the 2nd of February.

At a grand banquet given by the Czar in honour of his distinguished visitors, he asserted that Queen Victoria, the Emperors of Austria and Germany, and himself, had the power and the desire to keep the world in peace.

The Sultan of Darfour invaded Egyptian territory near Bahrel Gazal, and captured a number of slaves. The Egyptian Governor, Seebia Bey, gave battle. The fighting lasted six hours, and resulted in the dispersing of the Sultan's army,—ten thousand troops strong,—the capturing of four guns, and the killing of a Vizier and many chiefs.

It is a circumstance worth noting that the native British Regiments who are engaged on the Gold Coast have been found to withstand the climate much better than the West Indian troops, all of whom are colored.

The facility with which the British race becomes acclimatized has long been well marked and recognized by anthropologists; but the contrast afforded in the present instance has not often, if ever been obtainable before, and it is of some scientific value.

Rev Robert Moffatt, the English missionary to South Africa, is still in doubt as to the correctness of the report of Livingstone's death. He thinks it hardly creditable that Livingstone could have reached the place where he is said to have died. He says also that the Doctor's supply of provisions was ample. The Foreign Office also entertains the same doubt.

It is generally believed that Sir Stafford Northcote will be Chancellor of the Exchequer; Chichester Fortescue will become a Peer under the title of Baron Cairnsford.

An extensive cotton mill in Leeds was destroyed by fire yesterday. Loss estimated at £350,000.

Large fires are reported in Dundee and Shields.

The Indian Government telegraphs that it now has amply supplies of grain to meet any demand from the distressed districts.

The locality of Mount Sinal has been discovered; at least we are told so by Dr. Beke, the English traveller, who professes to have found not only the spot whence the law was given, but also some important inscriptions.

In the Reichstag to-day (19th) the Bishop of Metz, who is a member, asked the President for permission to be accompanied by an interpreter during the sittings. His request was refused. A motion was offered by an Alsatian deputy that Alsace and Lorraine be permitted a plebiscite to decide their nationality, has been rejected by an overwhelming majority.

LATER.—In the Reichstag during the debate on the proposition for a plebiscite in Alsace and Lorraine, an Alsatian delegate supported the motion in a violent speech, in the course of which he said Germany had overstepped the principle which should be binding upon civilized nations. He held that the annexation to Germany was illegal. "We are sent here," he said "to proclaim our affection for our French fatherland, and your acts of violence prevents us from regarding you as brethren."

General Augéro telegraphs from Texas that Colonel Buell with cavalry and fifteen Tonka scouts has surprised a camp of Comanches on Double Mountain Fork, on the 5th, killing ten and capturing all the stock, including sixty four horses.

A deputation from the Sandwich Islands is at Washington to arrange for a reciprocity treaty with the United States.

Steve Raymond, alias Chas, Seymour, alias Robert McGuire, arrived here last night in charge of officers, having been captured in London. He was the principal negotiator of an immense amount of the forged bonds of the Buffalo, New York, and Erie Railroad, last September, by which nearly a million dollars were sold in Wall street.

King Lunlilo's occupancy of the throne of the Sandwich Islands, has been brief. He died on the 3rd ult., of some throat complaint.

The Cuban insurgents in the Central Department of the Island are setting fire to farm houses in all directions. The Government troops were victorious in recent engagement, in which the rebels lost heavily.

A heavy engagement has taken place in the Central Department, of which the Havana journals give the following account: "Gen Bascones, with three thousand men and four pieces of artillery, attacked the main force of the insurgents near Naranjo. The latter were five thousand strong, under the Marquis of Santa Lucia, the Cuban commander in chief. The battle lasted seven hours, and resulted in a success for Gen. Bascones. The Spaniards lost fifty killed and a hundred and eighty wounded. The rebels took no prisoners. Their loss is not given.

THE LOCOMOTIVE IRON REDOUBT.

By ARTHUR LITTLE, (late Regt. of Lucknow.)

(From Colburn's United Service Magazine.)

The following project to strengthen an army manœuvring in the field, by means of what I term the *Locomotive Iron Redoubt*, is based upon two deductions from the experience of the Franco-German war, which are now generally accepted as axioms:—

1. That a position defended by infantry armed with the breech loader cannot be carried by a front attack.

2. That an army when its flank is turned, and it is exposed to a serious enfilading fire from the breech loader and the modern field piece, cannot escape defeat.

It results that the crucial problem of the defence is now to force an enemy, if he attacks at all, to commit himself to a front attack, and expose himself to a flank attack.

The solution of this problem attempted in these pages is by unusually prolonged lines of defence, made possible by the introduction of the naval principle of moveable heavy artillery.

First of all, let me describe the *Locomotive Iron Redoubt*. It should mount ten very heavy guns, the platform of each gun being worked on two connected railway trucks, one on the up line and one on the down line of an ordinary railway. Besides the twenty trucks required for this purpose, there should be six iron plated luggage vans, to carry infantry, and then to be detached to act as what I call *Gatling Blockhouses*. The iron plating of the redoubt to the front should be sufficiently thick to resist field artillery, and the flanks and rear should be proof against musket bullets. Two engines could transport the redoubt to any position selected. They would not require to be plated, as they could travel along the inner line, with a *Gatling Blockhouse* between each one and the enemy. I am told by a civil engineer that there is no mechanical difficulty in moving a coupled train; but the front portion and the rear portion could go down separately if required. Guns fired from plated carriages were introduced during the French war, and used with great effect to beat in a portion of the line of defence of the Commune. But the French pieces were field pieces fired from a single carriage. What is new in my proposal, I believe, is the idea of working very heavy artillery on a double track. I propose that thirty iron redoubts be prepared, mounting in all three hundred seven ton (one hundred and fifteen pounder) guns. The plating might be so arranged that it could be detached and shipped off to Belgium or Canada and the guns could be worked on trucks and luggage vans in these countries.

Besides the necessary gunners, I propose that a special force of ten thousand infantry should be trained, called the *Garrison Division*. They could be regulars, or what would be more convenient, as my project has important duties for the trained British troops, they could be specially trained reserves, willing to serve abroad, and officered by professional soldiers. Their duties would be to jump upon the redoubt, and support any part of the lines of defence that was being hotly attacked. As they would only come into action when the enemy was about to try and carry a position, I propose to arm them with a special weapon, Meig's Magazine Rifle, (fifty shooter) which I will describe by and by.

I now proceed to enumerate some of the advantages of the *Locomotive Iron Redoubts*:—

1. They can bring upon a field of battle guns of calibre with which it would be impossible for field artillery to cope.

2. This would deprive the German "swarm" attack of its principal weapon of offence, the concentrated artillery fire.

3. They are able to assist an army manœuvring in the field by turning a selected railway into a fortification, held strongly by reserve forces or allies in shelter trenches.

4. From their unexampled powers of concentration, and the strength that their presence, and that of the *Garrison Division* and of the *Gatling Blockhouse*, sprinkled about in the weaker positions of the line would afford; the said line of defence may be extended to a length hitherto unknown in war.

5. This would render it quite impossible for an attacking enemy to deliver a flank attack.

6. Also, it would render it almost impossible for him to escape a flank attack, as the opposing army manœuvring in the field, having no communications to be anxious about, would have nothing to do but seek the point where his attacking line ended.

7. It is proposed, also, to show that it would be quite possible to bar the progress of an invading enemy advancing on London from any possible point of landing except the Thames and Severn.

Let us first view the tactical aspect of the question, and imagine that an English general, with allies, has determined to fight a pitched battle in defence of, say, Belgium. Let us further imagine that he has divined with tolerable accuracy the line of advance of the enemy. Whether the said enemy wears a *kepi* or a spikert helmet, each reader can settle according to his political proclivities.

These are the dispositions that I suppose the English general to have made. He has selected a line of railway running at right angle to the enemy's line of march, and on some twenty-five miles on either side of the point at which he expects the said enemy, he has manned this with the infantry of the allies. These at once throw up shelter trenches, fell covering woods, barricade villages, and hurriedly place it in a condition of defence. The thirty locomotive redoubts are brought up, and posted in convenient positions, ready to get up steam at the shortest notice. The *Garrison Division* (ten thousand men) are bivouacked or encamped where they can at once jump up on the redoubts. From this moment the railway ceases to be a railway, and becomes a fortification. I mean by this that it is devoted exclusively to the passage up and down it of the locomotive iron redoubts. Meantime the English army, some forty-five thousand men, with the allied Cavalry and field artillery, is feeling for the enemy to the front. It retires as he advances, and covering the front with mounted riflemen and light cavalry, seeks the most convenient position from whence to deliver a flank attack. Let us fix the total forces of our ally at eighty thousand men, and the enemy at one hundred and sixty thousand: One word on this principle of defence. Readers of the *United Service Magazine* probably all know Count Molke's new tactical defensive disposition. It is in brief a long thin extended line of shooters, thickened when necessary, but the bulk of his army, although posted in the rear, is destined for the flank attack. This defence is almost identical with the German "swarm attack"; and it is expected in the next war that two armies will keep amusing each other with

lines of shooters, and seeking to gain each other's flank. This process will require an adroit general, mobile troops, and some luck. And as the mobility of an army is to be rated not by the activity and flexibility of its best, but of its worst troops, it is expected by many that a motley force of English Volunteers, Regulars and Militia, if ever it be called upon to defend the country, would fair badly.

The principles of our railway defence is virtually that of the Germans; only the thickening riflemen move up laterally instead of from the rear, and as they have the advantage of the telegraph and the steam engine, and, moreover, bring with them fortresses as well as rifles, coming to the menaced point almost as rapidly as a staff officer could gallop off and fetch a column posted two or three miles to the rear, it is urged that my shooting line, the volunteers or allies in shelter trenches, could be unusually prolonged. This would take away the flank attack from the assailant, however highly trained, and give it to the defence.

To go on with our imaginary battle, let us suppose that the enemy has made dispositions to attack us on a front, say of nine miles; and that the English general has ordered a concentration of the locomotive redoubt and the *Garrison Division* to meet that attack. I now proceed to analyse the tactical power of this line of defence.

A line of railway may be divided into—

1. Country sufficiently open to allow an enemy to view the line of defence at a convenient distance for artillery fire, and to assail it with that arm if he likes. This portion I defend with my redoubts and their heavy guns.

2. Country not sufficiently open to allow the enemy to use his artillery. This portion I defend with all the resources of multiplying fire that have been made available by modern science.

It seems scarcely necessary to consider the defence of the first portion of the line at any great length. If the enemy can use his guns, we can use ours; and there can be little doubt as to the issue of a duel between field artillery and three hundred seven ton guns, worked by gunners secure from the enemy's fire, and with the advantage of a perfectly level platform. The Prussians are against firing at very long ranges, and Captain Von Boguslawsky lays it down as a maxim that they should never open at a greater distance than from 3,000 to 1,500 paces. But the crowd of men and horses that constitutes a field battery would be simply blown to pieces if exposed to one hundred and fifteen pounders at these ranges, and to the hundreds of sand shot which their bursting shells would scatter broadcast around. And yet the importance of depriving the enemy of his artillery fire must not be underestimated. The *Times* correspondent with the Army of the Loire especially asked the Prussian officers how shelter trenches defended by breech loading small arms were to be overcome. The answer was, "By a disproportionately large number of field guns, not tied fast to particular brigades, but acting as a distinct arm to prepare the way for others."

I now come to the second portion of my line, and here, perhaps, at the first superficial view of my project, a military observer may exclaim, "Here is the weak point of it! A railway does not consist throughout its entire length of convenient sites for the service of artillery; certainly for not much more than half its extent. It is often obstructed with cuttings and tunnels. It sometimes runs through undulating country, where guns could only command some three

or four hundred yards in front of them. At times the line is choked with a village or a wood. Supposing a deep wood were available, an enemy would take the advantage of it, like the Prussians at Woerth, or near Metz, and bring up heavy masses of infantry to your defences, without any loss from artillery fire."

To all this I answer, in the first place, that where we are unable to use our artillery, the enemy is deprived also of his "demoralising" artillery attack. It will be found also that, owing to the immense range of our guns, it would very rarely happen that he could reach such a screening wood without at first running the gauntlet of our fire. But let us give him every advantage, and suppose that there is a wood along one mile of our line of defence, and that it is sufficiently large to allow an enemy to bring up masses without exposure. I think I can show that such can be made a source of peril rather than strength to any army which, like a German army, is commanded, not by a man, but by a system.

These are the dispositions which the English general would have made in view to this peril. He would have ordered forty of the Gatling carriages to be massed at some convenient shunting, and these would be brought up and distributed along the line at the edge of the wood, at forty yards distance from each other. Navvies and infantry would set to work to clear a belt of wood, say two hundred yards deep, and a strong body of the garrison infantry would come up to lend their services to the defence. The infantry shelter, where the railway was an embankment above the level of the surrounding country, would be behind this embankment, so that an assaulting column might be first down with the enfilading of the Gatlings; the same where there was a cutting with the inner side higher than the one nearest the enemy. The railway would, in the latter case, make an admirable ditch of a fortification, with flanking caponiers in the Gatling carriages. Where there was a cutting with the high bank towards the enemy, it could be turned into a lofty rampart, and manned entirely by the garrison division being furnished also with a few Gatlings behind enfilades.

Now I ask what possible tactics could carry this mile of defence? The swarm attack, regarded as a front attack, is virtually no attack at all. It is not believed in by its inventors, even where the opponents are only a line of shooters armed solely with the breech-loader. Suppose a regular line was sent against this arsenal of multiplying destruction, how many of them would reach the defences, and if they did reach them, what good would they do? As for the advance in column, machine guns have for ever set that question at rest, as it was proposed they should do when my father, the late Sir John Scott Lillie, brought forward what was, in all essentials the first mitrailleuse, the "Lillie Rifle Battery," a short time after the battle of Inkerman. I propose, also, that riflemen should fire from the top of the Gatling carriages, behind an iron screen working on hinges. Rockets also might be used from the same position, to bring a curved fire on points which the guns could not reach.

I have alluded to the "Magazine Rifle," and proposed to arm the garrison division with it. I see no reason why some such weapon should not be put in the hands of a much larger section of our forces. I cannot do better than quote a short article from

"The Field" newspaper, describing it. Mr. Walsh, the editor of that journal, is known to be one of the best judges in the world of the mechanism of small arms:—

"We have recently inspected a repeating rifle invented by Captain Meig, and just now brought over by him from America on his way to the Vienna Exhibition, and, as far as we can judge from the superficial trial to which we submitted it, it is a marvel in point of ingenuity and efficiency. The magazine, instead of containing seven or nine cartridges, as is the case in Spencer's, has a revolving cylinder consisting of five tubes, each of which contains ten charges, the whole amounting to fifty. These can be fired with such rapidity as to occupy only half a minute with reasonable aim, or a quarter of a minute with aim; and a new magazine can be inserted with nearly as great rapidity as in the Spencer rifle. Captain Meig took the lock and repeating parts to pieces for our inspection, and in reference to their simplicity and apparent durability we can only state that they are as complete as can possibly be expected in a gun intended to do the work performed by it. The inventor fired upwards of fifty rounds in our presence with extraordinary rapidity and precision, striking a small piece of paper at nearly every shot, whether advancing or retreating, 'on the double.' The firing is accomplished by a sliding motion backwards and forwards, in a line parallel with the axis of the barrel, and consequently the aim is not so much disturbed as in those guns which are opened by a lever. As the gun is not protected by a patent, we are not permitted to describe its mechanism minutely, the inventor preferring to depend on his prior claim, and on the possession by the Lowell Works (U.S.) of the plant necessary for its production at a low cost, which he states will not exceed £6. in large numbers. The cartridge contains 60 grs. of powder and 300 grs. of lead, and is of the ordinary central fire bottle construction now generally adopted in this country. Before leaving London, Captain Meig submitted the gun to the Duke of Cambridge, but we have not heard with what result, as he was to start for Vienna immediately afterwards. The weight of the rifle, unloaded, is a little over 8 lb.; with its fifty charges and cylinder, complete, 12 lb."

Now it is evident at once that if there exists a weapon capable of delivering fifty bullets in a quarter of a minute, a shelter trench held by resolute men becomes at once a fortification strong beyond the wildest dreams of Vauban and Cormontaigne. Imagine a swarm of shooters running across two hundred yards of open, exposed all the way to this terrific fire. If any reached their goal what would they gain by it? They would still find a line of men plying each his infernal instrument with reasonable aim." "Carrying" such a position would be a hundred times more dangerous than retreating before it.

It will be urged that the invention is "novel," "American" "gim-crack." At any rate, in the view of Mr. Walsh, it is singularly ingenious and efficient. It exists, moreover, and the present writer had the good fortune to be present at these experiments, and saw the American, with his rifle fixed to his shoulder, run backwards and strike the mark at every discharge. And the fact of its existence seems to be to point to the conclusion that the principle may be improved upon, if necessary, but that it cannot be ignored. Grant that in an assault

fifty rifles were to go wrong in a hundred, it would still open up a new chapter in defensive war.

Tactical as well as mechanical objections may be brought against it, no doubt. It may be said that in range, accuracy and weight of bullets, it is inferior to the rifles at present in use; and that it is unwise to give troops a weapon that may induce them to throw away all their cartridges too quickly. In the case of troops manoeuvring in the field, these arguments have their weight. But the greater the force of these objections, the greater the value of the weapon in defensive warfare.

For they show that it is perfectly impossible to place an active attacking force on an equality with a purely defensive force at the crucial moment. A garrison army, like the force I had described, having special duties, may have a weapon of overwhelming superiority. In adjusting the ration of morale there can be no comparison instituted between a Prussian or Russian Guardsman running along in the open, and an English Volunteer in a shelter trench, holding an ever detonating piece, and conscious that the nearer his antagonist comes, the more certain must be his destruction. It is true that some of the tactical objections just urged apply, although in a lesser degree, to the defence as well as the attack. But range and accuracy in the early stages of an action could be obtained by arming a shooting company of picked men with the Martini-Henry. The increase of power afforded to the present system of railway defence by such a weapon is so marked that, at any rate, a special garrison division should be armed with these. If all the Reserve Forces in England were provided with this rifle, or a similar improved weapon, the length that we could give to our lines of defence would be very great indeed.

Hitherto, I have been considering the defensive powers of what I may call the containing line. I think I have proved it to be very strong. It must be remembered, however, that its chief tactical function is to expose the attacking force to a flank attack. And this flank attack it would be scarcely possible for him to escape if he committed himself to a *bona fide* attack on the line of railway. Supposing that he attempted to contain the English army with some sixty thousand men, and that this force was drawn up at a right angle to the rest of his line. It is easy to show that both sections of his army are compromised. The English field artillery would enfilade that portion of his army which was attacking the railway line. A concentration of iron redoubts would be brought to act on the containing force that was facing the active field army, and the terrible segments of the seven ton gun would rake this line from end to end. The fire of the breech-loaders would be incessant, and riflemen from the portion of railway not attacked might hurry out and assail the other flank of the enemy. It is evident that his position would be critical; indeed, all who witnessed a serious flank attack during the last war speak of its vast significance in the presence of the new weapons. Resistance and retreat are both equally dangerous; indeed, the German officers press strongly upon their men that in a war of breech-loaders, retreat is the more dangerous of the two. All this while, although the English would be firing at crowds, the enemy's marksmen would be aiming at solitary skirmishers. A charge with the bayonet might be attempted, but what chance would the swarm attack have under this double enfilade. My project, it will be seen from this,

by no means bases itself on mere passive defence; but aims at the complete disorganization of the attacking enemy. And if it can methodize this flank attack, and reduce it to a scientific certainty in defensive warfare, a British army some fifty thousand men, kept in hand especially to deliver this crucial blow, is not quite so useless as some writers are now inclined to contend.

I now come to the strategic question. The battle I have described was solely intended to illustrate the tactical power of my line in case the enemy attacked it. The enemy, of course, might have avoided it, and it may be thought by some that this is exactly what he would do—that he would avoid all protected railways in point of fact. And if we were fixed to these railways, he would have a decided advantage in being able to roam at will over the rest of the country.

But war is never a question of roaming about at will. "An army," says Napoleon, "moves on its belly." And the vast masses of men that constitute a modern army require the perfection of a most intricate mechanism to allow them to move at all, a mechanism always liable to be disturbed and dislocated. In civilized countries railways are now everywhere; and it is useless to explain to the student of strategy how important in a campaign must be a movable line of fortresses upon which a defending army might pivot, as Faidherbe did on the Belgian fortresses, and to which, in case of a reverse, he might retreat for security, as McClernan did to the gun boats on the James River. Let me take one strategical instance. All theorists dwell on the importance of a base parallel to the enemy's line of operations, but this with the locomotive iron redoubts might almost always be obtained. Supposing an enemy were to land at Eastbourne. If the English general manœuvred the Brighton line with reserve forces and redoubts, he might use that as a base, and strike at the flanks of the enemy's columns of march. Perhaps, if London were in its present undefended state, it would be possible for the enemy to send forward a few divisions, and make a dash at the capital; but I propose to show how London may be made secure without much cost, in a future paper, when I come to consider Fixed Railway Fortresses.

To give another instance of the power of the locomotive iron redoubts, if we concede that one hundred and fifty thousand Militia and Volunteers could hold sixty miles of shelter trenches, assisted by the regular army and the redoubts, a glance at the map will show that it would be impossible for an enemy to land anywhere in England south of Carlisle without our being able to invest him, by manning a convenient line of railway round him before he would have time to commence offensive operations. I have mentioned the exception of the Severn and the Bristol Channel, which give him an opportunity of choosing the side on which he may select to land, but his feints might be baffled by dividing the investing army until his real plans were known. If he landed to the west of Exmouth and Barnstaple, the Exmouth and Barnstaple line might be manned to bar his progress, and an attack from the side of Scotland might be met on the line between Carlisle and South Shields. If London were fortified, of course the English general could adopt something much better than mere passive defence. Most Englishmen still disbelieve in the possibility of invasion, in spite of the Report of the Royal Commissioners. The present aspect of the question, perhaps, is this. In a war with

France, let us say, we can render London secure by keeping a fleet superior to the whole of the French fleet continually in the Channel. But this would be virtually turning our naval force into a military force, defending London passively. In another paper I will show how London can be defended far more cheaply.

VOLUNTEER MEETING.

ORGANIZATION OF THE FIRST COMPANY.

A public meeting, called by Lieut. Col. Houghton, D.A.G., took place in the Hyack Hall, on Friday evening last. There was a large attendance.

By request of the Deputy Adjutant General, Captain Bushby, of the Rifles, occupied the chair.

The Chairman having stated that the meeting had been called for the purpose of forming a Volunteer Militia Company, to be part of the Active Militia of the Dominion of Canada.

Lieut. Col. Houghton explained the nature of the organization, the duties, responsibilities and privileges of members. He declared his intention to do everything in his power to meet the wishes of the members of the organization; and, in answer to questions, explained a number of minor points.

A long conversation then ensued, between the Deputy Adjutant General and Captain Scott, of the Seymour Artillery, with regard to the position of that corps, resulting in an agreement that Lieut. Col. Houghton should strongly recommend the formation of an auxiliary company of artillery here, as soon as Captain Scott should furnish him with the names of twenty men, ready to join said company.

The roll for the Rifle Company having been opened, twenty seven names were subscribed.

This closed the business of the public meeting.

Non-Volunteers having retired, a meeting of the new company was held, Mr. Bushby in the chair.

The Chairman said that he was most anxious to see the new company flourishing and efficient in every respect; and he believed that a great deal depended on the selection of officers. He had given a good deal of thought to the matter and he begged to suggest that the officers be

Captain—HENRY V. EDMONDS.
Lieutenant—JOSEPH BURR SR.
Ensign—A. PIERCE

Mr. J. C. Brown seconded the nomination. He expressed his regret that Mr. Bushby, Captain of the late Rifle Company, could not be prevailed upon to accept a similar position in this one, although the had been urged to do so by many members of the company.

The motion was passed unanimously. (Captain Edmonds was for some years a Lieutenant in the London Irish Rifles, a corps that hold a high position among the volunteers of the old country; and was also Lieutenant and Adjutant of the late rifle corps here.)

Lieut. Col. Houghton expressed himself perfectly satisfied with the choice of officers. He believed the selection was a good one.

Each of the newly elected officers, in a few words returned thanks for the honor done them, and several other members of the company addressed those present briefly, each and all expressing a hope that the new company

would be a credit to New Westminster, and declaring their determination to spare no effort in attaining that end.

The meeting then broke up.

SECOND MEETING.

A meeting of the newly organized company was held in the Hyack Hall on Tuesday evening. Only a few members were absent.

Capt. Edmonds announced that he appointed Mr. McMurphy Color Sergeant, and Mr. Pritchard, bugler, other non-commissioned officers would not be appointed for some time, until experience had shown what men were best qualified for the position.

It was agreed that the members hand over the capitation grant to the funds of the Corps.

Drills will be for the present on Tuesday and Friday evenings at 8 o'clock—the first drill being on Tuesday next 20th inst.

The Captain announced that only one man was wanted to fill the roll and bring the company up to its full strength.

Mr. R. Dickinson was elected Civil Secretary and Treasurer.

Captain Edmonds stated that he had applied, through the Deputy Adjutant General to the Dominion Government, for a grant for repairing the Drill Shed, &c. He hoped also that the Municipal Councils of the District would follow the practice pursued in the East, and assist the company by grants to its funds.

There was some discussion as to fines for non-attendance at drills, &c., and we can hold out no hope of leniency to defaulters.

After some further business, the meeting broke up.—*Dominion Pacific Herald* Jan. 16

MILITARY.—Lieut. Colonel Houghton, D.A.G., goes down by the Enterprise this morning. The formation of a Volunteer Corps at Burrard Inlet has been abandoned for the present, the population of that place being too much scattered.—*Id.*

FORT GARRY FIRE.

We have much pleasure in publishing the following letter from J. H. McAvish, Esq., thanking Colonel Smith and those under his command for their gallant exertions during the late fire. As the Hudson Bay Co. were the parties most deeply interested, it is gratifying to see that they fully appreciated the noble efforts of their military friends, which resulted in saving an immense amount of valuable property from destruction:—

HUDSON'S BAY COMPANY'S OFFICE,
Fort Garry, 15th Jan., 1874.

LIEUT.-COL. OSBORNE SMITH, C.M.G.,
Commanding Dominion Force,
Manitoba.

SIR,—It is with the deepest sense of gratitude that I have this morning to express to you and the force under your command, my thanks for the eminent services rendered in Fort Garry during the past night, when the entire establishment of the Hudson's Bay Company stood in the most imminent peril of destruction by fire.

I estimate to the fullest extent the fact, that owing solely to our own cool judgment and the noble manner in which you were assisted throughout by your officers and men during the several hours conflict between the devouring element and man's in-

genously, we are indebted to-day for the existence of Fort Garry.

While acknowledging my appreciation of how very much we owe to you personally for the successful result of last night's efforts, I would respectfully request you to convey to the officers and men under your command the sincere thanks of myself and brother officers, and of the Hudson's Bay Company in general, for the services so signally and nobly rendered, and which resulted in a victory, which at one time the most sanguine dared not anticipate.

I have the honor to be,

Sir,

Your most obedient servant,

J. H. McTAVISH, Factor, H. B. Co.

—Manitoba Gazette.

On the evening of the 19th the Governor General's Foot Guards, underwent a close and searching examination by Lieutenant Colonel JACKSON, D.A.G., and Brigadier Major MORTON. Captain and Adjutant WALSH was awarded a first class certificate, and Ensigns DUNLAVIE and AUGUST second class certificates. The men mustered well, over 250 men being present, besides the band and the drums and fifes. After the examination and general inspection was over, the regiment marched through the principal streets headed by their splendid band, under the command of Major WHITE.

We have received from the Publisher "McAlpine's Dominion Business Classified Directory for 1874." It is well got up, neatly printed, and on the whole one of the best yet published. It is an inestimable book to the business man, and ought to be in every Counting House in the Dominion.

REVIEWS.

NEW DOMINION MONTHLY.—The February number of this magazine lies on our table, and is not a whit behind preceding ones in interesting and instructive reading matter. Amongst the many articles worthy of notice those entitled the "Pedigree and Kinship of Words," by John Read, one of Canada's foremost poets and writers; "Physical Training," by W. A. Withrow, M.A., and a "Review of the Times," by another writer of eminence, stand prominent. The selections are as good as usual, which is no slight praise. The frontispiece is an engraving of Hon. Edward Blake.

REMITTANCES Received on Subscription to THE VOLUNTEER REVIEW up to Saturday the 21st inst.

- Stratford, O.—Major M. Stephenson, to Mar. 71 \$2.00
- Toronto, O.—Capt. John Gray, to July, 1874 4.00
- Chatham, N.B.—Lt. Col. C. McCulley to Ap. 75 2.00
- Windsor, N.S.—Capt. Jos. Burgess, to Feb, 1874 1.00
- New Westminster, B.C.—Capt. Edmonds, to '75 2.00
- L. Joseph Burr, to '75 2.00
- Ers. A. Peelo, to 1875 2.00
- Dr. C. N. Trow, to '75 2.00

VILLE DU HAVRE.—A communication in the London Times from Admiral Heath of the British navy takes the same ground in relation to the recent fatal collision of the *Ville du Havre* and the *Loch Earn* as was taken in our late article on that subject. The object of Admiral Heath is to relieve the British authorities from the odium of the rule which at the last moment was the cause of the disaster, and which we took occasion to impugn. He contends that the rule to port the helm in all cases of danger of collision is not of that absolute character that it has been represented to be, and that it is amply qualified by other sections of the rules laid down in the published directions of the Board of Trade to prevent collisions. He holds that the *Loch Earn* should not have ported her helm, but held her course or luffed, and agrees with the opinion we expressed that had she done so the collision would at the last moment have been avoided. He insists that it was not the fault of the Rules that it took place, but of the misinterpretation of them by the helmsman of the *Loch Earn* and by Capt. Robertson also. The case is of interest to us as relieving the British rule of the road at sea of the censures we felt ourselves bound to express in view of the shocking consequences that ensued in this case. It is of public consequence to know, especially in maritime circles, that there is no such preemptory rule as has been alleged in regard to the action of steamers in imminent danger of collision; but that the mode of steering is left in such emergencies to the judgment and discretion of the commanding officer of the vessel concerned. Of course this discussion does not touch upon the merits of the question as to whom was primarily responsible for the disaster. Admiral Heath naturally exhibits a professional reticence upon that subject; but there can be no doubt that the awful responsibility of the collision rests in the first instance wholly upon the French steamer, which could have easily avoided it in a variety of ways, none of which were attempted until it was too late.—N. Y. Sun,

MOUNTED POLICE BALL.—Lieut.-Col. French and the officers of the Mounted Police, not to be out done in hospitality, entertained their numerous friends to a magnificent ball in the Pacific Hall on Friday evening the 30th inst. The decorations of the Hall were the same as those used by the Benedicts two nights previous, with the addition of stars bayonets, picturesque stacks of arms, and all those numerous little *addenda*, which the military know so well how to blend in artistic contrast with more peaceful materials, while the whole is calculated to throw a dash and glitter over the scene that it is beyond the reach of civilians to produce. The excellent music of the military band was again in attendance, and all the guests were made thoroughly happy and comfortable by their gallant entertainers. The popular verdict expressed at the close was that the Mounted Police were all jolly good fellows, and happy to meet, sorry to part, and hoped to meet again, soon.—Manitoba Gazette,

The *Pall Mall Gazette* correspondent at the Hague writes. "The Dutch Navy is in a most lamentable state, notwithstanding that in the last five years more than twelve millions of florins a year were spent upon it. Our wooden ships are quite rotten and most of the iron ones hardly fit for use. Happily it may be said that the war with Acheen will have no serious character so far as regards our vessels; our men of war have only to bombard the fortresses on the coast, and it seems that they can resist the shaking caused by the fire. But if we were involved in a war even with the smallest naval power it would be proved that our navy is good for nothing, except for the defence of the mouths of our rivers, and Mr. De Roo, the leading military M. P., gives us the consolation that 25,000,000 a year will be needed to bring our army into a tolerable state. Notwithstanding the millions which we earn yearly from our East India colonies, the Dutch are, perhaps, the most heavily taxed nation of Europe. It may be accepted as a rule that the middle class pay ten per cent. of their yearly income in taxes; and there is great probability that this will still augment, because it seems certain that the favourable balances of the East India service will, for some years to come, be needed for covering the cost of our war with Acheen."

It has lately been felt in St. Catharines that there has not been sufficient interest taken in the welfare of the volunteers in that neighbourhood, and it has been thought that the organization of a new company would not only be a welcome addition to the force in its life, but would have a beneficial influence on the existing companies. Mr. Willard C. Coland, the energetic Adjutant of the 19th Battalion, has accordingly undertaken the task of organizing a new company, and we hope he will be successful. There are, says the *News*, "many young men in town who can well afford to spend a few hours in acquiring a knowledge of military drill, and we hope they will enroll themselves in this new company."

Captain Morton, of the steamship *Morro Castle*, from Havana, reports that in the engagement about February 1st, a column of Spanish troops 1,200 strong, were utterly defeated by the insurgents, incurring a loss in killed, and wounded, and prisoners, of over 600 men. Intelligence that Captain Morton regarded as trustworthy, respecting the Spaniards, state they have been woisted in every engagement.

A Havana letter states that the Colonels of the volunteers of that city, waited on the Captain General, requesting him to modify his recent order compelling them to take the field, but he refused to do so. Much dissatisfaction is expressed among the volunteers. Private reports from the interior of Cuba state that many Cubans have left the towns and cities to join the rebels, rather than submit to the recent proclamation of the Captain General.

The Duke of Edinburgh has been appointed a Colonel of the Prussian Army attached to the 95th Infantry Regiment of Coburg Gotha. The *Cologne Gazette* states that the appointment is the first instance on record of an English Prince obtaining a Prussian commission. English Princes have in former times been named honorary or proprietary colonels of regiments, which consequently bore their name—such, for instance, was the Duke of Cumberland, afterwards King Ernest Augustus of Hanover—but the Duke of Edinburgh is the first who has really held a colonel's rank in the Army.

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The Volunteer Review,
AND
MILITARY AND NAVAL GAZETTE.

"Fabricated, unbought, our swords we draw,
To guard the March, fence the Law."

● OTTAWA, TUESDAY, FEB. 24, 1874.

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

The following account of an interesting experiment with *torpedoes* is copied from the *U.S. Army and Navy Journal*. Its value of course rests on the fact that there was no enemy to be encountered, and therefore the favorable results. As in line of weapon defence they are about as valuable as *spring guns, min traps*, and all the other adventures with which orchards and fruit gardens used to be protected in our younger days, they did not prevent the fruit from being stolen, though they scared away the timid.

The following report has been made to the Chief of Bureau of Naval Ordnance:

The experiments were made in the Gulf of Fiume. To facilitate measurements a large buoy was anchored 600 feet from the launching tube, with intervening cork floats at intervals of twenty feet. For ascertaining the depth of the course of the torpedo below the water's surface, nets eight feet wide, with meshes of small stuff eight inches square were furnished. The charging and

launching of the torpedo was effected in all cases by one mechanic with an assistant.

"December 6th, 1873. Weather clear and pleasant—calm—watersmooth and very clear.

"FIRST EXPERIMENT.—Object: To prove that the Whitehead Torpedo can be accurately directed, and also adjusted to maintain its direction at any depth desired by the operator. Torpedo launching tube was immersed four feet below the surface of the water; the torpedo was charged with compressed air, 35 atmospheres pressure, and adjusted to run at the rate of eight knots per hour for a distance of 600 feet, and to maintain a course five feet below the surface. A net was suspended from a boat at 280 feet from the starting point. Time accurately noted by ourselves.—Result: The torpedo was launched, but rose to the water's surface at a distance of 80 feet, the operator having neglected to open the air valve. It was then taken back and restarted with the following results. It ran 600 feet in 50 second, maintained a perfect direction, and pierced the net five and a half feet below the surface of the sea. After completing its run, the torpedo rose to the surface and was towed back to the launching tube.

"SECOND EXPERIMENT.—Object: To prove that the Whitehead Torpedo can maintain a speed of ten to ten and a half knots for a distance of 600 feet.

Torpedo launching tube immersed four feet below water's surface; the torpedo was charged with 50 atmospheres compressed air, and adjusted to run at 600 feet at the rate of ten to ten and a half knots, and to maintain a horizontal course five feet below the sea surface. Net suspended as before. Time accurately noted. Results: Torpedo ran 600 feet in 35 seconds, with a trifling deviation to the right at the end of the course. In consequence of the boat being out of line, torpedo did not pass through the net.

"THIRD EXPERIMENT.—Repetition of the second experiment with the following results.

"Torpedo ran 600 feet in 35 seconds—equal to 10-15 miles per hour; direction was perfect; pierced net five and a half feet below the surface of the water. After the torpedo finished the above run, it was towed back to the launching tube, and restarted without recharging the air tank. The distance to be run was 600 feet which it accomplished in 44 seconds—equal to eight knots per hour.

"December 7th, 1873. Wind quartering offshore, with a force of about five, moderate sea, weather clear and cold.

"FIRST EXPERIMENT.—Object: Repetition of the two previous experiments to prove that the claimed speed of ten to ten and a half knots per hour can always be obtained.

Torpedo launching tube immersed five feet, the torpedo charged with 55 atmospheres compressed air, and adjusted to maintain its course six feet below the water's surface, for a distance of 600 feet, at the greatest speed. Net suspended as before. Time accurately noted. Result: Torpedo ran 600 feet in 35 seconds, direction perfect, pierced net six feet below the surface.

"SECOND EXPERIMENT.—Object to prove that the Whitehead Torpedo would run 4,500 feet at a constant velocity equalling seven knots per hour. Torpedo launching tube immersed three feet, the torpedo

charged with 57 atmospheres compressed air, and adjusted to run its longest course at its greatest speed for that distance. Time accurately noted at 600 feet and at end of course. We accompanied the torpedo in a steam launch about twenty feet to the left of its course. Result: Torpedo ran first 600 feet in 47 seconds, and continued its course until it ran ashore 2,940 feet from starting point. Time from start to running ashore was three minutes 50 second; the course of the torpedo was apparently straight for the first 2,000 feet, it then deviated and went ashore about 100 feet to the right of the line of sight. The rudder was then readjusted and the experiment repeated with the following result. The torpedo ran 4,926 feet direct course in six minutes 28 seconds, equal to seven and a half knots per hour, and ran ten seconds additional, with a deviation to the right, at a reduced speed.

THIRD EXPERIMENT.—Object: To prove that the Whitehead Torpedo can be easily launched and accurately directed from an ordinary boat, and that changes of depth can be effected at the will of the operator without impairing the qualities of the torpedo in any way. The torpedo was launched from very simple slings attached to a light boat; three men in the boat; one to launch the torpedo and the other two to attend oars. The torpedo was charged with 35 atmospheres compressed air, and adjusted to run a course twelve feet below the surface, at a speed of seven and a half knots. Torpedo was directed to pierce a net suspended from a boat about 400 feet from launching boat. Result: Torpedo was launched by signal and grazed the side of the net at twelve feet below the water's surface.

The latter experiment was wonderful, not only on account of the facility with which the torpedo was launched, but because of its remarkable accuracy, the sea and wind considered. Had not the elements caused the boat with the net suspended to drift to leeward, we have every reason to suppose the torpedo would have pierced the net fairly. We found the assertions of Mr. Whitehead in regard to the invention to be fully carried out in every particular by the performances of the torpedo; in the matter of speed for the longest course we found that the rate claimed by the inventor was considerably under that attained in our presence, and the distance run in the long cruise considerably greater. By examining the contracts made by Mr. Whitehead with the different governments, we find that the English Government purchased the secret on the 11th of June, 1871, in the sum of £15,000 sterling; some time later the French Government paid for it about £8,000 sterling, and in the present month the Italian Government has concluded its purchase in the sum of 100,000 florins, paper—about \$42,000 gold.

"The price of the torpedo is about 5,000 francs gold, each.

"In English contract we find that five officers selected by the government are to be instructed in the construction and use of the machine; the same stipulation is made in the other contract, except that the number of officers to be taught is increased.

"We found at the Whitehead Works, Captain Filling, chief of the Torpedo School at Venice, and Mr. Bernard, an engineer attached to that institution, who had been detailed by their government to receive the instruction agreed upon and also to take

charge and convey to Italy the torpedoes furnished by Mr. Whitehead under the contract.

Very respectfully your obedient servant.

W. A. KIRKLAND, Commodore, U.S.N.
E. J. BIRWIND, Master, U.S.N.

We published in our last a number of articles on "the Militia," and among the rest one from the *Ottawa Times* of the 10th February, and with the exception of the present inefficiency of the Active Force, we entirely concur in all its sentiments. There can be no doubt that the national military force is one of those institutions from which an *apparent ready money return* for the outlay on it must not be expected; the same may be said of the police, the officers of the civil service, and indeed of fully nine-tenths of the helps necessary to government trade and the preservation of society. In the manufacturing arts, mining and agriculture alone are to be found the majority of those whose industries pay at once, but it is in order to allow those people to pursue their avocations in peace and security that military organizations are necessary; and it is in the increase of those industries the return for the services of "The Militia" are to be found. We are not at all willing to admit that anything like the disorganization pointed out in the *Times* exists. In a purely defensive force recruited from the whole population and not necessarily *always under strict discipline*, without any outside stimulus, the occasional scanty musters of a company or battalion are not to be taken at all as a criterion of its nominal strength or the unwillingness of the people to encounter the stern rule of military discipline: the said company or battalion may have *filled* through its ranks three or four times its real strength, and the majority of those men are in the country ready and willing, if occasion required, to take the field again with the advantage that they know something of soldiering and could handle their rifles with such effect as to leave no cause of triumph to the best drilled troops in the world. And for this they may thank "the lawdry array of captains, colonels, and other staff dignitaries." And moreover, the Volunteer Force of Canada is not only a credit to the intelligence of the country, but it is also in a position to be serviceable to the Empire, and even Great Britain might feel justly proud of such an organization.

We believe the Government are sincerely desirous of doing justice to the force and placing it in a condition of stability, without burdening the resources of the country by unnecessary outlay, and we are glad to perceive that, while requisite reforms will be undertaken, nothing like *reorganization* will be attempted.

The present Militia Law was a great measure the work of the present (acting) Adjutant-General Lieut. Colonel Powell, and

it is hardly possible to find any man in Canada better acquainted with the genius of of its people. The success of the measure is a positive proof of that fact.

In another page will be found an article from *Colburn's United Service Magazine* for January, entitled "the Locomotive Iron Redoubt," which we reprint as the latest tactical novelty.

The value of a locomotive ironclad battery has yet to be ascertained as well as the arrangement for its proper manipulation as a war engine, but it is evident that true strategy points the necessity which exists for crossing all lines of railways with fortifications, in order to make the "Locomotive Iron Redoubt" valuable it must be shot and shell proof to the heaviest field Artillery at present in existence, and what would happen provided the machinery of even one Redoubt became disabled or the machine itself went off or was knocked off the rails, the shells of the lightest field artillery in use are sufficient to displace rails and thus would paralyze the defence of the line. Moreover, there is no sixty miles of any railway line in England that presents a natural glacis over which one iron redoubt could obtain the command. Most of the terrain in front of those lines on the contrary afford shelter for pushing field artillery to within favorable range for destroying the track.

Apart, however, from the practical question the author of the very able paper under consideration points out the tendency of modern tactics to be solely directed towards *flank attacks*, and intimates that this is the result of the improvements in fire arms and increasing the rapidity and power of delivering fire.

Frederick the Great of Prussia inaugurated a revolution in tactics when he introduced the *iron ram rod* which enabled his troops to deliver their fire more rapidly, and under his system the flank attack was perfected; but Napoleon the Great, by rapidity of movement and concentration, reversed the proposition altogether and decisively shewed by over twenty years of victory the movements towards a flank are the most dangerous an attacking force can indulge in.

Is it not just possible that active officers may be found who would desire nothing better than to have the chance of meeting a flank attack by a movement on their adversaries' centre? and it is quite likely to be successful if undertaken at the right time.

This is, however, a question for our readers to study, and they have to thank the author of this really clever paper for a good lesson in strategy and major tactics.

Below will be found an able article from the *United States Army and Navy Journal* on the "Military Organization of Switzerland," a perusal of which will go far to satis-

fy our readers that we have, under the Militia Law, a better system and one that presses less heavily on the resources of the people, either in time or money.

The average Canadian is not inferior physically, intellectually, or morally, to any other race or people; for military purposes he does not require as high a training, for if he must fight there are the strongest of all inducements to unflinching and unyielding courage. The system under which he has been trained is one adapted to the social organization to which he belongs, nor is there in that of any other country sufficient excellencies to warrant any improvement being attempted.

True wisdom will, therefore, prescribe the course to be taken in dealing with our military organization; as little Legislature meddling as possible, and as much encouragement as can be given consistent with true economy.

Lieutenant Commander, S. D. Ames, of the U.S. Navy, attached to the frigate *Wabash*, has translated from the French, Colonel de Mandrot's "Résumé of the Swiss Military Organization." Colonel de Mandrot is a colonel in the Federal Army of Switzerland, and his work, published in 1871, is full of interest to the military reader. Lieutenant Commander Ames recently visited Switzerland, under leave of absence, and in the spirit of Rear-Admiral Gase's General Order No. 2, presented on his return this translation, considering the subject one of much interest.

The resume is too full and lengthy to admit of entire publication in the Journal, and we can publish only such parts of it as may seem to possess the greater interest, and in doing so will not follow the translation literally.

The author, in his preface says: "The military organization of Switzerland is neither well known nor properly appreciated. Many people see in our militia nothing but a national guard or citizen soldiery, which they conceive costs nothing to the State and very little to individuals. Strangers to the military profession above all, have a low idea of the militia, though, as a rule, they see nothing of it. The visits of foreign officers (mostly Germans) have latterly modified this opinion, but the military public keep to their old prejudices Our Swiss militia is a peculiar institution, and I cannot better define it than by calling it an army living at home. Its organization resembles somewhat the ancient Prussian Landwehr, and it may be that the founders of that great institution found their model with us." Composed of citizen soldiers, the Swiss army can never excite fear among our neighbors. By its very composition it will always be impossible for any power, however centralized, to make use of it for anything but a defensive war. . . . After having been too little studied, our militia system is now overrated. It is declared to be not only cheaper than any other system, but also entirely sufficient for the defence of any country."

The author says the public is in error on two important points; first, as to the cheapness claimed for it, and second, as to its

As the Prussian System is as old as the time of David, King of Israel, this is hardly likely. [ED. JOURNAL]

being as thoroughly organized as the armies of neighboring nations. It is said for £6,000,000 yearly the Swiss have an army of 202,000 men ready for instant service against any regular army; on the contrary, it costs £13,000,000, including interest on a loan of £12,000,000, expenses of the cantons, personal expenses in clothing, equipment, etc.

As to the Swiss militia being entirely equal to the regular armies of other countries, it is an exaggeration. They have as much military spirit as any other people. Nowhere can a soldier be formed as promptly as in Switzerland, and this soldier, well commanded, can hold his own against the troops of neighbouring nations. But is he always well commanded? Are his general officers, superior officers and subalterns equal to their positions? Every one in Switzerland knows this is the weak point of our army, and this inferiority cannot be overcome except by much more exercise, more assembling of the troops, and in consequence, more expense. To do this, the budget must be increased to £14,500,000. This would not be dear if Switzerland could have 200,000 well organized troops; but, in fact, she has but 120,000 in a state to take the field. The author disclaims any attack upon the militia in general or upon Switzerland in particular.

Every Swiss is a soldier. Military service is obligatory from the age of 20 to 45, but various exemptions are allowed. The Federal army includes an *elite* and a reserve, the first about three per cent. of the population of each canton, the second $\frac{1}{2}$ per cent. of this population.

The militia man can be kept in the *elite* until the age of 35; usually he passes into the reserve at 28 or 30, where he can be kept until he is 41, and after this he belongs to the landwehr. The Cantons must always have their contingent (*elite* and reserve), complete. In case of a grand arming, the Confederation may take charge. As each Canton owes to the Confederation a contingent of men and materials, it also owes a proportionate money contingent to the general government, (seldom required), which is calculated from the population and wealth and the occupation followed by its inhabitants, and the scale is revised every 20 years. By adding the *elite* to the reserve and landwehr, one-twelfth of the Swiss population is organized, armed, and equipped.

SUPERIOR AUTHORITIES.—ADMINISTRATION.

The Federal Assembly is the highest military authority. It decrees the military laws and rules, elects the commander-in-chief of the army and his chief of staff, orders the number of troops to be called out, and decides when to disband them. In time of peace the Federal Council, (Central Executive Authority), commands the whole army through the War Department whose chief has to be a member of the Federal Council. The Federal staff consists of the following officers:

1. Commissioner for the personnel of the army, who is at the same time Chief Instructor of the Infantry, and who is a Federal colonel. 2. Administrator of material of war, who is a colonel of Federal artillery. 3. Commissary in Chief. 4. Chief Auditor. 5. Surgeon General. 6. Inspector of Engineers. 7. Inspector of Artillery. 8. Inspector of Cavalry. 9. Inspector of Riflemen. 10. Inspector of Infantry, each a Federal colonel. 11. Officers of the Staff, Bureau, and of the Topographic Office.

IMMEDIATE COMMAND OF THE TROOPS AND STAFF.

The Federal colonels; are the general offi-

cers of the army; they command the divisions and brigades, and form part of the general staff. This corps, which is at the head of the army, is divided into six sections:

1. The General Staff consisting of at least forty colonels, thirty lieutenant colonels, thirty majors, and a number of captains and lieutenants.

The Federal colonels are appointed to divisions and brigades without regard to seniority of commission, and are promoted from the grade of Federal lieutenant colonels who have seen at least two years service in that grade.

From the Federal colonels the Chambers choose the commander-in-chief of the army and the chief of the general staff, without regard either to the arm or the seniority of the officer chosen.

The first or commander-in-chief alone has the title of "General." He bears it until his death, but the distinction is merely honorary, since at each new calling out of troops the Federal Chambers may appoint another general officer commander-in-chief. The commander-in-chief is given the title of "Excellency" in all official papers, in the same manner as the President of the Confederation himself.

He has the right to choose his private staff. Upon his nomination he exercises entire authority over the army, and is only responsible to the Federal Assembly.

The army once disbanded, the Federal Council again takes up the direction of all affairs.

2. The Engineers Staff consists of at least two colonels, three lieutenant colonels four majors, and a certain number of captains, lieutenants, and sub-lieutenants.

3. The Artillery Staff consists of at least four colonels, ten lieutenant colonels, fifteen majors, and a number of captains and lieutenants.

Each of these staffs has attached to it a number of clerks or secretaries, who have the rank of assistant non-commissioned staff officers.

The staff has its private advancement. In general, seniority in no rule, though it is taken into consideration. One cannot enter this corps without having served in some arm of the service as superior officer or subaltern. Once admitted into it, promotion in the corps cannot be obtained until the officer has served at least two years in the grade immediately below the one to which he seeks advancement.

4. The Judiciary Staff. An Auditor in chief with the rank of colonel, and a number of judiciary officials.

5. Commissariat Staff. One chief commissary with the rank of colonel, and the necessary number of functionaries, ranking from first sub-lieutenant to lieutenant and colonel.

6. Sanitary Staff, consisting of one physician in chief, with grade of colonel; nine physicians or surgeons of divisions, three of whom rank with lieutenant-colonel, and the rest with majors; one staff surgeon and one apothecary of the staff, with rank of captain. Besides these there are a sufficient number of hospital and ambulance surgeon, who are divided into, 1. surgeons of first class, with rank of captains who may be employed as brigade surgeons or chiefs of ambulances; 2. surgeons of second class, with rank of lieutenant (all for ambulance service); 3. surgeons of third class, with rank of first lieutenant (all for ambulance service.)

The personnel of the veterinary service consists of one veterinary surgeon-in-chief,

with rank of lieutenant colonel or major, and a sufficient number of veterinary surgeons of the staff, ranking with captain, lieutenant, and first lieutenant.

APPROXIMATE RECAPITULATION.

	Cols.	Lt.-Colonels.	Majors.	Captains.	Lieutenants.	1st Sub-Lieutenants.	2nd Sub-Lieutenants.	Total.
General Staff	58	41	55	53	11	5	11	225
Engineers Staff	3	3	11	29	12	6	11	69
Artillery Staff	1	2	20	14	30	6	6	69
Judicial Staff	1	1	6	30	14	6	6	41
Commissariat Staff	1	11	29	28	10	48	11	127
Sanitary Staff	1	0	10	81	22	73	11	103
	70	93	130	220	74	131	11	747
Staff secretaries or Clerks								73

CORRESPONDENCE.

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

MITKAILLE.

(LETTER No. 3.)

Since despatching my previous sheets, I perceive that being, as I recollect, interrupted when I was reading "Centurion's" letter, I overlooked the fact that the suggestion of a commission of officers is his. I should like to have the naming of some of that Commission!

By the way, it is to be hoped the present Government will restore, or request to be allowed to restore, to the list, the name of Lieut. Col. George Danison.

So it appears that Mr. Gladstone, fortune's favorite, has, or hopes to have, a surplus of five millions, and has dissolved Parliament. Whatever party or state of things comes uppermost in England, her ruler will doubtless be too much occupied in conciliating the greedy and profligate British merchant, and in attempting to mediate between bigots of all sects, who prefer their threadbare dogmas to the higher duty of popular enlightenment, to think serious of British honour.

It seems strange to the student of history that the most obvious lessons which it teaches appear to be lost on statesmen of great nations. What might not England have been at this day had there reigned two hundred years ago a monarch with force of character to impress upon the nation a grand traditional policy? Within that period stand forth prominently as examples of what is to be achieved by traditional policy stern, persistent and relentless, as such a policy must be to maintain its country in the foremost ranks, three nations, whose birth may be said to have taken place within that period; for, if the germs of Russia's present greatness existed before the reign of Peter, they would have lain dormant till waked to life by genius, had it been for 100 years later. Whatever may have been the faults of Prussia and the United States—and they have neither of them at all times behaved with the dignity and forbearance of older

nations—there has ever been somewhat of the upstart, the parvenu, the "nouveau riche" about their diplomacy; whatever may have been their delinquencies they have alike kept a steady eye to the national aggrandizement. When a race is progressive (I am not talking of international morality), this is the right course. This noble aggressiveness, the product of the highest qualities of the highest races England has lost. Englishmen no longer think their mission is to bend the world to their type of civilization. I do not say that the English type is faultless, or perhaps even the best, but that when the desire to extend it fails, there is a weakening of the national fire, England has long become indifferent to the glory of seeing her flag fly in all the waste spots of the earth. What she gains by war she fritters away with imbecile complacency at the first treaty. In diplomacy she is overreached with a facility ludicrous and contemptible. As against the United States she cannot be kicked into self assertion even. At the bottom of all this decadence, despite all the milk and water Exeter Hall philosophy which pervades the nation, lies simply avarice. For example let the following paragraph, cut from a recent newspaper, bear witness that I do not use too strong a term in styling the British merchant "profligate."

"A merchant ship from Liverpool was captured the other day on the Gold Coast, loaded with 2,000 muskets, and a large quantity of powder for the Ashantees. All the muskets were of English make and marked "Birmingham."

But much of this is digressional from the point to which the consideration of Mr. Gladstone's surplus and traditional policies led me. The policy of Russia, Prussia and the United States has ever steadily kept in view territorial extension. In the case of Prussia, whose natural aspirations of the German people for the unity of their race and territory, that policy has been, more or less, from the time of the first Frederick downwards, promoted by a means entirely consistent with the common sense, but which no other nation seems to have had the courage to imitate. I mean the wise foresight of, to some extent, anticipating the expenses of wars by laying up treasure wherewith to begin them. If England had the courage, out of the surpluses of her enormous revenues, which have been so frequent of late years, to put by a million a year as a war fund, the very net would go far to make the belligerent nations think very carefully before they provoked her. But she is too far involved with Manchester and Exeter Hall to leave a hope of so true and bold a policy. Piece by piece she has supinely permitted the United States to curtail and hem in the territory of the Dominion. She is awakening now. But so much mischief has been quietly accomplished that thinking men may well entertain grave fears whether the awakening be not too late. Had Fed-

eration and the Fort Garry troubles occurred ten years since we should have been better welded together to-day. We have no right to impute disloyalty to the mass of the Reform party because some of their chiefs are chargeable with annexation utterances, and if the Pacific Railway be at once set on foot (if that be possible, in view of the Survey Records, which I believe it is) from the Pacific Coast and from Fort Garry, the Dominion from sea to sea will be too stubborn a fact to be set aside. But it behoves all loyal Canadians to closely watch whether results prove the sincerity of the present Government. These postulates may be safely assumed. Without the Pacific Railway the Confederation is a whisp of straw, and every year's delay increases the danger of it becoming so.

I have read with much interest Captain Colomb's paper on Colonial Defence, so far as published in your columns. The question seems to me to resolve itself into this: England cannot maintain an army sufficient for the defence of her Colonial possessions. If the British connection be deemed by her Colonies worth the maintenance, the larger communities amongst them, to wit, Canada, Australia, and New Zealand, and the South African Colonies, must provide for their own military establishments. With all her wealth England is unequal to this burthen, but all her available resources should be devoted to maintain her fleet on a scale of magnitude and efficiency which has not even yet entered into the hearts of officials to conceive. If she strain every nerve (without neglecting her own army) in that direction, there is no fear but that she could guard the channel, and, at the same time maintain a squadron in every sea powerful enough to sweep the ocean, and at the same time she should not be squeamish about "letters of marque." British Columbia depends almost entirely on the navy for protection, and were it not for the presence of part of the Pacific squadron in the harbor of Esquimalt from time to time, there is little doubt that British Columbia would not now be a Province of the Dominion.

If there is one thing in which England may triumphantly claim pre-eminence over all the nations of the world (except France and Spain), it is in blundering. She has consistently blundered in her sympathies on almost every conceivable occasion that has been afforded her. The Crimean war was a huge blunder, the want of sympathy with our natural kindred and allies, the Germans, in the beginning of their resistance to French aggression, was another. The sympathy with the South was another, or if not, then was the time to have gone to war. The South erected into a separate federation, and Maine and Michigan wrested from the Union, and the boundary line rectified from the Columbia River to the head of Lake Michigan, would have been results not impossible ten years ago. Now it remains to be

seen whether we shall hold our own. The destinies of Canada are very much in the hands of the present military.

At last, the Siamese twins are dead. But it would appear from some indications of an intention to make a profitable operation out of their bodies, that the world will not yet cease to be disgusted with prurient particulars connected with them. The ready acquiescence (as reported) in this scheme, of the women who consented to become the wives and to share the loathesome lives of the abortions, is what might have been expected. It is devoutly to be hoped that a speedy corruption, will defeat the ends of the speculators, and rid the newspaper reading world of a disgusting nuisance.

"FRANC TIREUR"

DOMINION RIFLE ASSOCIATION.

To the Editor of the VOLUNTEER REVIEW.

SIR,—In common with many others I regret to find that the interest once taken in the Dominion Rifle Association has in a great degree disappeared. At present I will not attempt to account for this apathy or indifference, my object is to intimate that instead of sending home a team annually at great expense, some of the old interest in rifle shooting might be called up if an International match was a feature of our annual gathering. The original idea of the promotions of competition at Wimbledon was to lay the basis of an interchange of visits, not that the Canadians should make periodical raids on the presence of English, Irish, and Scotchmen, content if a few pounds passed into their possession. I am convinced that if a suitable prize was offered, teams from the parent country and from the States of the Republic would find their way to Canada, and a stimulus would be given to rifle competition that we have not known. Honor has been won by Canadians in England; and the funds of the Ontario and Dominion Rifle Association attest the profit of the presence on the "Common" of Canadian volunteers. Let us for a season put aside the costly visit to England and endeavour on our part to procure the presence here of representatives of the mother country. If it was intended that the visit of our shots to Britain should promote emigration, certainly the presence in this country of gentlemen from the other side of the Atlantic could not fail to prove beneficial in the same direction. Beyond this we owe it to the British volunteer and to our many very kind friends at home that an effort be made to, in part, repay them for attentions marked by the most touching regard.

I am yours truly, M.

To CORRESPONDENTS.—"Sabreur" and "Gladiator" has been received and will appear in our next.

SWEET IMPATIENCE.

BY MATTHEW ARNOLD.

The sun light glimmers dull and gray
Upon my wall to-day;
This summer is too long;
The hot days go
Weary and slow
As if Time's reckoning were prever- and wrong;
But when the flowers
Have faded, and their bloom has passed away,
Then shall my song
Be all of happier hours:
And more than one fond heart small than be- gis
But song can never tell
How much I long to hear
One voice, that like the echo of a silver bell
Unconscious, low and clear
Falls, as a foretime angel voices fell
On St. Cecilia's ear;
And it would come again
And I shall hear it, when
The dawning summer bee forgets his song,
And frosty Autumn crumptions hill and dale;
I shall not murmur then
"The summer is too long!"

The trolleed grapes shall purple be,
And all
The forest atles re-echo merrily
The brown quail's call
And glossy chestnuts fall
In pattering plenty from the leafless tree
When Autumn winds blow strong;
Then shall I see
Her worshipped face once more, and in it see
shine
I shall cease to sigh:—
"This summer is too long!"

Meanwhile I wonder up and down
The noisly town,
Alone;
I miss the litho form from my side,
The kind, caressing tone,
The gentle eyes
In whose soft depths so much of loving lies,
And lonely in the throng,—
Each jostling bustling, grasping for his own,—
The weary words arise:—
"This summer is too long!"

Haste, happy hours—
Fade tardy, lingering flowers!
Your fragrance has departed long ago;
I yearn for cold winds, whistling through the
ruined bowers
● For winter's snow,
If with them, shio
May come to teach my heart a cherrier song,
And lovingly
Make me forget all weariness and severance and
wrong,
Whispering close and low,
"Here are we still together, Love, although
The summer was so long."

OUR DECREPIT NAVY.

During the debate in the House, on the 9th, on the Naval Appropriation bill, Mr. Archer, one of the Democratic members of the Naval Committee, made a striking speech upon the present condition of the Navy, in which he told some startling truths. We give full extracts from his remark:

MR. CHAIRMAN: No greater mistake on the cry of economy can be made than the reduction of the Navy. The true economy of this country is to keep up a fair, strong Navy, in order that war may be averted, and not be economical until war comes and then go into wild extravagance, which always follows in a state of war. The true economy of a government is to keep a strong Navy. We have the naval officers, and we should keep our naval vessels and sustain the Navy Department.

For years past the friends of the Navy have been doing their utmost to keep its head above water, with varied success. Now and then a liberal spasm seems to animate Congress but the effect is only momentary; an economical reaction ensues, and the Navy sinks back to its ancient inefficiency as regards material of war, until we are finally caught napping at the critical moment when we should be prepared to defend the honor of our flag.

No civilized people know so little about a Navy and what it requires as those of the United States. It is a separate profession, only understood by those who have been educated in all its details and who comprehend its necessity for the protection of our citizens and commerce.

The recent troubles with Spain have turned public attention to the necessity of placing our Navy in a condition not only to defend our shores, but, if necessary, to carry the war into an enemy's country.

In time of peace most of those who are not personally interested in keeping up a naval establishment are clamoring for retrenchment and the cutting down of appropriations to such a figure that it would be impossible for any Secretary of the Navy to keep our squadrons up to the standard of the most inferior powers. As soon, however, as there is a prospect of war, the noisiest opponents of naval expenditures are the first to cry out, "Where is the Navy upon which the nation must depend when its flag is insulted, its ships captured upon the high seas, and its citizens butchered?"

Mr. Archer gave a classified list of the vessels of the Navy, and proceeded:

The *Colorado*, *Wabash*, *Minnesota*, and *Franklin* cost \$3,795,000. The first named were built eighteen years ago, and the *Franklin* was launched ten years ago. They were built with auxiliary steam power and their average speed under steam is not over seven knots.

The *Niagara* was pulled to piece, for repairs, work suspended on her, and the vessel has so deteriorated that she cannot be rebuilt.

Of the thirty-one second rates, five have never been launched, but have rotted on the stocks. The *Nevada* and *California* were condemned, having been constructed of green timber.

In 1869 a board of naval officers was ordered to examine into the condition of the vessels of the Navy, and their report was laid before Congress. The board stated that the *Florida*, *Iowa*, and *Tennessee* were worthless for war purposes; that the *Stern*, *Congress*, *Worcester*, *Benicia*, *Alaska*, *Omaha*, and *Plymouth* are white oak vessels, and not to be classed as ships-of-war, although some of them have represented the country abroad. The aggregate cost of the above vessels was \$11,245,000, and they are characterized by the board as the offspring of irretrievable blunders.

The *Delaware* and *Illinois* are decayed: on them over \$2,000,000 were expended.

The *Susquehanna* is eighteen years old, and has gone to the scrap-heap. The *Powhatan* and *Saranac* sidewheel steamers, are twenty five years old, and although in service for want of better vessels, have outlived their natural term of existence. The five ships of the *Lancaster* class, with the four old frigates, are the only vessels in the service deserving the title of ships-of-war, and even they are not at all suited to go into battle with more modern vessels or resist the improved ordnance at present in use. The *Lackawanna* class, carrying, ten guns, has been somewhat improved, but still possess so many defects as to be very objectionable ships-of-war. They are slow under sail and under steam, and have no room for provisions or coal.

Of the twenty-three third rates the *Junata* and *Ossipee* can neither sail nor steam fast, and are dangerous at sea. In a recent gale the *Ossipee* lost all her boats.

The *Quinnebaug*, *Swatara*, and *Galea* have all gone to decay, but, like the *Phoenix*, are rising from their beds with new live oak

frames. What they will be remains to be seen a year hence.

The *Mohican*, *Iroquois*, *Kearsarge*, *Wachusett*, *Tuscarora*, and *Wyoming* are a fair class of vessels, but too small to cope with ships of any size. They steam and sail well, however, and would do irreparable damage to an enemy's commerce. The Navy is much in need of such vessels with modern improvements.

The *Mohican*, is rotten, the *Nantasket* in like condition, and *Narragansett* is so slow she can scarcely keep out of her own way. Thus, out of these thirty-one vessels, only five are fit for service.

In the East Indies we have two old "double-enders," the *Monoway* and *Ashuelot*. These cruise in the rivers of China, and are too unseaworthy to be sent home. Everybody conversant with naval matters is aware of the utter worthlessness of this class of vessels, and in what a spirit of stupidity they were conceived. It is only strange they have not long ago proved collins for all on board of them, yet these offsprings of our late war are classed among the ships upon which the country must depend in case of hostilities. Even the Chinese laugh at them as inferior to their junks.

The *Nyack*, *Shawmut*, *Kansas*, *Nipsic*, *Saco*, and *Yantic* are small 3 gun vessels, whose best point is their imposing appearance since being rigged as full ships. Such vessels may delude the Chinese, but cannot deceive those accustomed to ships of war. The *Nyack* is in Rotten Row, in Canton, where all the rest of her class will go in the course of two years, at the end of which time they will be literally worn out.

RECAPITULATION OF STEAMERS.

On the stocks, work suspended, and decayed.....	16
Worthless.....	2
Under reconstruction, which will require six month.....	2
Number not to be classed as ships of war.....	5
Total number of steamers not available.....	25

Leaving a remainder of thirty-eight available vessels, including the ten ships reported by the board of naval officers "worthless as ships of war."

Of the sailing vessels, the *New Orleans*, at Sackett's Harbor, and *Virginia*, at the Boston Navy-yard, have been on the stocks since 1818, and are both rotten. Six are receiving ships, and are mostly decayed, their decks in some cases not permitting the exercise of guns, and the spars and rigging in such condition that the men cannot be sent aloft to exercise sails. Most of these vessels have attained the usual age at which an admiral in the Navy is retired, and were formally put down in the register as mounting 74 guns each.

The average age of our sailing ships, leaving out the *Idaho* and fourth rates, is thirty seven years.

The *Constitution* was built in 1797, and is all in pieces, to be pitched up for the centennial celebration. The *Independence*, at Mare Island is fifty nine years old, is decayed, and is used as a receiving ship. The *Vandalia* and *Marion*, built in 1828, and 1829, are being converted into screw steamers, and will not be ready for sea under six months, and even then will be but a small addition to our naval force. These vessels are now on the register as carrying twelve guns—a system of estimating batteries that has existed since 1818, but which affords no clue to the actual force of our ships.

The *Portsmouth*, sailing sloop of war, with a light battery, is absent surveying the Pacific ocean. Being engaged in a peaceful pursuit, she is unprepared for war, and in case of hostilities would be an easy prey to some one-gun steamer that could take position and cut her to pieces.

Four of the sailing vessels are store ships. The *Idaho*, built at an expense of \$500,000, is lying at Yokohama, Japan, good for nothing, and has been ordered sold, and the money turned into the Treasury.

Four of the sailing vessels are used as practice ships at the Naval Academy and as ordnance vessels; but none are in condition to go to war, for want of steam power; and although noted in the register as carrying a certain number of guns, they are, in some cases, not armed, at all, and in others have only unserviceable ordnance.

All the old ships of the line, once so formidable, are used as receiving ships. They are mostly gone to decay; are unfit for sea; and it would be unwise to expend money on them, as no officer would wish to command such vessels in time of war.

When Ericsson built his little *Monitor* and it was launched against the plated vessel *Merrimac*, all the wooden ships of the line went to cover, as sportsmen say, and from that day to this no vessels of that kind have been used for battle in foreign navies. All experienced seamen now how useless a sacrifice it must be to bring these ancient structures into action against the quickly-plated war vessels of the present day. Had we vessels of this kind now with steam power we should probably use them from sheer necessity, as we did unfit vessels during the war of the States, when the indomitable spirit of our officers undertook the most difficult enterprises and succeeded, to the surprise of all Europe, whose officers predicted certain defeat.

We have no right to ask men to sacrifice themselves when we deny them the means to insure success. Naval officers do not fight for pleasure, but from a stern necessity and the orders of their Government. The Navy was not made as an amusement for naval officers, but to protect the honor and interests of the Republic when assailed by foreign arrogance; and if we expect success we must give the Navy the means of accomplishing it.

We send our officers to school at an annual expense of \$120,000, and educate them to the highest professional standard; that is, we educate them to be killed in defence of their country and make them food for gunpowder. We expect them to conquer or die, and would be to the officer in command of a 5-gun ship who should be obliged to strike his flag to an enemy of four times his force! The nation, in its humiliated vanity, would never forgive him. We expect everything from naval officers, and yet deny them the means to accomplish the ends in view. It is like telling a man to walk the rope across Niagara Falls, and giving him a thread to walk on.

I will now refer to our iron clad Navy, of which so much has been said and so much repeated. Constant allusions are made to the great efficiency of this part of our naval force and the wonders to be accomplished by their formidable guns. There stand on the Navy Register 35 vessels of this class, carrying 121 guns, and were they really good vessels this would be a formidable force; but they were built without due consideration of what they were to accomplish.

Originally intended for coast and harbor defence, they have been made to do the duty of sea-going vessels, for which they are utterly unsuited.

A recapitulation shows that out of 121 guns named in the Register, we can count on fourteen guns now and fourteen guns more in four months' time.

Among the vessels reckoned available are twenty-seven tugs, such as you may see any day in the Delaware or New York harbor, tugging merchant ships to the sea. They vary in size from thirty to three hundred tons, and some are built of wood, others of iron. The *Polaris*, lost in the Arctic expedition, still figures on the Navy list, and other tugs are employed in towing vessels in and out, or running from the Navy-yard to the powder station. None of them are fit to carry anything larger than a howitzer, and few of them have any speed. For want of better vessel several of the tugs have been fitted as torpedo boats, and one or two used as despatch vessels at Key West; but such craft do enter into the number of war vessels, and their names on the Register only serve to delude people with the idea that we have an effective Navy.

In the above statement you have the facts, which can easily be verified by a reference to the reports of the Secretaries of the Navy since 1861, in which all these things are set forth, and they are particularly noted in the report of the board of which Rear-Admiral Goldsborough was president in 1861-'62. It is a humiliating story to tell, and it looks as if some one had neglected his duty, but as Congress has made no appropriation whatever for the repair of these vessels, or to supply their places, we must conclude that the Navy Department is not to blame; but the blame is with us. The magnificent bubble of one hundred and sixty-seven ships and twelve hundred guns has been pricked, and the indisputable fact remains that we have only a Navy on paper, and it has required herculean efforts on the occasion of the Cuban imbroglio to get a few ships to sea to maintain the honour of the flag, which is on the ocean in the keeping of our Navy. Out of all our ships afloat when these troubles broke out we could only command thirty seven vessels, carrying 530 guns, in the European, North Atlantic, and South Atlantic waters, to recall which would leave our commerce in case of war at the mercy of the smallest privateer the Spaniards could send to sea.

PROF. GOLDWIN SMITH ON THE UNITED STATES AND CANADA.

In the session of the Trades-Union Congress, held at Sheffield, England, on Jan 14, Prof. Goldwin Smith made the following remarks in the course of a long address:—I can tell you what has fallen under my observation as a resident on the other side of the Atlantic. If there are any gentlemen here who met me the other day at Bradford in a small private conference, they will excuse my advertising again to the circumstances which I mentioned there. I am a professor in the university founded by Ezra Cornell. The university was founded for the special benefit of the working classes, in the hope that it may form the ladder by which the sons of toil may mount from manual labour to the higher work of the intellectual world. When I had nothing more to do here I felt that I could not devote my labour to any better object than that. I have had several applications from young artisans in this country who wished to emigrate and enter at the Cornell University. I have not ventured to encourage those aspirants, and for this reason, that the fact is the intellectual traders are very much overstocked in the new world. That was my reason, and not

because I had the slightest doubt they would receive the warmest welcome, the kindest treatment, in the university founded by Ezra Cornell. Mr. Cornell had a scheme very much at heart for the combination of manual labour with university education. That scheme has not borne so much fruit as he expected, though I confess it has borne as much fruit as I expected. It has not failed, but it has succeeded in a lesser manner than its founder hoped. The reason of its partial failure is not that there is any feeling whatever against the combination. Whatever may be the faults of our society in the new world, labour there is sincerely honoured; there is no man in the highest society of the United States or Canada who does not feel proud of having sprung from the ranks of labour, and glad to point to it as an escutcheon. At Cornell University I have had students at my history lectures in their working dress, and when they have taken honours at the university I have observed with pleasure that they were greeted by their fellow-students with enthusiastic applause. The reason why the scheme did not succeed to the full extent intended is simply this—that you cannot, except in very rare instances, effectually combine hard manual with hard intellectual labour. Labour of all kinds draws upon the same fund of nervous energy, and when you have exhausted yourself by working with the hands you need recreation. You cannot pass to the superior work of the brain. Still the scheme has left its impress at Cornell University. It gave to us a distinct complexion, of what I, as one of the professors of that university, am proud. The rich do not come to us with their luxurious tastes and idle propensities. It is a poor man's university, and there is no university in the world where the poor man can get his education at so small a cost and at so little expense to his feeling in the way of humiliation. Therefore, I am glad to call myself professor of this university, and feel that in devoting myself to its prosperity I am carrying out that which, in company with my friends here, I pursued during my residence in England. These are the facts. I wish to mention, in the year after my arrival there came to me a party of fourteen English artisans and their families. I did not invite them. I should never venture to take upon myself to invite any of them to emigrate, because I know too well that emigration, though its result may be most excellent, at first brings a man into hardship and disappointment. I know the first hours, weeks and months of the emigrant are often hours, weeks and months of dispondency and for longing for his own home. Therefore I did not venture to invite these artisans; but Ezra Cornell came into my room one day with newspapers and said: "I see that owing to the distress in the building trades a number of men in these trades are out of employment in London. Write and tell them there is work for them here." I wrote accordingly mentioning a smaller number than he had told me, rather fearing the result, but still feeling that I was bound to carry out his beneficent intentions. The result was that fourteen artisans agreed to come out to work on the buildings of that university. Before they started from England a breakfast was given to them, at which was present Mr. Mundella—a man who is always to be found where kindness is to be shown and honour done to labour; a man who is not like many men who made their fortunes by labour, who separated themselves from the labour by which they rose and passed into the lower ranks of the aristocracy. He remained in the heart a true workman.

Through some misunderstanding, the artisans who came out were not aptly chosen for the enterprise. They were workmen accustomed to the finest work; we wanted men for rougher work. The artisans came. Their first weeks and months were a period of dependency and disappointment. They found things different from what they had been accustomed to in the old country. They did not like to mix trades. They did not like the habits and diet of the country, and longed for England. One of them wrote some desponding letters to the English newspapers. Very painful for Mr. Cornell to read, but, notwithstanding this Mr. Cornell has always followed that man with great kindness, and when his health failed gave him an appointment adapted to his weak condition. However, I was very anxious for them, and did what I could to comfort and guide them. Some were enticed away by the nominal high wages in the great cities. The wages of the mechanic in the United States of America are nominally very high and dazzling. Five dollars a day tempts a man; but recollect that \$5 a day in New York, where house rent, clothes, and everything is dear, is only a high rate of wages nominally. I said to some of the artisans, "If you will stay with me in Ithaca, and let me do what I can for you, I think you will do better than if you go to New York. This is a rising place, and you may rise with it if you stay here; but if you go away to New York and engage there under the great employers as journeymen, you may remain. But if you stay there you may become something better. The last time I was at Ithaca we all dined together in honour of what I believe is their assured prosperity. These men are now obtaining high wages, and have risen to high position, industrially and socially. Many of them are building houses, others are freeholders, and the rise in their social position is at least as marked as the rise in their material position. You can see it in everything. That indicates a man's feeling that he is not one of the lower classes, but is one in a free country, living in a land of equality, where one man is the friend of another. It has happened in the States, but I must tell you that in Canada, where I principally resided, though I go every year to give my lecture at Cornell University, there are, in my opinion, quite equal advantages to the States, and in some respects greater advantages. I was drawn to Canada by the fact that members of my family were residing there, and that they had found it a pleasant home; but I have also found Canada a very happy and pleasant country to live in. It affords, as I say, all the advantages of the States, and some further advantages besides. At the present moment there is a check to the prosperity of the United States. I believe it to be only a temporary check, knowing the country and knowing the people, and seeing the amount of wealth and industry there is in these States. I have no doubt whatever that this crisis the same as several crises before it, will pass away. At the present time it has created wide-spread distress, and thrown many of the working class out of employment. That crisis has not spread to Canada. We have suffered a good deal from being denied reciprocity of trade with the United States. It is denied us on account of some misunderstanding between this country and the United States. It has separated our trade from the States, and therefore we are not involved with the American crisis. Then there is another advantage which Canada possesses. I am sorry to say that the re-

sult of my observation in the United States to convince me that feeling against England is very high and very deep-rooted. We, as Englishmen, feel it deeply. Many of those in Canada have left England, like myself, without any diminution of love for England, more because other considerations drew to the other side of the Atlantic. They still love the old country, and they cannot bear to be among people who are always breathing hatred of it. I should be, perhaps, puzzled to tell you why it is that Americans hate England so much. Probably it might be traced to many influences. There are the old quarrels, and there are the celebrations of those old quarrels. Then there is this influence of the Irish, and perhaps the influence of the protectionists has something to do with it. In the Eastern States the feeling against England is very strong. It is, however, not so strong in the West, or at any rate it does not prevail to the same extent as it does in the East. In Canada you do not meet with that feeling. You are there among Englishmen. You are welcomed as an Englishman from the moment of your arrival in Canada. In the United States you have to live five years before you can be naturalized, and until you are a naturalized subject you are placed under certain disabilities in regard to the ownership of property. British Canada is thoroughly British; there you find yourself not only among those who speak English, but among those who are in heart English, whose words, habits and customs are English, but on the other hand it is not England in the sense of being aristocratic England. I think the cause of Canada has been somewhat ill pleased by the emissaries of the Canadian Government. They have come here and said to the suffering English labourer, and to the suffering English artisan, "Go to Canada, and you will there find the exact counterpart of England." Again, this is only partly good hearing to the English labourer and the suffering English artisan. There are some things in England which the labourer and artisan want to leave on this side of the water. He says to himself, if you really have in Canada everything we have in England; if you have there an aristocracy to bar the way of progress to the people; if you have there the squire, to whom I am bound to cringe all my days; if you have there the landlord system; if you have there the person to help the squire and the landlord to keep his foot on my neck; if you have all these blessings in Canada, I will go to the United States. But it is not a fact that we have all these blessings in Canada. We have there a little mock court which I have no doubt plays some curious antics in imitating the real courts. There have been efforts to propagate an aristocracy in Canada, but it has not been eminently successful. Four gentlemen have received aristocratic honors from the Imperial Government, and three of the gentlemen who received those Imperial honours were involved in the Pacific scandal; and the Government of Canada has declined to bestow any further Imperial honors on Canadians. Then, as to the Church question, that has been distinctly settled in the sense of our perfect religious equality. We have an educational system such as, while you have an established Church, you will never get here. We are Englishmen in this sense: We love England, and look back with fondness to it, and desire to retain in our memory illustrious deeds recorded in its history, and if we ever become a separate nation, as I believe some day we shall, our feeling towards England will, depend upon it, not be

the least cooled by that. In Canada men are rearily upon an equality. Every man has a fair start; a labourer is honoured as he is in the United States. The Prime Minister of Canada at this moment is a man who rose from the ranks of labour. We are really a community without privilege—thoroughly democratic. A man is esteemed for his intrinsic worth, and not raised above the head of his fellows by any artificial rank. No emigrant to Canada need fear finding anything of the kind on the Canadian shore. Mr Arch has informed the British public much more accurately and correctly than I can of the exact prospects of the different kinds of emigrants. I don't think I can be deceived in saying the farmers of Canada are a prosperous race. The climate in Winter is severe, but in Summer the country is amazingly prolific, and the growth of vegetation is extraordinary rapid, and the farmers, so far, are certainly prosperous. I should not recommend the English rural agricultural labourers to go out upon a lot of land in Canada, as it is so raw, and requires so much cultivation but they consider that so much social prestige attaches to the position which the possessions of land gives to man, that they desire at once to be possessed of it; but when a labourer goes at once into the possession of a lot of land he has many hardships to contend with, and has many things to do which he was not accustomed to do at home. For these reasons my belief is that the English agricultural labourer will do well by going out first as an assistant at a Canadian farm, but the position would be quite different from that of the English labourer, for he would be well treated, well paid, and would probably in a few years become a Canadian himself, and would have learned how to cultivate his land. As to the artisan, the only remark I think I have to make is this: I doubt if a highly-skilled artisan betters his position by emigrating, but the ordinary English artisan has a fair prospect before him in Canada. Everything in that country looks like hope and expectation. Its resources are great, its mineral wealth is great, its ground produce is large, its water communication and power are abundant, there is everything that can make a prosperous and wealthy country, and the emigrant, thrifty and industrious, will share its rising prosperity. I hardly know a man in the higher ranks of Canada who has not risen from the ranks of labor. It has been said that emigration depends on the man. Well, everything depends on the man; in every walk of life it depends upon the man himself whether he succeed or fail; but I doubt in the case of an emigrant to Canada that more depends than in the ordinary walk of life. I think that a man who has the ordinary complement of limbs, who has sound health, and who is determined to be industrious and temperate, is sure to be prosperous and do well. If, however, distress fall upon the people of this country; if this wonderful prosperity which I find in all cities receives a check; if any labourer should be thrown out of employment, or if he desire to leave the dominion of the British aristocracy and come to the realm of equality, Canada will give him a warm welcome and a prosperous and happy home.

A despatch from Florida Bay states that the naval fleet yesterday went through some sailing manoeuvres. Whole broadsides were fired by each vessel.