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The Volunteer Review

AND MILITARY AND NAVAL GAZETTE.

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

VOL. VIII. OTTAWA, (CANADA,) TUESDAY, MAY 26, 1874. No. 21.

NEWS OF THE WEEK.

THE Queen's Birthday will be celebrated to-day with great eclat throughout the whole of the Dominion.

The new Pacific Railway Bill and the new Election Law Bill both passed through their third reading on Wednesday night and were sent to the Senate for concurrence. The Election Bill is to go into effect on the 1st July next. The voting is by ballot.

The Supplementary Estimates submitted to the House of Commons on the 19th inst., amount to $1,837,145. Among the most noticeable may be mentioned $1,500,000 for Pacific Railway construction and improvements on navigable waters in the interior in connection therewith; telegraph lines in British Columbia $23,000; and to meet the expenses attending the making of any treaties which may be concluded during the year with the Indians of the Sackatchewan $34,000.

Hon. Mr. MacKenzie has introduced a bill to enable the Government to lend the various Provinces in the Dominion, such sums of money as they require to complete their public works such amounts not to exceed the amount on which the Dominion is now paying interesting to such Provinces, by way of subsidies.

The New Brunswick House of Assembly has been dissolved, and writs for a new election, returnable on the 30th proximo, are ordered.

Dr. Grant, of the City of Ottawa, has been chosen as one of the delegates from the Dominion of Canada by the American Medical Association, which meets this year at Detroit on the 2nd June. This Association embraces the entire American States, and its members number several hundreds.

Lieut. Colonel Skinner has been returned for South Oxford by a majority of 275.

The advised sailings of vessels for Quebec up to the 20th ult., number about fifty in excess of last year. The arrival of the spring fleet is however, considerably later.

The timber boom at Fredericton broke on Wednesday, and some millions of feet of timber, went adrift. The river is raising rapidly.

About four o'clock on the morning of the 19th. A serious fire was discoved in the Provincial Penitentiary, in the premises occupied by Mr. S. T. Drenan as a cabinet shop. The fire started about the floor of the second flat, over the engine room. The prison officials succeed in confining the flames to one building which, however, was completely gutted, only the wall remaining. An attempt to save some prison clothing stored in the building were unsuccessful. The men worked well, both the guards and those of the convicts who were released to aid in the suppression of the fire. The loss to the Government is about $30,000; the loss of the contractor is about $15,000. Nearly all the articles in the shop were destroyed. The origin of the fire is supposed to have arisen from the engine room but how is unknown, as the inspection of the night round showed no signs of fire.

The breaking of the reservoir at Goshen, Hampshire County, Mass; has been of the most disasterous consequences, both in the destruction of life and property.

The cause of the disaster would appear to have been too weak a dam to contain such a large body of water, which was 150 acres in area and thirty feet in depth.

The extent of the disaster increased rather than diminishes, and it is as yet impossible to give a full and reliable estimate of the loss of property and life.

At Haydenville on the 19th, 60 families have applied for relief. The temporary funds furnished from Northampton yesterday are now exhausted, a mass meeting has been called at Northampton this evening to devise means for the continuous and systematic relief of the sufferers. The whole community is moving in the work of relief, and everything that can will be done to alleviate the loss and suffering.

Hayden, Gere & Co., at Haydenville, the proprietors of the destroyed brass works, commenced the work of rebuilding this morning, but have been obliged to desist on account of the rain. They will resume their work as soon as the weather allows, and hope to have their building ready for occupancy in three months' time.

Mr. H. L. James, the woollen manufacturer at Williamsburg, whose mill was left standing, although badly damaged, will prepare for the full resumption of business as early as possible. The most of the other business men affected by the disaster will probably resume as early as practicable, but the suffering of the labouring classes must inevitably be quite severe.

Carefully revised estimates fix the total loss at $1,000,000, of which the manufacturers and mill owners sustained $550,000; the towns of Williamsburg and Northampton $15 000 for the repairs of highways and bridges; and the operatives and individuals not less than $150,000 or $200 000.

The Springfield *Republican's* latest revised lists make the total number certainly lost 145. distributed as follows among the four villages; Williamsburg 60. Skinnerville 4 Haydenville 30. and Leeds 51.

A Northampton despatch states that, although in some localities the industrial interest will be revived, it is scarcely possible that the present generation will live to see the valley in its former thirft and industry.

Propositions have been made by New York capitalists which may result in the rebuilding of Leeds, which was famous for buttons and paper.

The brass works of Hayden & Gere will be speedly rebuilt on the old site in Haydenville.

Williamsburg has enough left for a nucleus, and is likely to revive in the course of time.

Skinner's mill, of which there is not left one stone upon another, will not be rebuilt.

A large number of Irish harbored revengeful feelings against Spellman, whom they falsely accused of detaining Cheny, so that the latter could not warn the people of the flood in season. They threatened to burn his house and hang him. Yesterday Spellman removed his family, with half a dozen neighbors thoroughly armed, and picketed his premises.

The Irish began to gather in knots of four or five, but finding a detachment of troops on duty, the rioters dispersed.

The following is an extract from a private letter from the Mayor of New Orleans: "Unless the resourses for relief be increased in some way to $1,000,000, many thousands must perish by famine, even that sum will not more than suffice to save the lives of the inundated till the flood subsides and overflowed lands are again tillable."

A strange disease prevails among the fish of river and lake at Milwaukee, Wisconsin. Their flesh under the microscope is found to be alive with animalculæ. Millions of dead fish are floating upon the surface of the water, and dealers have been forbidden to sell any.

The Government of San José de Guatemala has settled with Cousul Magee for the recent outrage upon his person by paying him $10 000.

The Queen, it is reported will visit Russia in the autumn.

The Czar, at a reception of the diplomatic corps in London on Saturday, declared that the policy of Russia was the preservation of the peace of Europe, in which he hoped to be aided by the Governments represented by those whom he addressed.

In the treaty for the establishment of the British protectorate over the Fiji Islands it is stipulated that Great Britain shall assume all financial liabilities, pay the King $15,000 per annum, with other pensions to various native chiefs; recognize the ruling chief as owner of the lands, which are to be opened to settlement by foreigners within a year.

ANNUAL REPORT ON THE STATE OF THE MILITIA FOR 1873.

(*Continued from Page*, 240)

FORCE ON SERVICE AT FORT GARRY.

The establishmont, as reported on the 31st December 1873, consisted of the following:—

Distribution.	Field Officers.	Staff	Captains.	Lieuts. and 2nds.	Ensigns.	Staff Sergeants.	Color Sergts.	Sergeants.	Buglers.	Privates.	Horses
Artillery	...	...	1	2	...	3	4	4	3	66	...
Infantry	1	4	4	4	4	9	10	16	5	195	3
	1	4	5	6	4	12	20	20	8	261	3

For further information relating to this force, I respectfully refer you to the report of Lieut. Colonel W. O. Smith, C. M. G., Deputy Adjutant General, Military District No. 10, which will be found in the appendix.

During the year hut barracks have been erected at Fort Garry, and the same are now occupied by the *Dominion force at* that station. This measure has added much to the comfort of the men, and will prove economical as compared with previous arrangements.

RIFLE ASSOCIATIONS.

The aid given to Dominion, Provincial and other rifle associations amounts to about $18,000 per annum; that granted to the Dominion Association is expended in prizes, and for the expenses of a team of Canadian marksmen to Wimbledon each year. The success which has attended the efforts of the Association in respect of this team, renders the object worthy of continued support and commendation. Apart from the good results to the men, and the emulation it creates amongst Canadian marksmen to be selected for the team, it has attended in a remarkable manner to make the Dominion better known throughout the whole world; and as an advertisement for emigrants is of great value.

The aid granted to provincial associations is entirely expended for prizes and expenses attending the matches.

Under the present system the local associations obtain aid direct from government, without being compelled to affiliate with any central organization; but it appears to me that these organizations for competition in rifle shooting have attained such a position as to render the adoption of some plan on one uniform basis necessary.

Such a plan might perhaps be arranged as follows:—1st Provide the necessary means for expenses of the Whimbledon team and contribution in aid of the Dominion Rifle Association; 2nd. Divide one half of the remainder of the appropriation amongst the several Provincial Associations according to population, and the other half amongst the several county associations in the Dominion, on the understanding that only those affiliated with the Provincial association of their respective Provinces, and who make proper returns of matches or prize meetings, be recognized as entitled to aid, 3rd. The grant to county associations to be based on the number of competitors at matches, and upon the amount of local contributions in money, in aid of the funds of the respective associations for prizes; 4th. Returns of prize meetings from all associations receiving government aid to be sent to the Department of Militia and defence.

AID TO EFFICIENT BANDS.

The total sum available for this service during the past year was $7,000, and it has been divided amongst the battalions of militia who maintain bands of music, the amount paid to each, ranges from $50 to $100 per annum, according to extent and efficiency of the bands. This aid, trifling as it is, has proved a great boon to the officers, and reduces to some extent the personal expenses of each, in respect of payments to the band fund of their respective corps.

ORDNANCE AND EQUIPMENT OF FIELD BATTERIES OF ARTILLERY.

The expenditure authorized under this head has been devoted during the past three years to the purchase of the new 9 pounders muzzle-loading rifled field guns, and harness, such as are being issued to the Royal Artillery. The guns are issued as received to the older field batteries of artillery, in exchange for the smooth bore guns now in possession; and the latter are thus made available for newly organized batteries not yet equipped.

HORSES FOR FIELD BATTERIES.

Some difficulty is experienced by commanding officers providing horses, for the allowance, and under the regulations now in force. This difficulty is not confined to any one district, but is more apparent in some districts than in others. I have therefore taken steps to communicate with these officers through the staff in the different districts, in order to ascertain the difficulties, and the suggestion each has to make in respect of his own corps.

SCHOOLS OF INSTRUCTION.

The two Schools of Gunnery at Kingston and Quebec continue to afford a satisfactory means of instructing officers, non commissioned officers, and men of the artillery. These schools have been most successful since their organization, and there seems to be no difficulty in keeping the strength up to the full establishment. Seven officers, and 136 non commissioned officers and men have joined the school at Kingston, and seven officers and 150 non commissioned officers and men have joined the school at Quebec during the year ending 31st December, 1873. Special reports made by the respective commandants on the state and conditions of the schools are attached hereto, to which your attention is invited.

In addition to the Schools of Gunnery at Kingston and Quebec, there are six schools of military instruction in operation under the District Staff, viz.: Toronto, Kingston, Montreal, Quebec, Fredericton and Halifax The numbers in attendance at these latter schools are fully up to former averages, but as the schools are only maintained during the winter months I am unable to submit the exact returns until after the 1st June next. These schools have been most useful in imparting primary instruction to the officers of corps and candidates for commissions in the Militia. It is, however, evident that they are not sufficient to supply the higher class of instruction which has become indispensable to the maintenance of the present force in a satisfactory condition; nor do they supply instruction such as is necessary for the education of those who may be required for the future military necessities of the Dominion,

The ordinary duties of an officer may be performed without special training, but the higher class of duties and the capacity for superior command, can only be reached through a long course of study and preparation. It is therefore certain that some provision beyond that now existing is needed. This want might be met in two ways. 1st. By sending a number of young men to England, where suitable facilities are available. 2nd. By the establishment of a high class military school in Canada.

As distance would likely prove an impediment to the first course being adopted, the second will no doubt, commend itself as worthy of consideration. An institution at which young men could secure a superior military and scientific education would produce results alike beneficial to the Dominion and to those who join for instruction. To the Dominion it would prove a ready and economical means of providing officers whose military services could be utilized hereafter in the different districts, and to the cadet an education which would fit him for both civil and military duties, would give undoubted facilities for remunerative employment at all times.

I have the honor to be, Sir,

Your most obedient servant.

WALKER POWELL, Lieut. Col.

Acting Adjt. General of Militia.

Canada.

HEAD QUARTERS,

OTTAWA, January, 1874.

APPENDIX No. I

MILITARY DISTRICT, NO. 1

Deputy Adjutant-General's Office,

London, 27th November, 1873.

SIR,—I have the honor to forward the enclosed Inspection Report, for this District of the corps that have performed their annual drill for the current year, up to the present date, being about one-half the strength of the district; the remainder, purpose to drill during the month of June, next year.

In the 1st Brigade Division, under command of Lieut-Colonel Moffat, Brigade Major, the following corps performed their annual drill in accordance with general *orders, viz:*—

The "Mooretown" and "Kingsville" Troop of Cavalry 6 Officers 77 non-commission officers and men.

The Sarnia Battery Garrison Artillery, 3 officers 28 non commission officers and men.

The 22nd "Oxford" Rifles; the 24th "Kent" Infantry; the 26th "Middlesex" the 27th "Lambton"

And the Windsor and Lemington Companies of Infantry. Total strength, 109 officers, and 1,238 non commission officers and men.

The total strength of the Brigade being 1,471, and an average of 46 per company, or corps

This Brigade has turned out very well, their drill and general efficiency been very satisfactory. Lieut. Colonel Moffat reports, the 22nd Oxford Rifles being in a highly creditable state, their strength averaging 49 per company, on parade.

In the 2nd Brigade Division, under command of Lieut. Colonel Service, Brigade Major, the following corps drilled, viz.—

The "Wellington" Field Battery of Artillery, 4 officers, 66 non-commission officers and men; 51 horses, 4 guns.

Goderich Battery Garrison Artilery; 3 officers; 32 non commission officers and men.

32nd "Bruce" Battalion of Infantry.

33rd "Huron" Battalion of Infantry (6 companies only), total strength 512 officers and men, and total strength of Brigade, 617, being an average of 32 per company, or corps.

The "Wellington" Field Battery turned out nearly full strength, and were in a very efficient state, they had the advantage of an instructor from the School of Gunnery during their drill, and profited very much by his exertions in teaching them.

The whole strength of the district that have drilled so far, are 2,088 officers and men; leaving one field battery, 1 troops of cavalry, and 35 companies of infantry to perform drill next year. The drill was carried out, as a general rule, by separ to battalion camps, and squad and company drill was chiefly practiced, but they having to fire 40 rounds of ammunition, per man, at target practice necessarily reduced the drill hours considerably, which, in camps of only eight days' time, was found to interfere very much with satisfactory progress. As a general rule, the whole of the corps turned out very well, their uniform was in good order, and the arms and accoutrements in a very efficient state.

I have to report that the ordes from the Department of Militia and Defence, regulating the muster and payment of the force that turned out for drill, were strictly carried out.

Many of the company drill sheds are in a bad state of repair, and will be found to be a constant expense if kept in proper order; but it appears to me, that it is a question whether, instead of expending more money on them, it would not be advisable to erect a battalion drill shed in each county where there is an efficient battalion, and to have a caretaker to attend to the arms and uniform when the corps is not at drill; by such a method the arms, accoutrement and uniform would be found to last very much longer, and thus save considerable expense to the country.

I have much pleasure in acknowledging the great assistance rendered me by the Staff Officers of the District; and I beg most particularly to call your attention to the efficient state of the First Brigade Division, which is in a great measure due to the care and energy shown by Lieut.-Colonel Moffat, its Brigade Major.

I have the honor to be, Sir,

Your most obedient Servant,

JOHN B. TAYLOR, Lieut.-Colonel,

Deputy Adjutant-General,

Military District, No. 1

To the Acting Adjutant General, &c., &c., Ottawa.

HEAD QUARTERS,

LONDON, 1st Nov. 1873.

List of corps not inspected up to this date.

1st Regiment Cavalry, St. Thomas Troop.
" London Troop.
" Bayfield Troop.
" Stratford Troop.
London Field Battery Artillery.
7th Battalion Infantry.
25th Battalion.
28th Battalion (except No. 5 Company.
29th Battalion.
30th Battalion Rifles.
33rd Battalion, Nos. 2 and 6 Company's.

JOHN B. TAYLOR, Lieut. Col.
D. A. G., Mil. Dis. No. 1.

(To be continued.)

THE INFLEXIBLE.

Some time ago we laid before our readers certain particulars in reference to the design of the coming ironclad—the Inflexible. Since that period the data concerning this vessel have become more fixed and definite, and have assumed a character which renders them in the highest degree interesting. In fact, more is now promised than we had dared to hope for, though not more than we had ventured to advocate. Circumstances have pressed the Admiralty to take not merely a step but a stride. We believe this to be the truest economy, and we are glad to find that the constructive department of the Admiralty is giving proof of eminent ability, sufficient to cope with the high demands now made on naval architects. The late Chief Constructor, after resigning his post, pointed out that it was competent for a second rate naval Power to make itself suddenly formidable by the possession of a ship of war which should be superior to any other that could for a time be brought against her. Whether Mr. Reed's attention was fixed on Italy we know not. Certain it is that this Power has attempted to play just such a part. The Italian Government have asked Sir William Armstrong to produce the biggest gun he can, with the intention of applying it to naval purposes. What is likely to be the answer to such a challenge, or, commercially speaking, such a commission? Sir William founded the race of giants in artillery, and he is doubtless anxious to rival Woolwich—it may be to excel. Woolwich must be equally anxious to excel Elswick. At this hour it would seem that each one is waiting for the other. The War Office Committee, who have so long endeavored to find the proper powder for the big guns of the present era, have gone on building up their grains until they think at last they have an explosive worthy of their weapons. We have now advanced to "mammoth pebble"—something like the "arf a brick" with which the denizens of the Black Country are supposed to salute unwelcome strangers. The grain of this extraordinay species of gun-powder is in the form of a cube, measuring 2 in. each way, a black shiny mass like a piece of coal, and weighing half a pound. Itself a missile, if such a lump escapes the muzzle of a gun unconsumed, it will score a plate of iron, or kill a man, as may have a chance. A blank cartridge of this sort of stuff when fired sends a portion of its material whistling and shrieking through the air as if a shell were speeding on its way. When the gun is loaded with both powder and shot of course the combustion is more complete, and the requisite propulsion is given to the projectile without that sudden and useless excess of strain on the gun which occurs when powder of smaller grain is employed.

But what sort of a weapon is the new gun likely to be? The Inflexible is to carry four guns of equal size. We may reckon that they will not weigh less than eighty tons each, or more than double the tonnage of the "Woolwich Infant." The battering charge would doubtless exceed 2 cwt. of powder, or more than three times the weight of the actual shot fired from the heaviest guns originally supplied to the Warrior. Possibly the charge might not be much less than 300 lb. The projectile may be estimated as weighing 1300 lb. or 1400 lb., and, indeed, we should rather expect to see this weight exceeded, for there is no apparent reason why it should not be as much as 1600 lb., or very nearly three-quarters of a ton. At all events we are sure of something more than half a ton. Such a shell will hold a charge of powder sufficient to propel a 400 lb. projectile from 18-ton gun—that is to say, about 70 lb., if not more. What then shall be the armor of the ship that carries guns like these: We have gone on adding inch by inch, from the 4½ inch plates of the Warrior and the Achilles to the 5½ in. of the Agincourt, the Minotaur, and the Northumberland, the 6 in. of the Bellerophon, the 7 in. of the Monarch and the Captain, the 8 in. and 9 in. of the Hercules and the Sultan, and the 12 in. and 14 in. of the Thunderer and the Devastation. But now comes the leap. The belt line of the Inflexible is to carry no less than 2 ft. of armor! It is true that this will not be one thickness, but there are good reasons why it should not be, and we are reckoning without the inner skin. In the first place, there can be no doubt that plates of 12 in. can be made of finer quality than plates of 14 in. Secondly, it has been found that although laminated armor composed of thin plates is weak, there is but little loss of strength in building up a series of thick plates in contrast with one plate of the total thickness. Probably the two 12in. plates of the Inflexible will be collectively quite equal in strength to the best single plates that could be made of 24 in solid. But the question of construction is next to be considered. These two plates will be at considerable distance apart, and between the two there will be a compact mass of wood and iron work, so that when a blow is struck on the outer plate the shock will be distributed over a wide area. Supposing a shell from the "Woolwich Infant" to be fired at the Inflexible from a distance of 1000 yards, the shell would explode as it passed through the first plate, and its shattered fragments alone would reach the second; whereas, if the plate were all in one the entire substance might receive damage.

The Inflexible will be a turret ship, but will carry her sides 20 ft. out of water. We hardly expect that this extraordinary extent of freeboard will be maintained throughout the entire length of the ship. It my also be apprehended—as we signified some months ago—that there will be certain peculiarities in the form of the hull, to obtain bouyancy. The two turrets will carry armor of 18 in., and will be placed on a line oblique to the keel—one to starboard and the other to port—so that both may fire at the same instant end on, or very nearly so. This is a curious arrangement, and will porbably meet with certain objections. The guns will be loaded outside the turrets, the muzzles being depressed so as to receive their charge up a species of hatchway constructed for the purpose. Mechanical means must necessarily be devised for lifting and moving the heavy weights represented by the shell and the cartridge. The ship will be without rigging, but her engines are to give her a rate of speed at least equal to that of the fastest of the existing ironclads. Despite her superlative qualities the Inflexible will cost less than the Minotaur. Her gun power will be enormous, and her armor a wonderment. At least, so we think them now. If we could only build such a vessel in a twelvemonth, instead of taking three or four years to accomplish the task our confidence would be greater. It is now said that Krupp's breech-loading 2000-pounders are intended for sea service. As breech-loaders they are well adapted for such a purpose, providing the breech-loading is itself effecive. But how rests the question of guns versus armor? Our 35 ton gun

is equal to 15 in. or 16 in. of armour, and we may calculate that an 80 ton gun will penetrate 24 in., unless the cunning device of the Inflexible breaks up the shell outside the second plate. In such warfare as we are now contemplating the first hit may prove momentous. If an entering projectile, in addition to its own explosion, were to fire one of those huge cartridges of which we have spoken, the effect between decks would be tremendous. The more smoke would be a serious matter—far more so than in one of Nelson's ships with its many ports and free ventilation. For humanity's sake we can only hope that these preparations for war will secure the continuance of peace.—*London Standard.*

ANNUAL DRILL.

The Minister of Militia stated in the House of Commons on Monday, in reply to a question put by Mr. Stephenson, that it was the intention of the Government to reduce the strength of the Volunteer Force and that it was more than probable that the residue would go into camp during the present year. We are not yet aware of the nature of the Government Militia Scheme and consequently cannot form any idea of the number of men who will be required to drill during the present year. A reduction of the present nominal strength of the Volunteer Force is a step in the right direction. In anticipation of going into camp, officers in this vicinity are commencing the annual filling up of their ranks. We have reason to believe that it is the intention of the Government to increase the pay of the men, which would reduce a better class of recruits to join the ranks. Officers of corps, especially infantry corps, should be more particular regarding the class of men they take into their ranks. No encouragement should be given to drunken loafers, and imbecile old men to connect themselves with a battalion simply for the purpose of filling up the ranks during the time spent in camp. The Volunteer Force should be made as attractive as possible to all classes of our young men, but nothing can justify an officer in enrolling on his company list every incapable character who may present himself as a recruit. Active, intelligent young men are the most needed. To such the duties of camp life will prove a pleasure and a pleasant change from the monotony of every day occupation. In view of a camp being formed here at an early day, the officers should, we take the liberty of suggesting to those in authority, be instructed to "read up" their drill, so as to be the better prepared to instruct their men. It is a too notorious fact that a very large proportion of the officers of the Force are sadly deficient in this respect. Some of them may have never opened a drill book since they left the Military School, and the consequence is that they are not "posted" in the changes which are frequently made, and they even forget what they did learn. There is some excuse for the rank and file being ignorant, but none can be urged in defence of officers. Obsolete words of command are still to be heard used by officers who certainly should know better, which proves that they are not acquainted with the changes. It is a humiliating spectacle to see officers displaying ignorance of drill in the presence of their men, which cannot increase the confidence they should have in each other. Our remarks apply to the Force in general and not to any corps in particular. Facts are stubborn things, and if these defects were candidly exposed by the press of the country in general we are disposed to think an improvement would be the result. We hope that if our local corps is called out to perform its annual drill in camp, its ranks may be filled with a creditable class of men and that employers will allow every facility to enable those in their employment connected therewith to obey the call of their officers.—*Chronicle and News* May 15th.

CREEDMOOR.

THE COMING CONTEST.

The New York *Times* of Saturday says:

"The prospect of the comming match with the Irish team who won the Elcho Shield at Wimbledon last year, has put our National Rifle Association, or, to be more precise, its subordinate element, the Amateur Rifle Club, on its mettle, and, accordingly, they are preparing for vigorous practice in anticipation of the contest. That this is a wise precaution cannot be doubted, for the Irish eight (assuming that nothing will interfere to prevent their crack shots coming forward) are good marksmen; their Wimbledon prestige must, if possible be sustained, and their practice on their ranges at Dollymount, near Dublin, is usually of a very assiduous and thorough kind. The efforts of the Amateur Rifle Club will, therefore, be directed toward getting together the best marksmen, who shall have abundant practice, and how, when the time comes, (not sooner than the 15th September, or later than the 15th October,) shall be in proper form to meet their Irish competitors. The Irish team are the challengers, and the programme which they proposed for the acceptance of the riflemen of America has been agreed to on behalf of the latter by the Amateur Rifle Club, with the exception of one of them, fixing the minimum numbers of competitors. This the challengers desired to fix at four, but the Rifle Club think that six ought to be substituted. The terms of the match, as amended, would thus read as follows:

"Team—Each team to consist of not more than eight or less than six men, at the option of the Irish, whose decision will be announced on their arrival at New York. The American team to be composed exclusively of riflemen born in the United States. The Irish team to consist of men qualified to shoot in the Irish eight at Wimbledon.

"Rifles—Any, not exceeding ten pounds weight; minimum pull of trigger three pounds. The Americans to shoot with rifles of *bona fide* American manufacture. The Irish to shoot with rifles manufactured by Messrs. John Rigby & Co., of Dublin.

"Sights, Ammunition, Targets, and Marking—To be according to printed regulations in force at Wimbledon, 1873 which are similar to those of the National Rifle Association.

"Ranges—Eight hundred yards, 900 yards and 1,000 yards.

"Number of Shots Fifteen at each range by each competitor.

"Previous Practice—The Irish team to be allowed the use of the range for practice for at least two days before the match.

"Position—Any; no artificial rest to be used either for the rifle or person of the shooter.

"Mr. Leach, on the part of the Irish team, guarantees to deposit, on his arrival at New York, with the National Rifle Association of America, the sum of £100 sterling, a like sum to be deposited by the American team, and this sum of £200 to be handed over to the Captain for division among the members of the winning team.

"Targets, ranges, and all accessories for carrying out the match to devolve on the Americans. The Americans to choose a Referee to act for their team. Mr Leech will act in the capacity of Referee for the Irish team, and the two Referees shall mutually select an umpire, to whom, in case of difference of opinion, they shall refer, and whose decision shall be final. The terms of the match to be signed by Geo. W. Wingate, on behalf of the Amateur Rifle Club, and by Arthur Blennerhasset Leach, on behalf of the Irish team. Duplicate copies of this programme to be exchanged, and all necessary arrangements to be completed on or before the 1st day of June, 1874. Should either team fail to make an appearance on the day and hour agreed upon for the match, the team then present may claim the championship and stakes.

"In accepting the challenge the Amateur Rifle Club do not claim that they include among their members the best riflemen of America, but they assume to act as the representatives of the riflemen of the country generally, for the purpose of placing the matter in such a shape as to permit all who prove themselves competent to compete, irrespective of their residence or membership. They therefore request that all native born Americans who are interested in rifle shooting, and who desire to form part of the team which is to represent America in the forthcoming match, will at once commence practising for the purpose, and will, on or before the 1st of July next, forward to Mr. Fred. P. Fairbanks, the Secretary of the Club, a score of fifteen consecutive shots made at each distance named in the programme, in a form furnished for the purpose. Then, sometime during July or August, one match or more will be held at Creedmoor to shoot for places in the team. From the competitors making the best scores upon these occasions the Executive Committee will select a certain number who will shoot against each other until the best shots are definitely ascertained, and these only will be allowed to shoot in the team competing with the Irish visitors. In the match at Wimbledon, at which the latter won the Elcho shield, their average score was 149 37 points out of a possible 180, or 3 32 a shot, but the Amateur Rifle Club are fully satisfied that there are many riflemen in America fully as expert, and they feel quite sanguine as to the result of the match should they be induced to engage in the undertaking. There is, at all events, no doubt entertained that, apart from the National Guard practice, the most interesting feature of the season at Creedmoor will be this international match with the Irish eight.'—*N. Y. Times.*

WEAR OF GOLD AND SILVER.—It appears from experiments made in St. Petersburg that, contrary to the opinion generally entertained, gold coin wears away faster than that of silver. Twenty pounds of gold half-imperials, and as much of silver copecks—coins of about the same size—were put into new barrels, mounted like churns, which were kept turning for four hours continuously. It was then found, on weighing the the coins, that the gold ones had lost 61 grammes, the silver ones only 34; but as the numer of gold pieces was 28 per cent. less than those of silver, the proportion is of course, greatet to that amount in favour of the latter. The silver also contained more alloy than the gold.

CORRESPONDENCE.

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

PERTH RIFLE ASSOCIATION.

The annual meeting was held last Monday (18th inst.) at the Balmoral Hotel, Stratford; Major Stephenson G.T.R., in the chair. The following officers were appointed.

Patron.—Lieut. Colonel Daly.

President.—Major Stephenson, G. T. Rifles.

1st Vice President.—Pay-Master Rutherford, 28th Battalion.

2nd Vice President.—Captain Whyte, G. T. Rifles.

Council.—Lieut. Colonel Smith, Lieutenant Birch, Lieutenant Spimmon, Lieut. Patton, Sergeant Argo, Corporal Wilson. Major Scott, 28th Batt., Secretary.

This was one of the most interesting meetings since the organization of the association, Lieut. Colonel Service taking an active part in the association for its prosperity. Lieutenant Colonel Service, Lieut. Birch, and Lieutenant Wright were then appointed a committee to get the range in a first class order, and if possible to get another target erected to save time both in practice and at the annual match. A silver cup is to be competed for on the first Saturday in June, July, August, and September; the highest aggregate score of each member competing to decide the winner. Ranges —200, 400 and 600 yards. Fifteen rounds at each distance, this is done in order to give a stimulus to the association. As there is no balance on hand over the last match Corporal Wilson was appointed to collect $10 to affiliate with the Western Rifle Association, London, Ont. A team will be sent from here to compete at their match next month. Somehow or other the Annual Grant from Government was not paid for 1873. Hoping this mistake will be rectified in a short time as we will require money to make necessary alterations on the Range.

A vote of thanks was tendered to Colonel Daly and others for their prizes given at last match. The Annual Match will take place about the end of August, 1874.

By giving the above space in your columns you will ever oblige yours &c

Corp'l WILSON, G.T.R.

Stratford, May 18, 1874.

SCOTTISH RELICS OF THE SPANISH ARMADA.

The Nether Lochaber correspondent of the *Inverness Courier* writes:—A coin was sent us for identification a few days ago, the history of which strikes us as interesting. We had no difficulty in determining it to be a silver Spanish dollar of the time of Philip II. It is much corroded and worn, but the following letters of the original inscription are distinctly legible:—Ph. II., D. G. Hisp: et Ind: Rex. 1585. On the reverse disc is what seems to have been intended for the prow of a ship between two palm trees. The owner of this coin tells us that it came into his possession in the following manner:—A brother of his, owned and commanded a coasting schooner about fifty years ago, chancing to becalmed while passing through the sound of Mull, thought it best to come to anchor for the night. Next morning, when getting under weight, the anchor, as it came to the bows, was found to have brought up a large mass of tangle. While clearing this away, the edge of the coin was observed sticking out from among a lot of sand and shingle attached to the tangle roots, and having been secured and handed to the captain, he ever after kept it in his purse as a "luck penny," on which he set a high value, and all the more so, perhaps, that it happened to be found on the morning of Easter Sunday—a fact that to him, as a good Catholic, had a significance and meaning that the rest of the crew took no account of. Be this as it may, he was from that day an exceedingly prosperous and lucky man in all his undertakings, and till the day of his death he carried the coin about him wherever he went, as a "luck penny" and talisman of extraordinary virtue. The present owner, too, sets a very high value on this numismatic talisman, which, he declares, hardly anything would induce him to part with. During the ten years that it has been in his possession, he assures us that he has been prosperous and successful as he never was before, with never a moment's illness; and although too sensible and shrewd a man actually to assert that the coin has anything to do with it at all, it is a fact that he very seriously looks upon his Spanish dollar as a sort of "Lee Penny," giving its possessor a fair chance of an amount of health and wealth that without it he might struggle for in vain. This nonsense apart, however, the question remains: what business had a Spanish dollar in the bottom of the Sound of Mull? how came it there? Our theory is that the coin originally belonged to some one connected with the great "Invincible Armada" of 1588. It is a well known historical fact that, after the defeat of the Armada, the already shattered and discomfited fleet, in attempting to return to Spain by sailing round Scotland and Ireland, was overtaken by a dreadful storm, in which many of the ships were wrecked. One ship, named the *Florida* ran for shelter in the sound of Mull, and while at anchor off Tobermory harbor, was captured and destroyed by a body of Mull and Movern men, under the command of Maclean of Duart. This fact is sufficiently attested by a remission, under the Privy seal, to that chief for his share in the somewhat questionable transaction, bearing date the 20th March, 1589. The *Florida* was destroyed by being blown up, with all her armament and stores, and many of her crew—a treacherous and cruel act, for Scotland, at least, was then at peace with Spain—and it is probable that the Spanish dollar so recently examined by us, reached the bottom of the Sound on that occasion, and there remained till fished up in the curious manner above related, upwards of two centuries afterwards. Some of the timbers of the submerged *Florida* have from time to time been brought to the surface, and a casket formed out of a part of her windless was presented by Sir Walter Scott to George IV. during his visit to Scotland in 1822. An unsuccessful attempt, by means of divers, was made in 1740 to recover some of a large amount of treasure said to have been sunk in her; but some very beautiful brass guns were brought up, one of which is still to be seen at the Castle of Dunstaffnage, near Oban, and another, we believe, at Inveraray. These were last made to speak loudly and lustily, not against a Queen of England, as was their original errand to our shores, but in honor of the marriage of the daughter of a Queen of Great Britain with the son of a Scottish duke, who now owns the lands which belonged to the Macleans, by whom the *Florida*, carrying these very guns, was destroyed. Thus does "the whirligig of time bring about its own revenges." Some years ago we were shown by a gentleman in Glasgow a large ebony-stocked pistol, beautifully carved, and inlaid with mother of pearl and silver, which was said to have been secured from the wreck of the *Florida*. We recollect that the corroded state of the barrel and lock abundantly satisfied us at the time that, whether it belonged to the *Florida* or not, it had at all events long lain in water, and more probably, from the peculiar of corrosion, in salt water than in fresh. As to the dollar, we have only further to state that its owner now thinks more of it than ever—our suggestion as to its very probable connection with the Spanish armada having largely enhanced its value in his estimation. Its mere intrinsic value, as a bit of silver, would, we think be fully and fairly appraised at something like twenty pence sterling.

MOUNTED ENGINEERS.—At Vienna the experiment has been lately carried out of training a small body of mounted engineers for the express purpose of accompanying light horse in advance of the army, or in its extreme rear if retreating. These soldiers take with them a few light tools such as would be useful for repairing or destroying railroads and bridges by the ordinary means. But a formidable addition to their equipment is to be supplied them in case of actual war in the shape of small petards or hand grenades loaded with dynamite, portable and safe to carry, explosible only by a fuze, but powerful enough in their action to completely blow off any part of the ironwork to be destroyed against which they are laid. Trials have have been made expressly to determine the best shape of these grenades, and the simplest way in which to use them; and it has been proved that by their use any railroad may be as effectually interrupted in a couple of minutes as it could be with ordinary tools in as many hours.

AN ANCIENT ROYAL CRADLE.—One of the most curious of the relics left of the bluff old Henry VIII., his six wives and the three children who successively wore the crown after him, is the cradle of his youngest daughter, Queen Elizabeth. It is of English oak, very massive, with richly carved panels, six in number, two on each side, one of the same height composing the foot, and a much higher one under the headboard. The length of the cradle is three feet two inches, its breadth twenty inches, and the height, to the top of the ornament, four feet. At the foot is a large shield, with two cherubs supporting the royal crown, and in the centre the initials "E.R." —Elizabeth Regina, The ornamental work is of silver, carved and engraved in quaint devices.

REMITTANCES Received on Subscription to THE VOLUNTEER REVIEW up to Saturday the 23rd inst.

Ingersoll, Ont.—Capt. R. Y. Ellis, to Jan. 1875,		$1.00
Quebec City.—Lieut. J. Sharples, to Jan. 1875		2.00
	Lieut E. Gauthier, to Aug. 1874	6.00
	Capt. Jas. Morgan, to May, 1875	4.00
	Lt Col. Casault, D A G., Aug. '71	2.00
Sackville, N.B.—Hon. Col. Botsford, to Sept. '74		2.00

CONTENTS OF No. 20, VOL. VIII.

The Volunteer Review,

AND

MILITARY AND NAVAL GAZETTE.

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

OTTAWA, TUESDAY, MAY 26, 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

☞ LIEUT. J. B. VINTER, of Victoria, is our authorised Agent for Vancouver Island, British Columbia. As is also Captain H. V. EDMONDS for New Westminster and adjacent country.

THE most interesting and useful study to the professional soldier is undoubtedly *Tactics*—a thorough tactician must be a good strategist, which it does not follow that an intimate knowledge of the latter will necessarily make its possessor an expert in the former science.

In another page will be found a lecture delivered by Lieut. Colonel F. MIDDLETON, at the Royal United Service Institution, addressed to the officers of (English) Volunteer corps, which is reprinted for the benefit of our readers, as it contains many valuable lessons and much useful information. A great want in military literature has yet to be supplied, and that is a comprehensive history of ancient and modern tactics. Colonel MIDDLETON states that "the ancient Greek" was the earliest system of which we have any authentic record—but it is evident that the Assyrians, Egyptians, and Persians did not overrun the then civilized world with undisciplined mobs, and we are quite satisfied that there exists more affinity between ancient and modern tactics than is generally supposed, and that the whole art of war has undergone in reality little change in its general scientific or even mechanical features. The substitution of one mechanical appliance for another has simplified some of its problems, but it has not always or necessarily involved a change in tactical formation, and of this very fact Colonel MIDDLETON gives us one very striking example in the case of French Revolutionary soldiers, when in order to cover their advance in column they threw clouds of skirmishers to the front—and the distinguishing feature of the *new* Prussian tactics is to throw forward the "skirmisher swarm." In the first case it is to make good the want of tactical mobility which could not be maintained with undisciplined levies against an enemy in position and thoroughly well drilled; in the second it is to cover the same column formation from the effects of the same danger. Throughout the whole of the lecture it is clearly shown that the change for the time being in tactical formation was to a considerable extent not due to the improvement in the machinery, but to other and individual characteristics which in reality underlie the whole question.

It would appear then that the column formation is the only one that can be adopted to the temperment of European continental armies, and that it is a necessary consequence of the arms the various nations had been accustomed to handle for many ages. We know the Romans fought in *company columns*, just what the Prussians now do, that they sought to pierce by the weight of the formation which in order to bring the greatest number of missiles into action showed a front of sixteen files *ten* deep; but the Gauls and Germans used a totally different formation and fought in line as the British soldiers now do—being once subdued by the Romans and largely incorporated in their legions they ceased to have that individual reliance on themselves and each other which would make a return to the tactics of their ancestors possible—hence to this day, notwithstanding all the precedents and examples of modern times, it has been found impossible to introduce the simple line principle into Continental armies.

The races from which the people of England sprung were not subjected to this discipline and influence, and hence the national formation that brings at once every man and weapon to the front has always been a characteristic of that people since they had a history.

Their weapons have been always different from that of the neighboring nations and are sufficiently peculiar to warrant more research into the subject than we are prepared to give. At the time of the Norman conquest eight centuries ago English *billmen* were renowned not only through Europe as the best of Infantry, but were entertained at the Court of the Greek Emperors as the celebrated *Varangian* guards—whose fidelity could no be corrupted and whose valor on more than occasion sent the Moslem in headlong and disasterous flight to mourn over irreparable loss and to learn that on the confines of "*Ultima Thule*" *dwelt a race* capable of rolling back the tide of Mohamet an conquest and striking the Crescent into the dust.

Effective as English *billmen* may have been they were as of no account compared with English *bowmen*. At what period in the history of Britain that most formidable of all ancient weapons—the *long bow*—became a national arm it is impossible to say; it is very likely that it had been introduced by some of the earlier Scandanavian tribes, and that its use spread rapidly amongst the people. *In the eighth century a king of* Kent was shot to death with arrows by the Danish invaders—and at the close of the twelth century the English archers under *Coeur-de-Lion* spread terror and dismay amongst their opponents. It was not as a military weapon alone the *long bow* was used, every yeoman—which was tantamount to every freeman—in those days was an archer; every Parish had its *buttes* every holy day, and they were many; the archers assembled on the green, generally near the Parish church, and competed for the prizes given by the Lord of the Manor, Bishop, Abbot or whatever the local potentate might be. Those were the men that won Cressy, Poitiers, Agincourt, Flodden, and an hundred other fields that carried the name and prowess of the English people from the bogs of Connemara to the rocky heights of Coimbra, and who would eventually have extended the area of the British Empire over the greater part of Europe if the war of the Roses had not exhausted the strength alike of the noble and the yeoman and involved in common ruin the feudal lord and his gallant retainers.

Men trained to fight with such weapons acquire a self reliance in proportion to their mastery of the art of wielding them, and moreover both required peculiar formations which tended largely to inculcate that feeling of security peculiar to those who are confident that their *hands can keep their heads*. The bill was used with both hands and required space to be swung in, consequently the files were loose—rear rank *in open order* but covering the front file exactly—and they were drawn up in *three* ranks, a formation which has been in use within the *last fifty* years in the British army. In this formation billmen properly handled were quite a match for the cavalry or men-at-arms.

The spear, pike, or javelin was not much relied on and comparatively little used by

English infantry who were always eager to bring the issue to a hand to hand fight, and hence the readiness with which their descendants will charge.

The archer was armed with a bow, of yew, *wych* (hazel) or elm of his own height, a quiver carrying *twenty four* arrows, twelve more in a belt, a straight sword and a pole about eight feet long shod with pointed iron at both ends. The tactics observed were: bowmen formed in two ranks in loose order, rear rank files uncovered, each man planted his pole or stake firmly in the ground in front sloping outwards at an angle of 45 degrees, as a defence against a charge of cavalry—his *left foot* was advanced to the stake his right drawn back so as to give him the *right half face* of modern drill—the lower end of his bow rested against the ball of the right toe, the body slightly bent forward threw his whole weight into the arc of the bow, and as he drew the string to the right ear it can be easily imagined that the whole dynamic force of the archer was brought to bear in the best and most economic manner—so that at two hundred or two hundred and fifty yards nothing but the best proof armour could resist the *gray goose wing* and *cloth yard shaft*.

In action it was usual to oppose archers to cavalry and the results of Cressy, Poitiers, and Agincourt proves how unequal the contest must have been—the number of noble prisoners alone, i.e., the men who fought in complete armour; far exceeding the whole *archer* force opposed to them. It was never the practice of the English archers to shoot at an elevation for the effect of the descending arrow—the trajectory of flight was well understood, and the effect sought was precisely what our modern artillerists aim at—*hard hitting* by a low trajectory. The consideration of all the circumstances proves that our peculiar tactical formation, *the line* has been derived from remote antiquity, that it has been forced on us in consequence of the weapons peculiar to our ancestors, and that the people of continental Europe fighting with spears and missiles at short range did not acquire that individual self reliance and confidence peculiar to the looser formation. We say then that there may be and has been *variations* in tactics but no revolutions or changes, and the "art of war" as practised by Sesostris or Nebuchadnezzar does not differ in any material point from the same art as practised by Napoleon or Von Moltke.

In the latter case we do not see that any change has been made or indeed is necessary, if the smoke and noise of a *swarm of skirmishers* was necessary to enable the ill drilled Revolutionary French soldier to get into line of battle, armed as he was with a very imperfect fire arm, it appears to be equally necessary to the operations of the Prussian company column—lauded as it has been as the perfection of military discipline and skill—that all its manœuvres should be hidden under the noise and smoke of the *skirmisher swarm*—it may well be asked "what's in a name."

It is not necessary in this notice to say one word in defence of our *national fighting* formation, it has stood the test of ages, and General MACDOUGAL has declared that we needed no tactical revolution. The concluding paragraph of the lecture shows decidedly that the knowledge of the "*true tactical use*" of the weapon that has superseded the long bow is to be obtained by the same close application that the archers devoted to their art—drill, discipline, and (rifle) practice.

ON another page is republished the text of Mr. WIARD'S project, copied from the United States *Army and Navy Journal* for April 11th, in which he proposes to *convert* the smooth bore cast iron 15 and 10 inch guns of the United States service "into combined rifle and smooth bore guns"—superior to the Prussian system of cast steel or the English of built up guns and also by a better devised projectile to insure their greater endurance and their power largely increased, "especially for near firing"—and that by his system cast iron heavy guns can in all cases be made of greater endurance and throwing a heavier projectile for weight of metal in the gun than either of the systems in use at Woolwich or Dessen.

The U. S. *Army and Navy Journal* dealt with those presumptions at length some time ago, and we see no reason to differ from our contemporary in the matter. The experiments detailed proved nothing, the range was hardly 200 yards, and the work done contemptible in every point of view.

Our neighbors possess the best cast iron ordnance in the world, in fact till rifling great guns was introduced it was the best for endurance and most powerful in the world, but the educated scientists of the United States artillery service never dreamt of putting on such guns such a strain as from 22 to 60 tons to the square inch or subjecting them to the trials the rifled system would impose.

It would appear in this case that "fools will rush where angels fear to tread," and a speculating civilian prescribe what practical experience as well as scientific knowledge condemns. Mechanical knowledge is all very well as the handmaid of science and practical experience, but it is in no way qualified to prescribe for both. It is well known that 11,000 lbs. or about *five* tons to the square inch is the greatest strain which can be with safety placed on cast iron, and even then it is not right to repeat the experiment; what chance the altered ordnance would have of standing the strain of a charge of 70 lbs. of powder and a bad modification of the notorious Woolwich projectile to whose efforts at centreing the destruction of the *Woolwich Infant* and of scores of other specimens of monster artillery is due. In this case however the recommendation of the acting chief of ordnance is the proper course to be pursued, and we shall await the results of future experiments with curiosity.

THE reconstruction of the British Navy is advancing apace. Mr. GOSCHEN, the late Chief of the Admiralty, gave the world a dark hint some time ago of the mountain in labor, with which that department was charged. The London *Standard* in an article, which is reprinted in another column, gives us an idea of what is to be brought forth, and the *Inflexible* will be doubtless when completed another *Fin du guerre*. It has been argued throughout all this contest of *Guns* vs. *Armour* by practical seamen that all was wanted was cover from shell fire—the chances of solid shot would be taken as ordinary risks—and the very system now applied to this wonderful floating battery, for such she is to be, was pointed out by Captain SELWYN over two years ago.

What is held to be the great feature of the *Inflexible* is the distribution of armour—there is to be *twelve* inch plates outside a space of eight feet of solid wood and iron and an inner skin of *twelve* inch plate. The object sought to be attained by all this is to prevent shells penetrating the interior of the hull and thus affording the cover sought.

The strongest arrangement of all is the loading of the guns on the outside of the vessel (we presume somewhere within this eight feet space), and we do not think it will be an eminent success. Altogether the *Inflexible* will exhibit some very striking anomalies, and is an instance of the end of that contest between guns and armour which has existed since gunpowder became a mechanical agent in warfare.

REVIEWS.

WE have received the first number of *Quip*. It is artistically got up after the style of the London *Punch*. The illustrations are good, but we regret to say the literary articles are not quite up to the mark, but no doubt in this respect it will improve as it gets fairly under head-way. We wish it every success. Price of *Quip* $1.25 per year, exclusive of postage; single copy five cents. Address, "Editor *Quip*, St. John, N. B."

Wood's Household Magazine for May is a very good number indeed. The articles are all well written, and the selections good. There is a real go-ahead tact displayed in its management that we like, which entitles it to a front rank amongst its compeers. The number before us contains among other articles a paper entitled "Poor Jack," by F. W. Holland, in the interest of seamen; "The Child in the Church," by Mary Hartwell; "Kin and Kad," by H. V. Osborne; "Dumb Day," by Caroline B. LeRow, and some good poetry. There are several illustrated articles, the New York Fashions, Architectural Designs, &c. The illustration on Decoration Day is just the thing. Price of Magazine one dollar per year. Address, "*Wood's Household Magazine*, Newburgh, N. Y."

DOMINION OF CANADA.

MILITIA GENERAL ORDERS.

HEAD QUARTERS,

Ottawa, 22th May, 1874.

General Orders (11).

No. 1.

ACTIVE MILITIA.

PROVINCE OF ONTARIO.

Hamilton Field Battery of Artillery.

1st Lieutenant William Dowar, G. S., is hereby permitted to retire retaining rank.

Ottawa Brigade of Garrison Artillery.

No. 2 Battery Ottawa.

To be 2nd Lieutenant, provisionally:
Alexander John Russell, Gentleman, vice F. M. Cotton, resigned.

Sarnia Battery of Garrison Artillery.

To be 1st Lieutenant:
Sergeant-Major Charles J. Ellis, G. S., vice Adams promoted.

To be 2nd Lieutenant, provisionally:
Sergeant Edwin Adams, vice William McWhinney, whose resignation is hereby accepted.

2nd Battalion "Queen's Own Rifles," Toronto.

To be Lieutenants:
Ensign Edward Augustus Nash, M.S., vice Holwell, promoted.
Ensign Snelling Roper Crickmore, M. S., vice Foster, promoted.
Ensign Samuel Elgar Pettigrew, M. S., vice Beaumont, promoted.

To be Ensign, provisionally:
Sergeant Robert Heber Bowes, vice Alexander M. Munro, left limits.

25th "Elgin" Battalion of Infantry.

No. 1 Company, St Thomas.

To be Captain:
Josiah Corlis, Esquire, M. S., vice James McQueen Wardell, left limits.

To be Lieutenant, provisionally:
Edward Hughes, Gentleman, vice Wm. H. Moore, whose resignation is hereby accepted.

To be Ensign, provisionally:
Alexander Erie McKay, Gentleman, vice Daniel Darrach, whose resignation is hereby accepted.

40 "Northumberland" Battalion of Infantry.

No. 5 Company Cold Springs.

To be Ensign:
Francis Sweetland Gifford, Gentleman, M. S., vice Walter C. Bourn, whose resignation is hereby accepted.

Confirmation of Rank.

Ensign John Shaw, M. S., No 6 Company, 20th Battalion, from 10th April, 1874.

Ensign Alexander Bertram, M. S, No. 1 Company, 77th Battalion, from 29th April, 1874.

Ensign Andrew Storey Bachus, M. S., No. 4 Company, 25th Battalion, from 29th April, 1874.

PROVINCE OF QUEBEC.

Quebec Squadron of Cavalry.

No. 3 Troop.

The resignation of Cornet William Kent is hereby accepted.

79th "Shefford" Battalion of Infantry, or "Highlanders."

No. 8 Company, Waterloo.

To be Ensign, provisionally:
James Arlis, Gentleman, vice Joseph Legris, left limits.

The resignation of Captain John F. Leonard is hereby accepted.

Confirmation of Rank.

Captain and Brevet Major John Sious, G S., Gaspé Battery of Garrison Artillery, as Captain of Artillery, from 6th May, 1874.

Ensign William John Kenny, M. S., 6th Battalion, from 4th April, 1874.

PROVINCE OF NEW BRUNSWICK

Woodstock Field Battery.

No. 5 Battery (Woodstock) of the New Brunswick Brigade of Garrison Artillery is detached from the Brigade and is hereby changed to a Field Battery, to be known as the "Woodstock Field Battery."

To be Captain:
1st Lieutenant William Pierce Donnell, G. V. B.

To be 1st Lieutenants:
2nd Lieutenant William Osber Raymond, M. S
Sergeant Herbert Dibblee (provisionally.)

To be 2nd Lieutenant, provisionally:
John Thomas Kearney, Gentleman.

73rd "Northumberland, N. B" Battalion of Infantry.

No. 5 Company, Bay du Vin.

To be Lieutenant, provisionally:
Sergeant Thomas George McKay, vice Donald S. Ullock, whose resignation is hereby accepted.

To be Ensign provisionally:
Private James Cameron, vice Joseph B. Williston, whose resignation is hereby accepted.

PROVINCE OF NOVA SCOTIA.

63rd "Halifax" Battalion of Rifles.

The resignation of Assistant Surgeon William Young Fullerton, is hereby accepted.

Confirmation of Rank.

Ensign Arthur Francklyn Salter, M. S., 66th Battalion, from 1st April 1874.

No. 2.

CERTIFICATES.

Schools of Gunnery.

Certificates received from Commandants of Schools of Gunnery.

PROVINCE OF ONTARIO.

First Class "Short Course" Certificates.

Regimental Divisions.	*Names.*
Kingston, City of	—Sergeant John Thorn, Winnipeg Field Battery.
Lincoln,	—Gunner John Harris St. Catharines Garrison Battery.
Wellington,	—Bombardier E. Ellis, Wellington Field Battery.

Second Class "Short Course" Certificates.

Regimental Divisions.	*Names.*
Kingston, City of	—Acting Bombardier W. Exener, Kingston Field Battery.
Ottawa, City of	—Gunner W. Percey, Ottawa Field Battery.
Welland,	—Bombardier J. E. Reavely, Welland Field Battery.
Wellington,	—Corporal H. Thatcher, Wellington Field Battery.

PROVINCE OF QUEBEC.

First Class "Short Course" Certificates.

Regimental Divisions.	*Names.*
Gaspé,	—Captain and Brevet Major John Sious, Gaspé Battery Garrison Artillery.

SECOND CLASS "SHORT COURSE" CERTIFICATES.

Regimental Divisions.	*Names.*
Gaspé,	—Sergt. John Becharvais, Gaspé Garrison Artillery.
do	—Sergeant Alfred Carter, Gaspé Garrison Artillery.
do	—Acting Sergeant Wm. Patterson, Gaspé Garrison Artillery.
Quebec, City of	—Bombadier Michael Jno. Kirk, Quebec Garrison Artillery.
do	—Driver Andrew Scott, Quebec Garrison Artillery.
do	—Gunner George A. Gardiner, Quebec Garrison Artillery.
Shefford,	—Sergeant William Kay, Shefford Field Battery.
do	—Bombadier Ira Erskine Shefford Field Battery.
do	—Corporal Ozora Filton, Shefford Field Battery.
do	—Corp'l Allen G. Ingalls, Shefford Field Battery.
do	—Corp'l Ulric A. Neil, Shefford Field Battery.
do	—Bombadier Geo. Seale, Shefford Field Battery.
do	—Corp'l Job W. Taylor, Shefford Field Battery.
do	—Corp'l Albert M. Wolley, Shefford Field Battery.

SCHOOLS OF MILITARY INSTRUCTION.

Certificates received from Commandants of Schools of Military Instruction.

PROVINCE OF ONTARIO.

FIRST CLASS CERTIFICATES.

Regimental Divisions.	*Names.*
Cornwall,	—Lieutenant W. Douglas C. Adams, 59th Battalion.
Kingston, City of	—Frs. Joseph O'Connor, Gentleman.
Toronto, E.R.	—Sergeant James Brady, 2nd Queen's Own Rifles.

SECOND CLASS CERTIFICATES.

Regimental Divisions.	*Names.*
Addington,	—Wm. Davis, Gent'man.
Elgin, W.R.	—Andrew Storey Backus, 25th Battalion.
Frontenac,	—Charles W. Glenn, Gentleman.
do	—Oscar Telgman, Gentleman.
do	—Peter Curtis, Gentleman.
do	—John Chesnut, Gentleman.
Halton,	—Ensign John Shaw, 20th Battalion.
Kingston, City of	—George Bélanger, Gentleman.
do	—James Dumphy, Gentleman.
do	—John McCune, Gentleman.
do	—Jas. Joseph O'Connor, Gent'emen.
do	—William C. Sands, Gentlemen.
do	—J. H. Sutherland, Gentleman.
do	—Richard Newlands, Gentleman.
do	—John Pidgeon, Gentleman,
do	—Jas. John Whitehead, Gentleman.
do	—James Bibby, Gentleman.
do	—William Dearnaly, Gentleman.
do	Bernard Lenahan, Gentleman.
do	—Wm. Sherlock, Gentleman.
Lennox,	—Wm. Sinclair, Gentleman.
Middlesex, W. R.	—Corp'l James Buchanan 26th Battalion
Peel,	—Trooper Alfred Wright, Governor General's Body Guards.
Prince Edward.	—Capt. Alva Vandusen, 16th Battalion.
Simcoe, W R.	—Walter G. R. Ayerst, Gentleman.
Toronto, C. R.	—John Lyons, Gentl'man
do E. R.	—Sergt. Major John B. Muloney, 2d Queen's Own Rifles.
do C. R.	—Frederick H. Fatt, Gentleman.
do W. R	—Frederick W. Webber, Gentleman.
do C. R.	—Private Charles W. Pickering, 2d Queens Own Rifles.
do C. R.	—Elwin T. Woods, Gentleman.
Welland,	— Ensign Morris J Beam, 44th Battalion.
Wentworth, N. R.	—Ensign Alexander Bertram, 77th Batt.
York, W. R.	—Private Chas. T. Duke, 2nd Queen's Own Rifles.

PROVINCE OF QUEBEC.

FIRST CLASS CERTIFICATES.

Regimental Divisions.	*Names.*
Berthier,	—Sergeant John B. Emond, Berthier Independent Company.
Compton,	—Corporal Frederick G. Stacey, 58th Battalion.
Montreal East,	—Henri Lamoureux, Gentleman.
do	—Wm. M. Andrews, Gentleman.
do	—Wm. H. A. Grogen,
Quebec Centre,	—John Boyd Andrews. Gentleman.
do	—James Clifford, Gentleman.

SECOND CLASS CERTIFICATES.

Regimental Divisions.	*Names.*
Argenteuil,	—Francis Davis, Gentleman.
Berthier,	—Euclide Coutu, Gentleman.
do	—D'Angeville Dostaler Gentleman.
Hochelaga,	—Frédéric Bellefeuille, Gentleman.
Dorchester,	—Evangéliste Richard, Gentleman.
Montreal East,	—Narcisse Piché, Gentleman.
do	—Chas. W. Robinson, Gentleman.
do	—Horace Bergeron, Gentleman.
do	—Avila Hébert, Gentleman.
do	—Eusèbe Lapierre, Gentleman.
do	—Joseph E. Tétreault, Gentleman.
Montreal West.	—Ensign Wm. J. Kenny 6th Battalion.
do	—Peter Kennedy, Gentleman.
do	— Wm. H. A. Grogan, Gentleman.
do	—Cléophas Pageau, Gentleman.
do	—Oscar A. Watier, Gentleman.
Portneuf.	—Alfred Paquette, Gentleman.
Quebec West.	—Pierre Déry, Gentl'man
Quebec East,	—John A. Fages. Gentleman.
St Maurice,	—Dionis L. Désaulniers, Gentleman.
Rouville,	—Joseph N. Allard Gentleman.
Stanstead,	— George W. Cook, Gentleman.
Verchères,	—Napoleon Préfontaine, Gentleman.

(*For Continuation see Page 252.*)

MY LOVED ONE ON THE SEA.

The storm his ranging loud to-night,
And darker grows the sky;
And like a giant in his might,
The wild March winds sweep by.
My heart is with the good, the brave,
Who ride the billows free;
With one whose home is ocean's wave,
My loved one on the sea.

Would I could bid the tempest cease,
That hath the sky o'ercast;
And soothe to gentleness and peace
The wild and stormy blast.
How can I fear its strength to mark,
That death to him may be—
A wanderer in a fragile bark,
My loved one on the sea.

We were a happy household band,
In childhood's sunny hours;
Our pathway Hope's own rosy hand
Strewed with the fairest flowers.
But now a change hath o'er us passed:
The grave hides two from me,
And far away his lot is cast—
My loved one on the sea.

Oh! Is it strange that I should weep
To hear the tempest rise,
And know that o'er an angry deep
His rayless pathway lies?
O, God! my eyes with tears are dim,
To Thee I come, to Thee;
Hear Thou my earnest prayer for him,
My loved one on the sea.

Through every danger safely guide,
The watch care round him thrown;
Grant that his bark unscathed may ride
High o'er where wrecks are strewn.
But oh! if there his own must lie,
If there his grave must be—
Grant I may meet again on high
My loved one on the sea.

LECTURE.

(Royal United Service Institution.)

Thuesday Evening, February 27th, 1873.

Major General WILLIAM NAPIER, Director of Military Education, in the Chair.

CHANGES OF TACTICS CONSEQUENT ON THE IMPROVEMENT OF WEAPONS AND OTHER CIRCUMSTANCES.

By Lieutenant Colonel F. MIDDLETON, Superintendent of Garrison Instruction Aldershot.

GENERAL NAPIER AND GENTLEMEN.—My subject to-night is "Changes of Tactic consequent on the improvement of weapons, and other circumstances." This is, as you all know, an extensive subject, my remarks therefore must naturally be of a sketchy nature, owing to the shortness of the time at our disposal. As the most important arm of the service, and as perhaps the most suitable one for my present audience, I shall confine myself *almost* wholly to the infantry in what I am going to say.

Calling infantry the most important arm, may sound like military heresy to some, especially since our artillery has brought itself so much to the front lately, but there can be little doubt in the minds of most men that now more than ever, infantry is the decisive arm by which all battles are won or lost.

And now before proceeding further, let us endeavour to understand what is meant by "tactics." It has been said that a thoroughly comprehensive and clear definition of the term has never yet been given, as it is closely allied with other parts of military art. One simple definition is often given of it, which is this, "tactics is the art of moving large bodies of troops in presence of an enemy." This definition though a fair one, is hardly definite enough for the military student. Troops might be moved to a great extent in presence of an enemy, without a knowledge of tactics at all. Again, being in presence of an enemy, does not always in a military point of view, mean that he is staring you straight in the face. Movements of troops might be made actually out of sight of an enemy on purely tactical grounds, in fact it may be some times difficult to define the exact line between tactics and strategy.

If we refer to the origin of the word "tactics," we find that it is derived from the Greek work "taxis," meaning, "an order of the battle," and I think the following expresses what is generally understood as "tactics," viz.: "the art of moving large bodies of troops on a field of battle, by such combinations of manœuvres, as shall give you the greatest advantage over your enemy."

The earliest system of fighting-tactics, of which we have any reliable information, is that of the ancient Greeks. They, of course, used only two kinds of soldiers, infantry and cavalry. The latter were not considered of much importance. Their principal infantry carried usually two weapons, viz., a sword and long spear, 21 to 24 feet in length, and they fought in large, deep, and consequently unwieldy masses, the formation being known as the Phalanx, which against unorganized masses of men, such as the Persian hordes, was irresistible owing to its momentum.

The Romans are the next warrior nation of whom we know anything reliable. They at first, according to Niebuhr, used the Phalanx-formation, but they soon gave it up and adopted the legionary formation. And here we find an instance of an alteration of tactics and organization, and arms together, with a view of obtaining greater rapidity of movement. The pilum, or heavy spear, was reduced to seven feet, and nearly all the infantry was supplied with throwing javelins which would have been useless in the Phalanx.

The Romans fought in three lines. The first two lines armed with two light javelins, a pilum, and the straight Roman sword. The third line was formed of picked veterans armed with a pike and sword. These lines were loosely formed among themselves, at least a yard between each man, and consisted of so many maniples or companies with a maniple distance between each. The second line was formed so as to cover the intervals of the first and third line, sometimes covering the intervals of the second line and sometimes continuously. Their mode of attack was this. The enemy having been attacked by their light troops, bowmen and slingers, the first line closed on the enemy, and if it did not succeed in forcing them, the second line advanced in the intervals, and the third line only came up in case of necessity. Like our modern system of skirmishers, attacking parties, support, and reserves; but the lines were composed of maniples or companies of about 16 file, 10 deep, there being no artillery in the way then.

In the early Roman wars, cavalry seems to have been, as with the Greeks, of minor importance, but their wars with the Carthaginians soon taught them that skilfully handled, they could be used with terrible effect.

After the fall of the Roman Empire, military, as far as tactics are concerned, seems to have, if anything retrograded. Cavalry, or, as they were called in the days of chivalry, knights and men at arms, became of the most importance, though good infantry was not to be despised even in those days. Witness the stout English bowman who was able at a fair range, to send his cloth yard shaft clean through any but the best proof armour. The Spanish infantry also of the middle ages were no despicable enemy even to the armoured knights. Then occasionally mounted bowmen were used, but they were cross-bowmen.

In the fourteenth century gunpowder was first introduced into Europe; that "villanous" compound that was destined to work such changes in the art of war. It would appear that it was the first used for cannon, which were of very rude construction and difficult to move, and were used to batter down gates and walls in place of the old battering ram. It is said that the English used cannon at Cressy, in 1346, at any rate, powder was made in England in that year. It is even averred by some writers, that cannon were used in 1327, by the English in Scotland.

The hand gun was not invented until the beginning of the fifteenth century, and at first was a very rude weapon and of little use or effect, the bowman being by far the most effective. The hand gun was fired by means of a slow match held in the hand. Already (though not on account of the introduction of fire-arms) the great estimation in which cavalry had been held was beginning to be shaken; the knights and men at arms having sometimes to dismount and fight on foot to save their horses; and a great blow was struck at their prestige by an action fought at Morat in 1476, when the Swiss defeated the flower of the Burgundian cavalry with tremendous loss. About this time, bands of mercenaries formed themselves under partizan leaders of note, and by adopting a sort of rude organization and tactics, became so superior to troops fighting without any, that their presence on one side was often sufficient to turn the day.

At this time a very small part of the infantry are yet armed with the hand gun; but an improvement was made in it about 1480 by giving it a match lock, similar to that used by Asiatics to this day; and soon more of the infantry were armed with the hand gun, which in its new form was called a "harquebus." At the end of this century a general appeared, who has not, I think, had the credit he deserves, in the history of the rise of military art. I mean Maurice of Nassau, who commanded the Dutch army of Protestants in the wars between them and the Spaniards. He it was who first introduced camps of instruction. He not only armed half of his infantry with fire arms, but he gave them also to his heavy cavalry. He is also said to have had the harquebus made with a butt end to place against the chest. He still kept his infantry in ten ranks, but the artillery of that time was almost immovable, and therefore could do little damage to them. He also first exemplified the use of tactical points, by using woods and villages as defensive posts. He, however, made no attempt to move his troops with greater rapidity.

During the 16th century, fire-arms gradually came more and more into use as the weapon became more and more perfect. The harquebus received an improvement in 1517, by the substitution of the wheel-lock for the match-lock.

The pistol was also invented about this time, and soon became a cavalry weapon.

Another improvement on the wheel-lock was made towards the end of this century, called the snap-haunce, which was a near approach to the more modern flint lock.

These improved fire-arms seem to have been at first given only to the cavalry, the infantry still keeping the match-lock.

At this time a part of the infantry were still armed with the pike to keep off the

cavalry, the fire-arm having no bayonet.

Even at this time there were to be found stout old soldiers who poo pooed the use of fire-arms, and prophesied their being soon given up; some objected to it on the ground of its being a cowardly weapon! What would they say of the present fire-arm which kills men out of sight?

One remarkable consequence of the introduction of the fire-arm the gradual reduction of armour, until it disappeared altogether.

Of course, as the number of infantry armed with the fire-arm increased, so did the depth of the formation decrease.

We have now arrived at the 17th century, in the early part of which, Gustavus Adolphus, King of Sweden, appears in the military horizon as a reformer The greatest improvements he seems to have made were those equipment, and to a certain extent, of organization. He increased the effective power of infantry in a great degree by inventing cartridges and pouches. Up to that time the musketeer had either carried his powder in bandoliers (small wooden cases, each holding a charge) or in a flask, having another and a smaller flask containing priming powder, and his bullets in a pouch. The invention of cartridges enabled the soldier to fire at least three shots for every one he could before. Doubtless some of the wiseacres of that period shook their heads at this innovation, and prophesied (as was done not long ago, when the breechloader was introduced) that it would cause wild firing and waste of ammunition! Gustavus Adolphus also invented a light gun—a 4-pounder—made of cylinders of copper or some other metal, strengthened by bands. These guns were, I believe, drawn by men. He used them first at the battle of Lutzen, where he beat the Austrians, who used a heavy formation, like the Phalanx. Gustavus himself using the old Roman method of the second line filling up the intervals left in the first line.

Gustavus also seems to have been the first General, who ever thought of attacking in winter, or securing his communications. As far as actual tactics go, he did not make any great alteration, but seems to have used the ideas of Maurice of Nassau in a great measure. He made one improvement in the organization of his army which added greatly to its mobility. He divided it into brigades of two regiments each, in all 2,016 men. These were ranged six ranks deep. They fought in lines, with an interval between each, equal to their front.

The musketeers were now nearly three-fourths of the infantry, and every one of them used a rest; an improvement was made in this rest by enclosing a thin rapier blade, called a Swedish feather in the shaft, which flew out, on touching a spring. This was used as a defence against cavalry.

In the early part of this (17th) century a species of soldier was introduced, who did good service at first—I mean the Dragoons. Dragoons were first used by Mansfeld at the commencement of the Thirty Years' War, when they did really good service, as long as they preserved their original character—viz., mounted infantry. They were intended to gallop forward, dismount, and leaving their horses in charge of a few of their number, act as infantry. But this genius of soldier did not succeed in the long run. It was found that their colonels preferred to drill them and treat them as cavalry; and when they did dismount to skirmish they showed a marvellous inclination to fall back and get to their horses again. In fact they were expensive and bad infantry, and cheap and bad cavalry. They gradually fell into disuse, and became what they wanted to be, cavalry. They are said to have derived their name from the fire arm they used, called a dragon—a short weapon of large bore with a dragon's head at the muzzle.

In 1635 the flint-lock was invented, and used in England in 1677. This of course was as great an improvement on the snaphaunce as it had been on the match-lock.

Another great improvement was the introduction of the bayonet. The Swedish feather and rest had been discarded about 1660 in England, and the infantry soldier was provided with a dagger, which he stuck into the muzzle of his gun. Of course, though this converted the gun into a sort of pike, the objection was that it had to be screwed into the barrel and the man could not fire again until it was removed; moreover it took sometime to get it in and out. Twisted rings being fastened on the socket of the bayonet, which was then put over the muzzle. In one of the Flanders campaigns, our 25th regiment, whose bayonets screwed in, were, greatly to their astonishment and discomfort, fired into by a French regiment advancing to the charge with fixed bayonets, they having them fixed on with rings.

The socket-bayonet was afterwards adopted, and was in general use in 1703.

I happen to have a copy of the daily orders issued by the Duke of Cumberland just before the battle of Culloden, and one of them give a curious account of the tactics of the Highlanders, and, in the directions for opposing them no mention is made of the bayonet. The order is quaint and in bad English, and runs thus:—

"*Edinburgh*, 12 *Jan.*, 1746. *Sunday.*—The manner of the Highlander way of fighting, which there is nothing so easy to resist if officers and men are not prepossessed by the lies and accounts which are told of them. They commonly form their front rank of what they call their best men, or true Highlanders, the number of which being always but few when they join in battalions; they commonly form four deep, and these Highlanders form the front of the four, the rest being Lowlanders and arrant scum; when these battalions come within a large musket shot, or three-score yards, the front rank gives their fire, and immediately throw down their firelocks, and come down in a cluster with their swords and targets, making a noise and endeavouring to pierce the body or battalion before them, becoming twelve or fourteen deep by the time they come up to the people they attack. The sure way to demolish them is at three deep, to fire by ranks diagonally to the centre when they come, the rear rank first, and even that rank not to fire till they are within ten or twelve paces; but if the fire is given at a distance you will probably be broke, for you never get time to load another cartridge and if you give way you may give your foot for dead, for they being without a firelock or any load, no man with his arms and accoutrements, &c., can escape them, and they give no quarters; but if you will but observe the above directions, they are the most despicable enemy that are."

(To be continued.)

London, May 19.—The Czar went to Aldershot this morning. The usual crowds gathered in the streets to see him. He returns to London this afternoon. A state ball will be given in his honor at Buckingham Palace to-night.

DESPERATE VALOR OF THE ASHANTEES.—A correspondent writes from the field: "The Ashantees fought like demons. They were present in enormous numbers, pouring in on our gallant troops by thousands, yelling and screaming hideously. Although our fire told on them immensely, they had to be driven from point to point, and even when pushed out of the successive villages, returned to the attack. In the thickest parts of the brush they climbed the trees in order to fire more effectually upon our troops. The order of advance from Insarful was as follows: The attack was made in the form of a square, through the middle of which ran the main road, and the line extended about 300 yards on either side. The 42nd regiment, preceded by Lord Gifford and his scouts, formed the front line, with two of Rait's guns in the centre, Gordon's Houssas in a dense corner of jungle. It really seemed as if nothing but the failure of their ammunition would drive them out. Now at one point, now another, along the hill crest they poured down crushing volleys. Life they counted at no price if only a white man could be killed It was the same desperate obstinacy we had seen at Abrakrampa. They climbed trees to fire with more deadly effect, but the mass just lay down and shot till shot themselves or short of ammunition. Sir Archibald Alison, Brigadier of the white troops, declared he never came under a fiercer fire in India or the Crimea."

THE IRISH.—In his memoirs of the great Indian mutiny, Sir Hope Grant tells the following capital story of an Irish regiment, the 53rd. 'This reigiment,' says Sir Hope Grant, 'principally composed of Irishmen, were a fine looking set of fellows, and equally good hands at fighting. Their discipline, however, was not by any means perfect, and it was difficult to keep them well in hand. They had been lying under a bank of a road which afforded inadequate protection, and had in consequence lost a good many men. All of a sudden, without a word from any of their officers, they rushed forward, and utterly heedless of all efforts to stop them, made their way into the toll house, in a few minutes clearing out the enemy. The Commander in Chief was terribly annoyed, and riding up to the regiment pitched into it well. But these wild Irishmen were incorrigible; whenever he began to speak, a lot of them exclaimed as loud as they could: 'Three cheers for the Commander-in-Chief, boys!' and at last he himself was obliged to go away laughing.'

THE ARKANSAS QUESTION.—A Little Rock special says 326 of Brooks' left yesterday, (May 19) and a company of Baxter's men left. Brooks continues defiant under receipt of despatches from Dorsey and Clayton, at Washington, to the effect that Brooks will be sustained by Congress.

Rochester, N.Y., May 19.—The Farmers and Mechanics' Bank of this city closed its doors this morning. The failure of a heavy dry goods house a few days since is supposed to be the immediate cause of the failure.

San Francisco, May 19.—A despatch from San Francisco says that John Overend, wife and four children were found murdered in their house. There is no clue as to the murderers.

(Continued from page 249.)

PROVINCE OF NEW BRUNSWICK.

SECOND CLASS CERTIFICATES.

Regimental Divisions.	*Names.*
Albert,	—John A. McPherson, Gentleman.
Carleton,	—Charles Whitefield, Estabrooks, Gentleman.
do	—Geo. A. Estabrooks, Gentleman.
do	—Lothrop Hammond Jones, Gentleman.
Charlotte,	—Thomas C. Jack, Gentleman.
do	—Daniel W. Hanson, Gentleman.
Kings,	—Samuel F. Wilson, Gentleman.
York,	—Wm. Henry Ellsworth, Gentleman
do	—Joseph Johnston, Gentleman.
do	—Wm. Carman, Gentl'n
do	—Hugh Gregory Hilland, Gentleman,
do	—Geo. Clarence Needham, Gentleman,
do	—Wm. Henry Agnew, Gentleman.
do	—Chas. Elbridge Esty, Gentleman.
do	—Chas. Long Richards, Gentleman.
do	—John Kay, Gentleman.
do	—Lemuel Allen W. Tibbits, Gentleman.
do	—Wm. Anderson Barnes, Gentleman.

PROVINCE OF NOVA SCOTIA.

SECOND CLASS CERTIFICATES

Regimental Divisions.	*Names.*
Cumberland,	—Private Chas. R. Smith, Cumberland Provisional Battalion.
Halifax City,	—Captain Thomas Mowbray, Halifax Garrison Artillery.
do	—Captain W. R. Stowe Wainwright, Halifax Garrison Artillery.
do	—Captain David McPherson, 2nd Brig. Halifax Garrison Artillery.
do	—Captain John D. MacIntosh, 63rd Batt'n.
do	—Captain Thos. J. Walsh, 63rd Battalion.
do	—Ensign Arthur Francklyn Salter, 66th Battalion.
do	—Battery-Sergeant-Major Wm. C. Knight, 1st Halifax Brigade Garrison Artillery.
do	—Sergeant-Major John McCrow, Halifax Garrison Artillery.
Halifax City.	—Sergeant Edwin A. Lockhart, 66th Battalion.
do	—Sergeant Daniel S. Stewart, 2nd Halifax Brigade Garrison Artillery.
do	—Corporal Henry Ritchie, 63rd Battalion.
do	—Gunner John A. Boak, Halifax Garrison Artillery.
do	—Private Thomas Halliwell, 63rd Battalion.
Halifax County,	—Private Richard Dart, 66th Battalion,

By Command of his Excellency the Governor General.

WALKER POWELL, Lieut. Col.
Acting Adjt. General of Militia.
Canada.

WIARD'S PROJECT.

Subjoined is the full text of the letter from the Norman Wiard, which the Secretary of War transmitted to the House of Representatives, for the information of the committee on Appropriations:

WASHINGTON, D.C., February 16, 1874.

Hon. W. W. Belknap, Secretary of War.

SIR: The late experiments conducted by me have demonstrated, as I believe that, 15 inch smooth bore guns, and probably 10 inch smooth bore guns, such as are mounted on the fortifications, may be greatly increased in power and endurance, especially for near firing, by rifling them on the new system invented and owned by myself, thus converting them into "combined rifle and smooth-bore guns," and by the use of the improved projectiles I have devised.

The experiments I have referred to also show, if taken in connection with what has been previously well known relating to ballistic properties of guns due to their weight or the relative weight of the gun and the projectile, that new but heavier guns, proportioned to their calibre, can be made of cast-iron, and, if rifled on the new plan, much excel in power, endurance, range, and precision the expensive guns produced in Prussia of steel, or "built up" and steel lined" guns manufactured in England.

I desire to enter into contract with your Department for a series of experiments with each kind and calibre of guns referred to, with a view to establishing that the two largest calibres of smooth-bore guns in the possession of the War Department may be improved to the extent and in the manner stated, and to cast and submit to proof one or more cast iron guns of 12 inch calibre, with a weight of not less than 70,000 pounds each, and one or more cast iron guns of a calibre of 10 inches, to weigh not less than 3 ,000 pounds

I will undertake to furnish the two trial guns, or more than two if a satisfactory gun should not be produced at the first effort, of the above description; to rifle one or more 10 inch guns, of those on hand in the possession of the War Department before referred to, furnish necesary projectiles and appliances for transporting, mounting, and firing all the guns for the tests referred to, for the sum of two hundred thousand dollars: *Provided*, that if it be established that the converted guns are greatly increased in power and endurance by rifling, and not materially injured as smooth bores, I shall have a contract for converting not less than 200 of the smooth-bore guns on hand into combined rifle and smooth-bore guns, at the price of $500 each gun; a contract for making 70 12inch combined rifle and smooth bore guns of cast iron, of the same weight and kind of the successful trial gun of that calibre, at the price of $15 000 for each gun; and 24 10inch combined rifle and smooth bore guns, like the successful trial gun of that calibre, at the price of $6,500 for each gun.

A condition of the trial of the two new calibres and kinds of guns being, that each trial gun shall excel in power and endurance the Prussian Knapp-guns, as nearly as they can be produced from established calibre and weight, of the same calibre and weight, and also the English 35 ton gun, and a gun corresponding, as near as may be, to the 10 inch gun of 30,000 p unds' weight.

This proposal, if all the tests should prove successful, involves a contract amounting to $1,500,000, and if you signify to me your desire to accept it, and your approval of its conditions, I will make earnest effort to have the money required appropriated by Congress. I forward herewith drawings in outline of the contemplated 12 inch gun, and take this occasion to say that it is my intention to cast it breech up, but with sinking heads of usual excess. The drawings for the 10 inch gun of 30,000 pounds' weight will be ready in a few days. Blocks for these will be cast in the same manner; and it is my expectation to supply with each gun the "shark's mouth," in order to adapt them to the naval service, and the use of the breeching straps if it ever should be necessary to use them mounted on ships; and I will also supply with each gun the naval elevating screw, together with sights and lock masses, so that the guns may be available, if emergency requires it, for use on ships or in the fortifications. Very respectfully, etc.

NORMAN WIARD.

Below is the endorsement of the Acting Chief of Ordnance of the Army on the letter:

ORDNANCE OFFICE, March 17, 1874.

Respectfully returned to the Secretary of War

None of the official reports to the Navy Department on the experiments made by Mr. Wiard have been made known to this Bureau, but from conversations with the Chief of the Ordnance Bureau of the Navy the results obtained are well understood, and their importance appreciated. Forty thousand dollars were appropriated, and, I presume, have been expended in the trials thus far, but, in the opinion of this Bureau, the trials have not been so thorough and conclusive as to justify a decided conviction as to the merits of the invention. Further trials are absolutely necessary, not only to fully test its merits, but that the information gathered from the expenditure of the money already appropriated may not be lost to the United States.

It is therefore recommended that a liberal appropriation may be asked for to enable Mr. Wiard to make exhaustive trials for the invention.

S. V. BENET,
Acting Chief of Ordnance.