

Technical and Bibliographic Notes / Notes techniques et bibliographiques

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

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

- | | |
|--|--|
| <input type="checkbox"/> Coloured covers/
Couverture de couleur | <input type="checkbox"/> Coloured pages/
Pages de couleur |
| <input type="checkbox"/> Covers damaged/
Couverture endommagée | <input type="checkbox"/> Pages damaged/
Pages endommagées |
| <input type="checkbox"/> Covers restored and/or laminated/
Couverture restaurée et/ou pelliculée | <input checked="" type="checkbox"/> Pages restored and/or laminated/
Pages restaurées et/ou pelliculées |
| <input type="checkbox"/> Cover title missing/
Le titre de couverture manque | <input checked="" type="checkbox"/> Pages discoloured, stained or foxed/
Pages décolorées, tachetées ou piquées |
| <input type="checkbox"/> Coloured maps/
Cartes géographiques en couleur | <input type="checkbox"/> Pages detached/
Pages détachées |
| <input type="checkbox"/> Coloured ink (i.e. other than blue or black)/
Encre de couleur (i.e. autre que bleue ou noire) | <input checked="" type="checkbox"/> Showthrough/
Transparence |
| <input type="checkbox"/> Coloured plates and/or illustrations/
Planches et/ou illustrations en couleur | <input checked="" type="checkbox"/> Quality of print varies/
Qualité inégale de l'impression |
| <input checked="" type="checkbox"/> Bound with other material/
Relié avec d'autres documents | <input checked="" type="checkbox"/> Continuous pagination/
Pagination continue |
| <input checked="" type="checkbox"/> Tight binding may cause shadows or distortion
along interior margin/
La reliure serrée peut causer de l'ombre ou de la
distorsion le long de la marge intérieure | <input type="checkbox"/> Includes index(es)/
Comprend un (des) index |
| <input type="checkbox"/> Blank leaves added during restoration may appear
within the text. Whenever possible, these have
been omitted from filming/
Il se peut que certaines pages blanches ajoutées
lors d'une restauration apparaissent dans le texte,
mais, lorsque cela était possible, ces pages n'ont
pas été filmées. | Title on header taken from:/
Le titre de l'en-tête provient: |
| | <input type="checkbox"/> Title page of issue/
Page de titre de la livraison |
| | <input type="checkbox"/> Caption of issue/
Titre de départ de la livraison |
| | <input type="checkbox"/> Masthead/
Générique (périodiques) de la livraison |
| <input type="checkbox"/> Additional comments:/
Commentaires supplémentaires: | |

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

10X	14X	18X	22X	26X	30X
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
12X	16X	20X	24X	28X	32X



The Volunteer Review

AND MILITARY AND NAVAL GAZETTE.

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

VOL. VI.

OTTAWA, (CANADA,) MONDAY, JULY 1, 1872.

No. 27.

REPORT OF THE ADJUTANT-GENERAL

(Continued from Page 305.)

ENGINEERS.

At present there are actually only three Companies of Engineers in the Dominion, viz: The Montreal Engineer Company, the St. John (N.B.) Company, and the Grand Trunk Company; the condition of these Companies is stated in the Report of the Inspector of Artillery who is also charged with the instruction, inspection and training of the Engineers Corps.

The Engineer force is altogether too small, and up to the present time no proper steps have been taken to teach the officers and men of the existing Companies their special duties; no difficulty however, need any longer be experienced on this point, for the Artillery officers in command of the Schools of Gunnery at Kingston and Quebec would be able if assisted by two sergeant instructors of Engineers, to impart the necessary instruction to such Engineer officers and men as could attend these schools.

A knowledge of fortification, construction of siege batteries, field works, attack and defence of posts and fortresses is absolutely essential to the Artillery officer, as also a rough practical knowledge of military topography and surveying, construction of military bridges, &c., the above with the addition of Artillery, Mines, and Torpedoes, includes the entire training of the Military Engineer—their education is identical at the Royal Military Academy, Woolwich, and it would be very advantageous to combine the practical training of all Canadian Staff, Engineer, and Artillery Officers at the Gunnery Schools—the subject of instruction being common to all.

The increase of Engineer Corps generally throughout the Dominion, is recommended until there is at least, one Company in the District; also the formation of a Telegraph Company in each Province, provided with Telegraph equipment, and the organization of Pontoon Trains.

On reference to the report of the officer commanding the militia in Military District No. 5, it will be seen that the Montreal Company of Engineers, under command of Captain Kennedy, rendered good service at the La Prairie Camp last summer by preparing the rifle ranges ten in number, and erecting camp huts and other work, thereby saving considerable expense to the public; this company also constructed a two-gun battery (earthwork) for practice.

INFANTRY.

Nearly 30,000 (Officers and men) of the Infantry have performed the Annual Drill during the past summer, the greater portion being present at the various Camps of Exercise.

The suggestions contained in the Annual Report of 1870, for the extension of the period of drill, and the introduction of a general and systematic mode of carrying out Target Practice at the time of the Annual Drill having been approved of and authorized, the result has been that as compared with the two former years, a marked improvement has taken place. Indeed no measure could have been better calculated to increase the efficiency of the Infantry, than the adoption of some system to instruct the whole of the men practically in the use of the rifle, and the granting of numerous prizes for good shooting.

In the course of my inspection within the last three years, I have seen few of the Infantry Corps who were not, whenever commanded by officers who had learned their drill, after a few days practice fairly acquainted with the few simple Company and Battalion movements necessary to actual warfare; I have seen some Battalions who had the advantage of Drill Sheds at their local head quarters, very creditably drilled. But when it is remembered that the rifle and the spade are the tools used most in modern warfare, that individual skill in the use of the rifle is more than ever the first consideration in the military training of the Infantry, and that target practice cannot be carried on in Drill Sheds, the desirability of affording facilities for this, the most necessary kind of training in preference to mere drill shed drill, as illustrated at the various Camps last summer, is obvious.

There was a decided improvement, in the condition of the Snider Rifle last year, as compared with the two previous years of 1869 and 1870, the general condition of the uniform clothing, accoutrements and equipments being much the same.

The frequent losses and deficiencies of clothing, equipment, &c., which occur in some corps, (the expense of which falls upon the public) I attribute mainly to the fact, that in all cases the men are not required on the conclusion of the annual drill, when they return their arms and accoutrements into the various armouries, to return at the same time their uniform clothing. With a view therefore, to prevent such loss, I think this should be generally insisted on, the Captains of Companies being responsible for

the clothing and equipment, as well as the arms of their men.

TARGET PRACTICE FOR 1871.

During the past season the whole of the Infantry assembled in the various camps of Exercise, performed the prescribed course of Target Practice with the Snider Rifle, and Government money prizes were distributed amongst the officers and, to the successful competitors; to the best shot in each Company \$5, with a badge; to the best shot in each Battalion \$10, with a badge; to the best shot in each District \$15; and to the best shot amongst the non-commissioned officers and men of the Active Militia in the Dominion who performed the prescribed course of target practice, at the time of the Annual Drill the Adjutant General's prize of \$50 with a silver medal was awarded. 584 Government prizes were given, and great interest was taken in the competition.

A return showing the average shooting figure of merit of every Company, Battalion and Corps exercised, together with the names and scores of the best shot in the same was published in General Orders of 30th November, and although many of the men are as yet very insufficiently skilled in the use of the rifle, the foundation has been laid for a systematic course of practical instruction and target practice at the time of the annual drill which cannot fail eventually if persevered in, to increase in general efficiency.

On reference to the General Order above alluded to, it will be seen that:

The 27th Battalion, figure of merit 19.92, was the best shooting Battalion. No. 2 Company, (Widder) 27th Battalion, figure of merit 26.57, was the best shooting Company, and Sergeant J. R. Burwell, No. 5 Company, (Iona) 25th Battalion, with a score of 45, was the best shot in Military District No. 1.

The 31st Battalion, figure of merit 17.08, was the best shooting Battalion. No. 6 Company, (Flesherton) 31st Battalion, figure of merit 23.81, was the best shooting Company, and Private John Parks, No. 6 Company, (Flesherton) 31st Battalion, with a score of 51, was the best shot in Military District No. 2.

The 48th Battalion, figure of 14.53, was the best shooting Battalion. No. 1 Company (Tamworth) 48th Battalion, figure of merit 24.05, was the best shooting Company, and Corporal Frederick Hobbs, No. 1 Company (Bowmanville) 45th Battalion, with a score of 51, was the best shot in Military District No. 3.

The 41st Battalion, figure of merit 15.26, was the best shooting Battalion. No. 4 Company (Merrickville) 41st Battalion, figure of merit 12.24, was the best shooting Company, and Sergt. McIntyre of that Company, with a score of 51, was the best shot in Military District No. 4.

The 60th Battalion, figure of merit 14.13, was the best shooting Battalion. No. 3 Company (Franklin) 51st Battalion, figure of merit 23.06, was the best shooting Company and Sergeant W. McNaughton, No. 4 Company (Hemmingford) 51st Battalion with a score of 47, was the best shot in Military District No. 5.

No. 2 Company, Rawdon, figure of merit 12.31, was the best shooting Com, and Thos. Copping of same Company, with a score of 47, was the best shot in Military District No. 6.

The 8th Battalion, figure of merit 17.07, was the best shooting Battalion. No. 2 Company, 8th Battalion, figure of merit 21.60, was the best shooting Company, and Sergeant George Baxter, of same Company, with a score of 47, was the best shot in Military District No. 7.

The 73rd Battalion, figure of merit 17.75, was the best shooting Battalion. No. 4 Company (Black River) 73rd Battalion, figure of merit 20.52, was the best shooting Company, and Sergeant Major Burbridge, No. 7 Battery (Chatham) N.B., Brigade Garrison Artillery, with a score of 50, was the best shot in Military District No. 8.

The Cumberland Provisional Battalion, figure of merit 24.11, was the best shooting Battalion. No. 7 Company (Halifax) 66th Battalion, figure of merit 30.16, was the best shooting Company, and Private W. Colborne, No. 3 Port Philip Company, Cumberland Provisional Battalion, with a score of 49, was in the first return sent to head quarters reported the best shot in Military District No. 9; but since the publication in General Orders of the names of prize-winners, an amended return has been received from the Acting Deputy Adjutant General, Military District No. 9, intimating that Sergeant Connors, No. 4 Company, 63rd "Halifax" Battalion of Rifles, stands highest, with a score of 51.

The 1st Battalion Rifles, figure of merit 20.98, was the best shooting Battalion. No. 4 Company (Richmond) 1st Battalion Rifles, figure of merit 27.13, was the best shooting Company, and Private J. Ferguson, with a score of 49 was the best shot in the Grand Trunk Brigade.

The Province of New Brunswick, figure of merit 14.57, was the best shooting Province, Military District No. 8, figure of merit 14.57, the best shooting District. The Cumberland Provisional Battalion, Military District No. 9, figure of merit 24.11, the best shooting Battalion. No. 7 Company, 66th Battalion, in Military District No. 9, figure of merit 30.16, the best shooting Company, and Private John Parks, No. 6 Company, 31st Battalion, in Military District No. 2, who made 51 marks out of a possible figure of 60, scoring at 600 yards range 18 marks out of a possible figure of 20, and at the 200 yards range 15 marks, the best shot in the Active Militia of the Dominion at the Annual Drill of 1871-72. Private John Parks, 31st Battalion thus winning in addition to the Company, Battalion and District prizes, the Adjutant General's prize of a silver medal with \$50.

MILITARY SCHOOLS.

Since the formation of Military Schools in 1864, 6,285 certificates of qualification in drill have been obtained by the large number of Cadets who have passed through these Schools.

At present there are eight schools of Military Instruction authorized, six for Infantry drill, and two schools of Gunnery, the organization of the latter has been detailed in the report on the artillery; there are also 2 Riding Schools for the instruction of Cavalry, one at Kingston, the other at Quebec, as branches of Military Schools at those places.

On the 1st of February, the following number of cadets were attending the Infantry Schools, at Toronto, thirty-five; at Kingston, twenty six; at Quebec, forty-three; at Montreal, twenty-six; at Fredericton, forty four; at Halifax, fifteen; being a total of 185. The Gunnery Schools as already stated are nearly full there being at present about 280 of all ranks, acquiring a knowledge of Artillery Exercises in A. and B. Batteries. The Infantry Schools are in operation for six months, and the two Cavalry Riding Schools for three during the winter Season, the Artillery Schools for the whole year.

The experience of the past summer has clearly demonstrated the desirability of encouraging all officers and non-commissioned officers to attend the military schools to learn their military duties, and qualify for their respective posts. Unless officers have a knowledge of their duties, it is impossible they can know how to lead or train their men.

There are many excellent officers in the Canadian Militia, indeed I do not believe that the Transport and Commissariat duties required, could have been better performed than they were at the various Camps of Exercise last summer, by Officers of the Canadian Militia; the last expedition to Manitoba has given additional proof of their capacity in this respect also, but generally, as might be expected, from lack of opportunity to acquire the same, in a proper knowledge of Regimental Drill, of Camp Duties, and Interior Economy, they are very deficient.

If however, Regimental Officers and non-commissioned officers would attend the Military Schools in winter, to qualify in Drill, &c., they would come to the "Camp of Exercise" better prepared to train and discipline their men, and thus the Militia of the Dominion would yearly improve, and increase greatly in efficiency.

The system of allowing officers to come up for drill examination (without passing which satisfactorily they cannot receive commissions or be confirmed in their commands) at the time of the Annual Camps, is very objectionable, such examinations being then from force of circumstances generally of a very superficial character, moreover these examinations at the time of the Annual Drill interfere greatly with the routine of duties; it would be much more satisfactory therefore, if in future all officers should pass such examinations at a Military School where they could be properly instructed and examined, the usual gratuity of \$50 being granted them on obtaining their second class certificates.

ARMS CLOTHING AND STORES.

The present condition of the Militia De-

partment with regard to arms, clothing and stores, will be seen on reference to the Reports of Lieut.-Colonel W. Powell, Deputy Adjutant General of Militia, and Lieut.-Colonel T. Wily, Director of Stores, &c., both of which will be found in the Appendix.

40,670 Snider Rifles have been issued and are now in possession of the respective corps. There are 6,000 new Snider Rifles in the Reserve Stores, and steps are being taken to procure a supply of the most approved description of Rifles.

A large number of Snider Carbines are being received from the Imperial Arsenals in England for the use of the Cavalry, to replace the present inferior weapon (viz: the Spencer Carbine) in possession. There is a sufficient quantity of Snider Ball Ammunition in the various Magazine to meet the ordinary expenditure of the whole of the Active Militia for at least three or four years.

The Department has now obtained a supply of Tents that will suffice for the wants of Active Militia in this respect at the time of the Annual Camps of Exercise, but the supply of other articles of Camp Equipage, also Blankets, Knapsacks, Haversacks, Accoutrements, &c., &c., is far short of what is required; I therefore recommend that steps be taken to acquire the necessary supply, so that every Military District may in respect of stores and equipment, be complete in itself, and thus the Active Militia in every Province would be enabled whenever required for Actual Service, to turn out at a moment's notice properly equipped.

Lieut.-Colonel Wily's Report shows the amount of clothing in store on the 31st December last, and Lieut.-Colonel Powell's Report shows the number of articles purchased this year, all of which will be available as circumstances may require. Owing to the organization of certain corps in the Province of Manitoba, and in view of a similar provision for British Columbia, it will be necessary to increase somewhat the amount of the estimate for clothing for the next financial year, so that the new corps may be clothed and the necessary reserve formed to replace the annual wear of clothing in possession of existing corps, and in connection with this subject, I have to point out that for "Military reasons" it is desirable that the color and description of the uniform worn by the Militia of Canada, should at all times correspond (according to the respective arms) closely to that used in Her Majesty's Regular Army.

A heavy drain upon the limited stores of the Militia Department has been caused by the two expeditions to Manitoba, and the extension of the Militia system to that Province, this together with the maintenance now of several embodied corps in the Dominion necessarily requires an increased supply of Military Stores.

MEDICAL REGULATIONS.

With the view of establishing uniformity of system in the Medical arrangements at the time of the annual drill last summer, and checking many irregularities on this point which have occurred in previous years, a number of small portable Medicine Boxes or Field Companions were obtained, sufficient to admit of the issue of one to every Battalion performing annual drill in a Camp of Exercise.

These boxes merely contained such simple and ordinary remedies as might be required for a few days, it being the duty of

the Medical officers, immediately on the assembly of each corps, to make a strict examination of the men, sending at once back to their homes any who might be in delicate health, or who might appear likely to become so.

Some complaints having been made as to the deficiency, or inappropriate nature of the medicines supplied, I annex a list of the contents contained in the Field Companions supplied to the Militia Battalions last summer, together with a list showing the contents of the Field Companions used in the Regular army.

List of contents of the Medicine Boxes furnished the Canadian Militia in 1871:

Calomel, Chloroform, Diarrhoea mixture, Ether Sulph, Fuller's earth, Morph Acet, Pil Cathartic Co, Pil Coloc Co, Pil Opil—1 gr.; Pil Opil—1 gr.; Plumbi Acet, Po. as Chlor.; Potas Nit., Pulv. Acacia, Pulv. Crota Co. c. Opio, Pulv. Ipecac Co., Pulv. Jalap Co., Spts. Ammon. Aromat, Tinct. Opil. Tinct. Zingib, Zinci Sulph, Calco Bandages Flannel Bandages, Supensory Bandages, Linen Sheetling, Calico, Lint, Cutta-Percha tissue, Oiled Silk, Cotton Wool, Adhesive Plaster, Sponges, Needles, Thread, Tourniquet, Tape, Scissors, Minim Measure, Scales and Weights, Spatula, Enema Syringe, Surgeon's Tow; Pins.

Contents of the Medical Field Companion used by the Regular Army:

Medicines.—Mixture for Diarrhoea and Cholera, 2 oz.; Chloroform, 2 oz.; Tinct Opil, 2 oz.; Spirit Ammonia Aromat, 2 oz. Pills—(Tins)—No. 7. Calomel gr. i. Pulv. Opil gr. i. in each. No. 8. Plumbi Acet. gr. iii. Pulv. Opil gr. i. in each. No. 9 Calomel gr. ii. Pil. Rhei Co et Pil Coloc Co. na gr. ii. in each. No. 10. Camphir gr. iii. Pulv. Opil gr. ii. et Pulv. Cayenno gr. 1/2 in each. Four dozen of each kind. Powders—No. 1 Morph. Acet. gr. 1/2. Plumbi Acet. gr. iv. et Pulv. Acacia gr. ii. in each.—24. No. 2. Antim. Tart. gr. i. Pulv. Acacia gr. iii. in each. No. 3. Calomel gr. iii. Pulv. Jacobi i. v. et Pulv. Ipecac. Co. gr. xv. in each. 12 of each kind. No. 4. Pulv. Kino Co. i. scrupulo in each.—24. No. 5 Pulv. Crota Co. c. Opio ii. scrupulo in each.—12. No. 6 Pulv. Jalap Co. ii scrupulo in each.—12. Appliances—Calico rollers—2. Suspensory bandages—2. Clavical bandages—2. Strong calico—1 yard. Linen Sheetling—1/2 yard. Lint—1/2 lb. Gutta Percha tissue—1/2 yard. Cotton Wool—1/2 lb. Isin glass plaster—1 yard. Adhesive plaster—1/2 yard Sponges, surgeons—2. Needles, surgeons—25. Whited brown thread—1/2 oz. Razor in case. Shaving soap—1 roll. Screw field tourniquet. Candle and wax matches.—Fins—1/2 paper. Tape—1 piece. Scissors—1 pair. Minim measure—1 Graduated horn cup—1.

From this it will be seen that the Canadian box is the more complete of the two.

An experienced Medical officer, resident for many years in Canada, and who had served for years in the Imperial Army, was consulted as to the nature of the medicines required, and his selection adopted; a very limited amount of money was available, and only the most necessary and least expensive medicines could be furnished. Inasmuch, however, as the climate and nature of the usual complaints differ considerably in the various districts of the Dominion, aguo prevailing much more in Western than in Eastern Canada, it would seem advisable to include Quinine in the lists of medicines, and steps are being taken to have the Field Companions more suitably and completely supplied for the coming season.

The medical arrangements last year were carried out Regimentally, and in view of possible accidents, all Surgeons and Assistant Surgeons were expected to take with them to the various Camps an ordinary pocket case of instruments.

The position at present of the Medical officers in the Militia is unsatisfactory to these gentlemen, and the organization of so important a branch as the Medical Department of an army is as yet very incomplete.

Medical officers on first appointment to Militia Corps, rank relatively with Lieutenants, after five years' service with Captains, Surgeons with Majors, but beyond this no higher relative rank is granted, nor does the present organization extend beyond a mere regimental system. In order therefore to establish the Medical Department on a proper basis more in harmony with the Military system of the country, and Army Medical necessities, I have to submit that it is desirable on these grounds:

1st. That a Medical Staff Officer of Militia should be nominated, if possible one who has served at least ten years in the Imperial Army.

2nd. That in each Military District the senior Medical officer should be nominated principal Medical Officer of the District.

3rd. That each Battalion should have one Surgeon and Assistant Surgeon, each Squadron of Cavalry one Surgeon or Assistant Surgeon, and each Battery of Artillery one Surgeon or Assistant Surgeon.

4th. In each Military District there should be four Surgeons and eight Assistant Surgeons on the Staff, who could be called in cases of emergency to go on detachment, or take temporary charge as may be directed.

5th. All Surgeons and Assistant Surgeons should, on their first appointment, produce deplas of legal qualification to practice, and should be licentiates of one of the recognized Colleges or Universities of the Dominion or of Great Britain as recognized by the Medical Board of Great Britain or Canada.

6th. That on appointment an Assistant Surgeon should rank relatively with a Lieutenant, after five years service with a Captain, Surgeons to rank with Majors, ranking relatively, and after ten years service to be nominated Surgeon Majors, ranking relatively with Lieutenant Colonel but junior of that rank. Staff Surgeons to hold the same relative positions as Regimental Medical officers.

7th. The Senior Medical officer of each district to be the District Principal Medical officer, and to rank relatively as Lt. Colonel, according to date of Commission, but it is distinctly to be understood, that relative rank confers no military status or command, it being only established for civil officers attached departmentally to an army, to regulate precedence as to choice of quarters, rates of pay, allowances, &c.

8th. That the rank of Surgeon Major should carry with it \$1 per diem additional pay to that of Surgeon, whenever Corps are embodied for Annual Drill or Actual Service, and that the Principal Medical Officer of the District should receive \$1 per diem more pay than a Surgeon Major on similar occasions.

9. That at other times than those of Annual Drill or Actual Service, whenever the Services of a District Principal Medical Officer is required for Boards of Examina-

tions, &c., a fee of \$5 be allowed, but that all returns or reports on Militia service be transmitted by him without extra pay.

10th. That in addition to the Field Companion supplied for every corps, a pair of Hospital Bandiers complete with medicines, &c., similar to those supplied to Military District No 10, be obtained for every District.

The Department not being in a position to supply medicine boxes to several corps attending camps of exercise for annual drill on the day of assembly, medical claims and charges have been forwarded in connection with such claims, many of which are considered excessive.

In selecting ground for the formation of Annual Camps of Exercise, it would be desirable that the District Principal Medical Officer charged with this duty with a view to securing the best sanitary site, and in the Western Peninsula of the Province of Ontario, care should be taken to encamp on high ground, so as to avoid as far as possible risk of aguo in that aguish district.

The adoption of the above recommendations for the Medical branch of the Service, would I feel sure result in a much more satisfactory organization.

(To be continued.)

The new torpedo boat, in course of construction at the Brooklyn Navy yard, has at present 40 men at work upon it in the new machine shop, where the keel is laid and the frame is being put up previous to removing it to the shed where it is to be completed. It will be built with a double bottom and on the bracket plate system, with longitudinal frames. It will be iron plated forward and will carry one heavy gun and be propelled by a "Fowler" wheel, the success of which will depend upon the speed it can produce. Its dimensions are—length 173 feet; breadth, 28 feet; depth, 13 feet. It is not expected to be completed for some time.

A despatch from Havana, May 11, reports that the Spanish man of war *Pizarro* has arrived at Santiago de Cuba from Aspinwall having abandoned her vigilance over the steamer *Virginus* at the latter port, on account of the arrival there of the United States steamer *Kansas*. After a consultation between the commander of the *Kansas* and the American consul at Aspinwall, the *Virginus* was declared an American ship, and her commander then hoisted the American flag. The instructions of the Spanish commander were to watch the *Virginus* as a blockade runner and this mission terminated on the acceptance of the responsibility of *Virginus* as an American ship, The *Virginus* left Aspinwall previous to the departure from that port of the *Pizarro*.

A Washington special says, at the Session of the Cabinet on Tuesday, the President said he had for months past deplored the inefficiency of our coast defence, and regretted that he could not do anything to strengthen them. After an interchange of opinion it was finally decided that every iron clad of the navy should be put in a condition for immediate service. The Secretary of War was also instructed to make coast defences and particularly on the Southern sea board as impregnable as possible. Order to fit out so many monitors at this time excites the suspicion that trouble is imminent to Spain. Information has reached the Navy Department that Morn Castle guarding the entrance to Havana Harbor is being rapidly strengthened, and that 15 inch guns pointing seaward are now being put in position.

ONE EFFECT OF THE GOVERNMENT'S TREATY POLICY.

The action of our Parliament in enthusiastically accepting the Treaty of Washington has aroused in the Mother Country a strong desire to establish a Federal Zollverein, in which all the colonies should be represented. That scheme has often been propounded and discussed, but never before earnestly advocated by an influential portion of the British Press. While the policy of the Gladstone Ministry has been thoroughly anti Colonial, other nations have been striving for Union. The British people are beginning to see the necessity of welding all the members of the Empire into one united body. It is calculated, not wildly but with a fact basis, that before the end of the century, towards the close of the present generation, the United States will have a population of 100,000,000 souls. Russia has already a population of 75,000,000. She is now contemplating a railway to India, and in a few years will stand on the Himalayas.

Opposed to either of those two powers, the "tight little islands" without Colonial aid would have to give up the profession of arms and trust to their ability as carriers while their coal lasted. They could only fight Russia by way of a Canadian Pacific Railway. By the side of the tremendous military powers on the Continent, swelling annually, the British Isles would cut but a lamentable figure. These facts have created no small anxiety in England. The Manchester School, who would have Great Britain renounce her own flesh and blood, are falling into disfavor. Canada's action on the Treaty of Washington, exhibiting, as it did, her strong regard for Imperial interests, has silenced those who questioned the usefulness of colonies, and show that with a Legislative union the welfare of the Empire would be benefitted. The London *Economist*, discussing in a late issue of the acceptance of the Treaty by the Dominion Parliament, says:—

"There is another side to the question, and one that we should not lose sight of. The population of the Canadian Dominion is but little more than a tenth of that of the United States. It would clearly, therefore, be a mockery to bestow on it an independence it could not defend. The Canadians settled in America on the faith of protection from us, and shuffle as we may we cannot escape from the obligation. Nor, in truth, do we believe that the people of England would attempt to shuffle. If Canada, whether it were called Dominion, Kingdom or republic, were invaded in overwhelming numbers, this country could not and would not stand tamely by and see it conquered. Even on the most selfish grounds, therefore it is not our interest to sever the connection with her. If it be objected that we are here assuming an unfriendliness on the part of the United States which does not exist, we might content ourselves with pointing to the history of the last ten years as evidence that, either by naval over-zeal or official remissness, disputes may in the most unexpected ways, arise at any moment.

"To any one who will think the matter out, indeed, it must appear evident that federation with Canada is the only means of escaping the risk of war always impending over us at present."

English journals never penned such words as the above until we proved last session that our boasted loyalty was not of the lip alone.

HOW THE MILITIA IS APPRECIATED IN BRUCE—INTERESTING PARTICULARS.

KINCARDINE, June 19.

This morning the 22nd Battalion mustered here—414 officers and men, Colonel Sprait commanding. Two magnificent standards, worth four hundred dollars, composed of the richest silk, fringed with gold lace, each staff surmounted with a golden crown, supporting a lion, were presented to the Battalion by Mrs. Sprait on behalf of the ladies of Bruce. In the presence of a large assemblage of admiring civilians, Colonel Sprait responded in appropriate terms. The battalion enthusiastically cheered their fair benefactresses and the people of Kincardine for their hospitality. Thereupon they embarked for Windsor on the gunboat Prince Alfred, to attend their annual drill.

PROSPERITY OF THE DOMINION.

A glance at the annual reports of the Trade and Navigation returns of the Dominion, will reveal a most satisfactory exhibit of the prosperity of the country. In a very few years Canada has risen from the eleventh to the sixth position in this respect among the nations; and is fourth as a Maritime power. In 1868 the Trade of the Dominion was \$129,553,194, and in 1871 it had risen to \$161,121,095, or an increase of \$31,557,901, or nearly twenty-five per cent. The "paid up Bank Capital," which on the 30th June, 1868, was \$29,729,048 had risen on the 31st March, 1872, to \$43,248,389, being an increase of \$13,419,341, or nearly 46 per cent. in less than four years whilst the "Bank Deposits" between the same dates had advanced from \$31,752,775 in 1868 to \$69,810,008 in 1872, and within the four years had, within a fraction, *actually doubled!*

Again, taking the returns, of the Savings' Banks as distinct from the ordinary banking institutions of the country, the balances have risen from \$1,483,219 on the 30th June, 1861, to \$2,441,293 on the 31st March, 1872, or an increase of \$958,074, being upwards of 64 per cent. in less than four years; whilst in addition to the ordinary Savings' Banks show that the balances grew from \$24,588 in June, 1868, to \$2,988,140 in March, 1872, that is to say that they multiplied themselves about 14 and two-third times, or in other words about 14 66 per cent!

Coming next to the "Revenue" account of the country, it appears that the expenditure from revenue on new public works, fairly chargeable to capital, has been since 1st July 1857, no less than \$8,081,803, whilst the increase of the debt has only been \$1,967,876, so that Revenue has provided during that period for an extension of the public works of the Dominion to the handsome amount \$6,114,027.

So again in the year 1870 71, there has been expended in the extension of public works the sum of \$3,640,248; whilst in the same year the debt of the Dominion has, nevertheless, been actually reduced by the important figure of \$503,224!

But the comparison of the revenues of the years of Confederation are even still more satisfactory, for, whereas the revenue of the year ending 30th June, 1867 68, was \$13,687,028, that ending on that same date for the financial year 1870-71, was \$19,335,560, showing an increase of \$5,647,522, and an actual surplus of income over all the charges of the year of no less than \$3,712,479.

IRON BOATS ON THE MISSISSIPPI.—Parties in Dubuque, Iowa, are building, for a firm of St. Louis lumber dealers, an iron boat, the hull of which is 145 feet in length, breadth of beam, 26 feet; depth, 4½ feet. The entire hull is to be of iron, including deck and guards. The hull will be divided into eight water-tight compartments. There will be tanks in it, by which it will be practicable to sink the boat to the draft required in five minutes or in about the same time to raise her to her original draft of water. The contract requires that she shall draw but eighteen inches of water when completed, with water and 24 hours' fuel on board. In short, she is to be a regular Clyde built iron vessel. No rivets will be seen; on the contrary the exterior of the hull will present a perfectly even and smooth surface. Mr. Hopkins, a practical builder from the Clyde, Scotland, will superintend construction. He built the iron steamer Clyde recently at Dubuque, and also an iron barge. The power is to equal to twenty by thirty inch cylinders, to propel Dowler Birdseye's shoal water propeller, which is the invention of Captain John Dowler, an Illinois river steamboat man. The one under contract is to be able to tow up stream two thousand five hundred tons weight at a speed of four and a half to five miles per hour. The same parties will soon begin the construction of two other iron steamboat hulls for the same firm, one larger and one smaller than the one now building, and all to be furnished with the shoal water propeller aforesaid. They will be fully employed in the Upper Mississippi during the navigation in towing rafts. When navigation is suspended, they will tow in the lower river.

TRAFALGAR AND WATERLOO.—One of very few remaining officers who were present at Trafalgar has just died at Paignton, aged 82—the Rev. Henry Bellairs, a descendant of the ancient family of Kirkby Bellairs, Leicestershire. He entered the navy when 14 as midshipman and received two wounds at the battle of Trafalgar. From ill-health he left the navy, but subsequently received a commission in the 15th Hussars, together with his brother, the late Sir Wm. Bellairs, and served at Waterloo, thus taking part in both England's greatest battles. He subsequently entered the Church, and became rector of Bedworth, Warwickshire, of which county he was a magistrate.—*Vol. News.*

CORRESPONDENCE.

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

St. JOHN, N.B., 19th June, 1872.

To the Editor of the VOLUNTEER REVIEW.

SIR:—Permit me to ask through the next issue of the VOLUNTEER REVIEW your valuable opinion or decision on the following:

Last year when the 62nd Volunteer Battalion was disbanded, Mr. K held a commission in said Battalion as Lieutenant; since then the Battalion has been reformed, and a gentleman not holding a commission in the old Battalion had raised a company and was gazetted Captain last November.

Now, after this date, the Lieutenant above referred to, raised another company for the same Battalion and was gazetted as Captain about last February.

Which of the above is senior Captain of the present Battalion?

Yours truly,
ESQUIRE.

The date of commission decides the seniority irrespective of former service.—ED. VOL. REV.

To the Editor of the VOLUNTEER REVIEW,

SIR:—I perused with regret, a recent letter in the VOLUNTEER REVIEW signed "Fair Play." I say regret, because I did not think that any one entitled to hold a military opinion in the district of the 40th Battalion would have entertained a doubt as to the necessity of the Colonel of the Regiment being the sole judge of the officer who would best suit him (and by inference the Reg.) as Adjutant.

It is consequently with corresponding pleasure that I notice Captain Var's repudiation of the unsoldierlike idea.

"40TH."

To the Editor of the VOLUNTEER REVIEW.

DEAR SIR:—I desire, by your favor, to bring to the notice of officers of the Dominion Forces generally, a desideratum which it is not improbable that some of them might find it in their power to supply. It is not unlikely that the idea may have occurred to a talented young officer of a western Ontario Regiment, whose valuable contributions to the REVIEW must have recently afforded very great pleasure to its readers.

We are all familiar with those large maps of the United States which, with the broad common sense grasp of a subject which characterize the people of that country, give a fair delineation of their territory from ocean to ocean.

Every one is aware of the provoking nature of the old maps of Canada, few of which extend even to the head of Lake Superior, so that, in the beginning of 1870, it was extremely difficult for any one who had a chance of going to Fort Garry, to obtain any

general idea of the country west of Thunder Bay.

We now imperatively require such a map of Canada as will show us at a glance, our noble Dominion from Nova Scotia to Vancouver's Island on a large scale, and it should embrace the line of the American Pacific Railroad, so that the geographical circumstances which might influence the choice of bases of operations, and all possible lines by which invading forces from the States might operate, should be clearly perceptible.

I think that no great difficulties should now attend the compilation of such a map. The surveys of Manitoba will probably soon be completed. The operations of the Surveying parties for the crowning at once of the edifice of confederation, the Canadian Pacific R. R., will throw a flood of accurate knowledge on the great North-West, and the Crown Lands Office of Victoria, has already furnished maps of great accuracy of British Columbia.

Such maps should carefully avoid any thing like the heavy painted lines which disfigure the ordinary U. S. maps. Indeed they would be better not painted at all, but should mark in the clearest manner only such known features of the country as would be required for military purposes.

It would be an invaluable boon to such officers of the Force, and there are many, as make a study of the higher branches of military knowledge, if the Adjutant General would be pleased to take this subject into his consideration, and advocate the appropriation of a sum on the Militia Estimates for the preparation of such a map, which I am sure would be eagerly purchased by zealous officers.

I am, Dear Sir, &c.
G. W. G.

(FROM OUR OWN CORRESPONDENT.)

VICTORIA, BRITISH COLUMBIA,
28th May, 1872.

Every where there seems this year to be ground of complaint of the cold and backward state of the Spring. In San Francisco certainly, the effect was more of slight discomfort than backwardness, the unusual amount of moisture having rendered vegetation unusually luxuriant even for that splendid climate, whose chief fault is heat and dust. In Victoria it still remains more than usually cool and changeable. From what I have seen of it, however, and taking the accounts of reliable residents of experience there is little doubt but that the climate of British Columbia (especially the Island) is admirable.

The surroundings of Victoria are exceedingly pretty, and there is plenty of fertile land through the Island, although it is too rocky to be a purely agricultural country. Of course the mineral resources of the whole Province are its greatest attractions at present. But the Province is (and must continue) sadly isolated, until the Canadian Pa-

cific touches it. That will operate like a magic wand, and British Columbia will have reason to bless the day which will lot in a few thousand Ontario men, cheaper goods and Canadian currency. As it is, everything is absurdly expensive, altho' business seems very stagnant, owners of land hold it at ridiculously high prices, and in fact the Colony has all the faults incident to the extreme isolation of its geographical position. All this however will change at once when the Railroad reaches the Pacific shore, and the Province will be found to hold out plenty of inducements to the enterprising Canadian.

There is magnificent timber here for spars, but very little for purposes of household utility; furniture, consequently, is very expensive, and I think a large firm, like Jacques & Hay, might do a good stroke of business by sending a cargo over the road as soon as it is opened. Pity it is so long to look forward to. But I am not going into details of this kind. I will only throw out a hint to merchants in general to keep a sharp look out for prices in British Columbia, when they shall be able to throw fresh supplies into the Province by Rail.

The Queen's Birthday, somewhat cloudy and showery, was signalized by a Ball in the evening at Government House. There were said to be 400 persons present, about a fifth I suppose of the whole white population of Victoria, but the ample and commodious rooms did not seem uncomfortably crowded. Government House is not a very stately looking building outside, but internally seems to be very well arranged.

There are three men of war in Esquimault Harbour, the "Shout," the "Sparrowhawk," and the "Boxer," and the Ballroom was enlivened by the uniforms of a number of Naval and Marine officers.

A Regatta, and a trip to the Island of San Juan (pronounced San Wan) were the diversions of the earlier part of the day.

The British occupation of San Juan is maintained by a small force of Marines under Capt. Dalacombe.

The existing Militia organization of British Columbia (if it can be said to exist) is very small, consisting of about a half company at Victoria, and, I believe, about the same at New Westminster. The force was embodied under a local act, but received but little, if any, assistance from the local Government.

Considerable interest, however, is manifested in the future organization of the Dominion Force, and the steps to be taken by the Militia authorities are anxiously looked for. The smallness of the population and the fluctuating character of that portion of it occupied in gold-mining will probably render it difficult to raise a very considerable body, but there is no doubt that a fair proportion will come forward. As they have hitherto had to find everything but arms themselves, the relief of having uniforms provided will be sensibly felt, and together with the pay, will afford some inducement. The "materiel" is excellent. The local press takes interest in the matter, and the beginning of a sketch of the history and status of the Force, has already appeared in the columns of the *Standard*.

CONTENTS OF No. 20, VOL. VI.

POETRY.—	
An old woman's reverie.....	312
EDITORIAL.—	
The Quelling Gun.....	308
Montreal Herald on the Militia Law.....	307
Closing of 5th Session, 1st Parliament.....	307
Editorial paragraphs.....	310
Reviews.....	311
News of the Week.....	311
CORRESPONDENCE.—	
Wimbledon Team—A Rifleman.....	314
From Montreal—D.....	314
SELECTIONS.—	
Report of the Adjutant-General.....	303
Extraordinary rifle match.....	305
The German Exodus.....	311
25-ton guns to be tested.....	311
National Difficulties—G. W. G.....	3123
French Capitulations.....	31
2nd and 3rd Battalions compared.....	313
Gunboats.....	313
Earthquake.....	313
Foreign, Military and Naval Items.....	313
MILITIA GENERAL ORDERS.....	306

S. M. PETTENGILL & Co., 37 Park Row
New York,

GEO. P. ROWELL & Co., 40 Park Row, New
York,

Are our only Advertising Agents in that city



The Volunteer Review,

AND

MILITARY AND NAVAL GAZETTE.

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

OTTAWA, MONDAY, JULY 1, 1872.

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

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

It would appear from the leading article in *Broad Arrow* of 8th June, that our anticipations respecting the failure of the "large rifled guns," as a naval armament, have been singularly correct.

Our contemporary commenting on the system of rifling says:—"But without attempting to assert that the adoption of the faulty French rifling, and its weak projectile, was due to a want of either military experience or mechanical knowledge, we can unhesitatingly affirm that the time for enquiry into the propriety of retaining the system for the

Navy has now arrived. We believe too that our readers on learning the intelligence received, while we are writing, of the serious damage done to another of the 18-ton guns of the *Hercules*, will be of the same opinion."

The *Hercules* is an ironclad of over five thousand tons, armed with eight 18 ton guns, and of these several have been already under repair; but the late damage was caused by the premature bursting of a shell in the gun, splitting it through tube and coil so as to completely disable it.

A most instructive history in science and practical mechanics could be written from the failures of every attempt to arm the Navy of Great Britain with rifled ordnance—nearly one thousand of the 110 pounder Armstrong rifled guns—the *ne plus ultra* of artillery in their day—were manufactured with their stores of lead-coated shot before a failure was anticipated—it came in action: and £1,000,000 sterling was lost in consequence—the guns were condemned.

The present system was introduced and the result is as shown; but it is not all: the *Royal Sovereign* during a week's practice at Spithead had several 9 inch common shells broke up on firing—the boats crews about to land under such protection should be pitied.

It is stated by the Inspector of Ordnance "that three out of four 25-ton guns in the *Monarch* had their grooves slightly burred, and the fourth gun required re-venting after thirty-five rounds only of firing in three years."

It is very little wonder indeed that the people of England should experience grave doubts as to their capability of resisting the disembarkation of a well appointed invading force.

Under existing circumstances a naval battle could hardly fail to be disastrous to her, and she would not have the consolation of inflicting such a loss on the enemy as would make his victory barren; a circumstance which, on more than one occasion, saved her from utter annihilation.

The question of guns, military and naval, has yet to be solved, and if ever the monster artillery can be made available it must be in shore batteries—mechanical skill will undoubtedly overcome the difficulties indicated and existing—but the machine will never be successfully applied as a naval armament in the proper sense of that term.

We question the capability of any manageable mass of metal of which those guns could be composed withstanding the strain of a service charge for 100 rounds fired consecutively, and are pretty sure it would be unserviceable from heating before half the number were fired.

The designers of those guns must have imagined that a naval action would be decided by half a dozen shots fired at intervals of three minutes, the vessels meantime making a difference in range of over 1000 yards between each shot,—a likely condition to ensure accuracy of firing or aim and displaying

the superior excellence of delicately and artistically rifled guns.

In our issue of the 17th June, a quotation from Captain Colomb's lecture on "the attack and defence of fleets," shows conclusively the superior value of the old 68-pdr., as far as accuracy of fire is concerned.

The whole subject is of great interest and new developments may be looked for in connection therewith.

SOMEWHERE about thirty years ago military and naval philosophers had their minds exercised over the doings and pretensions of a Captain WARNER of the Royal Navy, who proposed to destroy a vessel by some secret process known only to himself, but which he would put the Government of Great Britain in possession for a consideration.

He also declared that under certain conditions he could make artillery attain a range of three miles with accuracy—his projects were ridiculed. *Punch* nicknamed him long range WARNER, and he was generally laughed at as an idle speculator by that portion of the public who did not consider him a fool or imposter—time however has queer revenges—and if poor WARNER had lived long enough he would have seen the last of his pretensions realized; while the first is declared to be superior to fleets for harbor or coast defence, and even superior to artillery for naval armaments.

There can be no question that Captain WARNER was the original inventor of the torpedo—as his only experiment was a complete success—but the question will arise as to what value is to be ascribed to either the long range or the torpedo?

Taking the former at a limit of three miles, what effect could be produced in action by shot at that distance; the resisting power of the vessel or fort &c. being measured by its penetrability at 1000 yards?

The deviation as stated, by Capt. COLOMB, with the vessel, which is the platform of the gun, rolling through an angle of 16 to 32 degrees may be at the 1000 yards range over 360 yards. At the long range the error proportionately would be over a mile, and this would occur from an error of half an inch in laying the gun, so that a shot fired at sea on either side of the point on which the gun was trained—not a very splendid or encouraging result.

It will be more difficult to define the value of a torpedo in actual warfare; it is quite possible that by using them as *caltrops* were used in ancient time to defend dead angles, or prevent the approach of cavalry—that is, to scatter them broad cast over the entrance to a bay or narrow channel, and if the enemy is uncommonly stupid he may be caught—it is as likely however that they would be just as mischievous to friends as foes—and the latter could easily devise means involving the minimum of risk for *flushing* them out.

The application of this offensive weapon to naval attack and defence in the open sea is another question; it has been asserted that a vessel with an *out rigger* could be equipped in a formidable manner with torpedoes, but a moments consideration will satisfy any one that such a craft must be necessarily slow and run as great risk from the explosion as the vessel she attacks.

A *towing* torpedo is a different machine, but even its positive value will be at best doubtful: a vessel moving at the rate of ten miles per hour has a speed of 293 yards per minute towing any object from her bow ram or cutwater, its tendency would be to fall into her wake, her opponent passing at a similar speed, if 300 feet in length, would clear her in about *one-third* of a minute, and the arrangements of either must be singularly accurate if they could succeed in placing a machine towing alongside in a position to do the slightest mischief to their opponent in that time.

No outrigger standing at right angles from the vessel (the only position in which it could be of use) could be concealed, and with the power of modern steamships a known danger can always be avoided.

It is evident that the torpedo is just about where Captain WARNER left it.

THERE is nothing calculated to be more beneficial to the mutual interests of Great Britain and her Colonies than an earnest practical consideration of the relations in which they mutually stand to each other.

It is no longer a matter of doubt that intricate political problems have been actually solved by the progressive growth of those dependencies, and it is evident the time has arrived when the question of a Federation may be fairly considered.

With respect to the aspect of the constitutional question the universal feeling in Canada is *one country one Queen*, and its practical solution is fairly illustrated by the following extract from an exchange:

"The correspondence on the Treaty and the proposed guarantee illustrates the new constitutional relation which has arisen both in Canada and in the Australian colonies from the modern experiment of so called responsible government. The Cabinet which, while it has absorbed the whole executive power of the Crown, has still no recognized place in the English Constitution, assumes in Canada, under its proper title of the Committee of Privy Council, an independent character in which it corresponds and negotiates with the Imperial Government. In theory the Governor General selects his Ministers, though they are necessarily, as in England, the leaders of the Parliamentary majority; but, while it is his business to obey the instructions of the Crown, the Committee of Privy Council is already recognized as the authorized representative of the Parliament and people. A minute of the English Cabinet is intended only for the guidance of its members, except on rare occasions when a collective resolution of the Ministers is submitted to the Sovereign. A minute of the Canadian Committee of Privy Council, for

ally approved by the Governor General, is a State paper embodying the decision of the Government on the most important affairs. It is convenient that a Ministerial body should be interposed between the Colonial Parliament and the Home Government; and there is a strong presumption in favor of institutions which owe their origin to practical expediency rather than to deliberate and theoretical legislation. The successive statesmen who, sometimes through indolence, and sometimes in accordance with their convictions, conceded responsible government to the colonies, probably persuaded themselves that the intercourse between the Secretary of State and the Colonies would afterwards, as in former times, be conducted by the Governor. As the Ministers now exercise the chief political power, it is desirable that their position should be acknowledged, and also that colonial statesmen should be known to those who hold office at home. The Canadian Committee of Privy Council apparently consists of sagacious men of business who regard substantial advantages as the best results of a dialectic victory."

The commercial aspect of our relations have been so often illustrated and analyzed that it is not necessary to do more than remark that Canada is the *third* naval power in the world.

In a military point of view she has over 700,000 enrolled soldiers and could put 250,000 in the field; her marine force in sea going ships would probably rank next to Great Britain, federation would therefore at once double the effective force of the latter; and although there are people who ought to know better—who will persist in asserting that Canada is a source of weakness to Great Britain—the people of this country and the United States thoroughly understand the contrary.

It is a well attested fact that the exigencies of Yankee politics would have forced a dangerous quarrel on Great Britain long since if there was no Canada in the rear of the United States.

As it is we can take that country by the throat at any time, and they know it.

The interests of Great Britain will be best served by Federation

"Several of the County Councils have liberally and properly voted some additional compensation to that granted by the Government for the services of the active militia. Wentworth has voted fifty cents per day, per man. Wellington and Peel have added twenty-five cents per day, per man, to the Government fifty cents. These generous acts are appreciated by the volunteer forces of the counties named, not so much for the mere money value of the boon, but because they regard it as a public acknowledgment of the valuable services of those who leave the comforts of home for the discomforts of camp, and make large sacrifices for the defence of their country."

The above extract which we copy from the *Expositor*, proves that the value of the Canadian army is fully appreciated by the great mass of the people, and that they will endeavor to atone for the misdeeds of the economists of the House of Commons.

It is well known that our County Councils

really represent the public opinion of the people; and in this case a sufficient answer has been given to all objections respecting the value of the Volunteer force. Military service under the enlightened and generous administration of Wentworth, Wellington and Peel, will be no "unequally distributed burthen," as those counties have shown that they thoroughly appreciate the duties as well as the rights of property, and by imposing a tax for its defence are determined that every individual shall do their part in that necessary function.

We commend a careful study of this feature of our municipal arrangements to those who complain of unfair treatment, and advise them to look for redress to their representatives in Parliament or their County Councils.

It does not argue well for the "any reorganization" scheme of Mr. CARDWELL and his Whig Radical confreres to find that fully *one half* the trained officers of what was the British army are retiring from the service this year.

We saw with regret in *Broad Arrow* an article on a gallant and experienced soldier (a man too who had attained the rank of Field officer by hard and meritorious service) having adopted the profession of *leather law*, in other words, being called to the bar—in which it was half jocosely insinuated that his military knowledge would be rendered of more value to his country by his forensic talent—although he had filled the rank of Deputy Quartermaster General.

It would strike practical observers that people who could contemplate the loss of valuable and experienced services to the country must be living in a "fool's paradise"—and it would appear that the advocates of "army reform" in Great Britain in their delight at having eliminated all the practical experience from its ranks—forget that mere scholastic acquirements is not efficiency, and that the *Dux* of a competitive examination will not necessarily be the *Dux* of a forlorn hope.

Perhaps the new tactics will render such an operation unnecessary, and the future subaltern with the aid of a camp stool, map, field-glass and the telegraph will be able *a la* Von Moltke to command his detachment out of the range or sound of cannon shot.

New discoveries in science and mechanism are making every day—and it might be possible for Birmingham to turn out a cast iron force as impenetrable to shot or shell as the far famed ironclads. The only trouble may be in the fact that they would be just as effective.

WHETHER the *Boston Journal* is an accurate authority on ordnance we do not know, but of one fact we are quite certain, the rifled gun is not the proper weapon for Naval armament.

A spherical shot will exert a greater smashing power, the initial having equal force, than an elongated bolt. In the contest described it was admitted that the *Alabama* was obliged to use powder of an inferior quality, still there can be no doubt that the *Kearsage's* guns inflicted the most damage—and it cannot be accounted for by difference in weight of metal—but rather in the form of projectiles.

"It has become a habit in some quarters to disparage everything in connection with our Navy, to institute unfavorable comparisons between it and those of European powers, and to question its ability to make a respectable fight if suddenly called upon. Now it may be that our naval force is inefficient; but that it is really so weak, so lacking in modern means of defence and offence, as those croakers take seeming delight in asserting, remains to be demonstrated. For instance, it has been stated that our great guns are inferior to those of England, France and Germany. In the light of recent scientific tests as much may appear. Improvements in gunnery are constantly making, and although the test of actual conflict—which after all is the only true test—awards the palm to the Dahlgren gun, yet it would be absurd to claim that Admiral Dahlgren has attained the *ultima thule* in this regard. Still, in consideration of the fact that the theories of Admiral Dahlgren have stood the test of actual use in war, particularly in the matter of wooden vessels, it is hardly safe to assume that guns constructed of a different and opposing theory, however near perfection, can be superior thereto. The Admiral constructed the gun which bears his name on the theory that rifled cannon for naval warfare are far less destructive to an enemy's vessel than a smooth-bore gun. The naval battle between the *Kearsage* and the *Alabama* demonstrated the exactness of the Admiral's theory. The latter was a British-built frigate, and with rifled guns, recommended by the Admiralty as the best for naval use—sixty eight pounders. The *Kearsage* had the Dahlgren guns, carrying one hundred pound balls. The *Alabama's* shot made clean, round holes when they struck the wood-work, or glanced off when they struck the iron chains which protected the most vulnerable parts of the *Kearsage*, while the shots of the latter tore away huge pieces from the hull of the *Alabama*, sending her to the bottom of the sea after an action of thirty minutes. As between the wooden vessels this actual test seems conclusive, so that instead of being inferior we are warranted in believing the Dahlgren superior to guns of latest European construction. With ironclads the superiority of rifled cannon seems beyond dispute. This can only hold true where the iron plating is too thick to be penetrated by the Dahlgren ball, as otherwise the less velocity and different rotation of this ball would measurably make the same ragged hole through iron and wood-work as through wood alone."

THE ex-Emperor of France has generously endeavoured to shield his officers from blame with respect to the surrender at Sedan. This effort has been severely commented upon by the members of the French House of Assembly, by the Press and by many people who would be quite ready to laud Louis NAPOLEON as the greatest Statesman and Soldier, if he been successful.

A pamphlet has lately been published in London, with the name of the Count de la CHAPPELLE on the title page, (but it is universally ascribed to the ex-Emperor) which will furnish the future historian with material of great value for a future history of the war of 1870-71.

Its most prominent feature, however, is the discussion of the question as to whether the ex-Emperor is or is not to be held responsible for the destruction of the French military power.

Many will answer this question in the affirmative, on the sole ground that his was a personal rule and consequently he is not entitled to plead the mistakes and wrong doing of his creatures as an excuse for his own want of capacity or good fortune.

But it is evident that he was only an autocrat in name, and that his misfortunes began when he attempted to inaugurate a system of liberal representative government in a country to which it is not applicable, and amongst a people who require to be governed.

As long as the exercise of autocratic power remained in his hands the French army held its own—the Crimea and Solferino are lasting evidences that the military spirit and soldierly instincts of the people was not extinct and that France had an army.

The opposition led by M. TIMON had been gradually extending its influence in the French Chambers—that it was factious and unpatriotic the results of its action on France in 1870 as compared with France in 1860 will abundantly prove, and history will hold the astute intriguer who is now the puppet of a Republican clique responsible for all the evils inflicted on the country.

In 1868 Louis NAPOLEON, during the administration of Marshal NEU, proposed a measure for reorganizing the French army, which would have given the country in 1877 an effective force of 550,000 soldiers with a reserve of 480,000 men who had served their full term with the colors—the strenuous opposition of the patriotic M. TIMON and his colleagues prevented that measure becoming law, and fearing that it would be eventually carried out, played on the susceptibilities of the French people, so that the quarrel with Prussia was pushed to a crisis.

The miserable result of this teaching is too recent to need illustration, but the astute fox that has crept to power by it, in order to render his hold thereof more secure, has hit upon the notable expedient of investigating the conduct of the officers charged with the defence of the various French fortresses in relation to their capitulations.

There can be little doubt that the critical situation of affairs in France after the declaration of war, the constant plotting at Paris, the unprepared state of the French army, and the miserable imbecility of the OLIVER administration, led to many unsoldierlike acts; and it can hardly be wondered at that the French soldier being merely a citizen in uni-

form, was generally imbued with the political feelings of the people amongst whom his life was spent, and it was not his duty to France but to the section to which he happened to belong which animated his action.

The system of quartering troops in large garrison towns had localized the French army, imbued it with all class prejudices, and made it the tool of every unscrupulous faction who wished to use it for their own ends. (Mr. CARROLL is about trying a similar game with the British army—the results will correspond.)

As the opposition in the French Chambers were powerful enough to force a ministry on the Emperor, they also took care to see that the army supplies were neither abundant nor accessible; and having plotted so as to take care to profit by the movement when their own factiousness had destroyed their country.

In order to cover up their share under an affected desire to serve the interests of France, they are endeavoring to bring discredit on the officers that endeavoured to save their country's honor, and they throw the same blame on the commandant of Strasbourg as on the man who surrendered Toul.

It is, however, not a matter of wonder that professional soldiers refused to attempt impossibilities or inflict unnecessary suffering and destruction on a civil population merely to pander to the cravings of a morbid sentiment—without arms, ammunition or food, defence was not possible.

Taking General UNION'S case at Strasbourg, he had a garrison of 10,000 inside a town fortified on VAUVEAN'S system, the military zone entirely covered with houses, gardens and trees, affording capital shelter for the enemy, he would not be allowed to clear off the obstacles without leave from the civic authorities which he did not get. Bomb proofs and magazines were few, powder was stored in sheds or any handy place regardless of consequences. Six days after assuming the command the enemy appeared, on the eighth he was summoned to surrender, on the tenth he was invested, and on the fourteenth the bombardment began.

His garrison consisted of odds and ends—demoralised troops, a few artillerymen, sailors and custom house officials—the moblots plundered, and the National guard would not stand fire—he had no engineers, and was obliged to depend on the *pavots* of the city when he wanted palisades put up—he could erect no blurdages because he had neither men nor material; yet he held out for two months under a hail of 200,000 projectiles. Part of his artillery was dismantled, a fourth of his soldiers killed, the citadel fired, 1200 inhabitants killed, 10,000 rendered houseless, ten breaches in the works and one ready to be stormed with the artillery of the enemy converged upon it and defence impossible; and because he did not fight out longer for the mere sake of getting

his men killed M. TURIN and his supporters so zealous of the honor of France want to sacrifice him.

It is useless contrasting the defences of the French fortresses with those of any other country. At Sevastopol the Russians had an Emperor and country to fight for, and would hold out, but can it be supposed that Frenchmen will prolong defence for leaders like GANNETTA or THIER.

History has queer revenges and it will yet do justice to Louis NAPOLEON and his officers.

HIS EXCELLENCY EARL DIFFERIN, Governor General of Canada, Lady DIFFERIN and Suite, accompanied by Sir J. A. MACDONALD, Sir G. E. CARTIER, Colonel BENSARD, and other distinguished personages, arrived on board the *Queen Victoria* steamboat at seven o'clock on Thursday evening the 27th.

HIS EXCELLENCY was met at the wharf by the MAYOR and CORPORATION and an address was read by his WORSHIP, another by the WARDEN of the County, and by the President of the Board of Trade, St. George's Society, St. Andrew's Society, St. Patrick's Literary Society, St. Jean Baptiste Society, Canadian Institute, Irish Catholic Temperance Society, Irish Protestant Benevolent Society, Metropolitan Canadian Society—there was a few more Societies on the ground, but it would appear their courage failed.

A guard of honor under the command of Major WHITE, and the Staff Officers in town, were in attendance on HIS EXCELLENCY. A Royal Salute was fired, and loud cheers given for the new GOVERNOR and his LADY.

About five thousand persons were present.

UNIVERSAL SUFFRAGE DENOUNCED.—Wendell Phillips says.—I shall not state a paradox wholly new. I affirm that so far as we have tried the system of universal suffrage in governing great cities, it has proved a failure. We dare not weigh New York with London. In the face of the Toryism and despotism of Europe, we dare not write New York and New Orleans beside Paris and Berlin. You may load your fingers with diamonds, and fill your pockets with gold, and cover your neck with pearls, and walk up and down the Strand at midnight, and be certain to come home in the morning; but no man would ever try that experiment in Broadway without making his will.

The above extract crystallises the idea of Canadian antipathy to Yankee institutions. There are Canadian speculative philosophers who affect a love for Republican institutions, but the value of such people socially or morally amounts to very little, and the effect of their opinions on the community far less—the mass of the people are not theorists, but simply practical, and they judge accordingly.

“Four iron composite gun vessels building at Chatham Dockyard—the *Rifleman*, the *Ready*, the *Zephyr*, and the *Ariel*—are now getting well advanced. They are building in Nos 3, 4, and 6 slips, and it will be necessary for the two former ships to be launched before the two corvettes, ordered to be

built at Chatham yard, the *Albatross* and the *Daring*, can be laid down.”

Those gunboats form an effective and handy squadron that can be brought to act together without fear of running each other down.

If designed for inshore service they should have a light draft of water, but *Broad Arrow*, from which the extract is taken, does not state what that is.

The class to which they belong would be of service on the Canadian Lakes and for coast defence.

We have received the first number of the *Watertown Morning Despatch*, a new Journal published at Watertown in the State of New York, by Messrs. Moss & Boon. It is Democrat in politics and for enterprise and ability of management we need only say that our friend Moss, so long connected with the *VOLUNTEER REVIEW*, is its principal manager. The *Despatch*, is as usual, in Presidential Election times, hard on its opponents.

NEWS OF THE WEEK.

THE Geneva Arbitration appears to be as completely muddled as the Washington Treaty which has called it into existence. An important decision was looked for on Thursday 27th, but no news has arrived indicating that it had been delivered.

Some confusion in the United States despatches which have been laid to the account of the telegraph, has caused further delay. An adjournment was talked of to take place on Friday.

The *Daily News* says the United States has agreed to be non suited on the “indirect claims.”

A Copyright Treaty has been concluded between Great Britain and Germany.

A break has occurred in the Australian cable between Java and Australia, it occurred just where land communication had been established.

It was stated by Earl Granville in the House of Lords on Friday, that the Court of Arbitration had decided against the indirect claims.

It is stated that negotiations for the complete evacuation of French territory by Prussian troops have been brought to a favorable conclusion.

The Carlist insurrection in Spain still continues to give trouble.

The Khedive of Egypt has been visiting the Sultan, who received the modern representative of the Ptolemies and Pharaohs with regal honors.

From the United States we learn that owing to severe and long protracted drought *three fourths* of the cotton crop will be destroyed.

Dr. Howard has been released as a favor shown the United States by the Spanish authorities.

Stokes, the murderer of Fisk, has been put on his trial. Great difficulty was experienced in finding a jury for the occasion.

The complications arising out of the “in direct claims,” are said to be fomented by President Grant and his party, in order to secure re-election as the redoubtable Horace Greely's chances appear to be improving.

The Dominion of Canada had to welcome her new Governor General, Earl Dufferin, having arrived at Quebec on the 24th, reached Ottawa on the evening of the 27th, and was received with great enthusiasm.

The Camp at Niagara was a great success, it has been broken up and the troops returned home.

A fearful collision occurred on the Grand Trunk Railway attended with great loss of life by an Engine running down an embankment at Shannonville and scalding a number of passengers to death.

At Manitoba and British Columbi affairs were in a progressive state, emigration beginning to pour in and trade being in its best aspects.

THE MOHAWK INDIANS.

A correspondent writing to the *Church Journal* about the above tribe, gives additional particulars to those furnished by our special correspondent, some weeks ago, and says:—

“The Communion Service to which the writer in the *Church Herald*, whom you quoted, refers, is one of two given by Queen Anne. It was taken by the Mohawk tribe to Canada at the breaking out of the war of the Revolution, and it still remains among them in a state of perfect preservation, this fact alone is greatly to their credit, but when I add that for more than fifty years after their removal to Canada, where they were left wholly to themselves, they kept up the services of worship during that whole period, your readers will perceive that they were Christians, not in name only but in reality.

There was a time, before their removal, when there was not an unbaptized person in the Mohawk tribe. When they left the Mission at Fort Hunter to join the English forces at Lake George, their faithful Catechist was still with them, and morning and evening prayers were daily offered on the march and in camp. In the battle at Fort Henry, where twelve sachems were left dead on the field, six of them were communicants of the Church of England. The fact that they had no sympathy with our Declaration of Independence, but preferred to cast in their lot with those who had brought to them the richest blessings of religion is creditable to their hearts, and also as I think to their heads, if we can suppose them gifted with the wisdom to foresee the future. They would have had small chance of remaining in the valley of the Mohawk, but at Brantford, on the banks of the Grand River, they have enjoyed peace and a good measure of prosperity. Long may it continue.”

ENDURANCE.

How much the heart may bear, and yet not break;

How much the flesh may suffer, and not die;
I question much if any pain or ache
Of soul or body brings our end more nigh,
Death chooses his own time; till that is worn,
All evil may be borne.

We shrink and shudder at the surgeon's knife,
Each nerve recoiling at the cruel steel,
Whose edge seems searching for the quivering
life;

Yet to our sense the bitter pangs reveal,
That still altho' the trembling flesh be torn,
This also can be borne.

We see a sorrow rising in our way,
And try to flee from the approaching ill;
We see some escape we weep and pray;
But when the blow falls then our hearts are
still,
Not that the pain is of its sharpness shorn,
But to think it can be borne.

We wind our life about another life—
We hold it closer, dearer than our own;
Anon it faints and falls in deadly strife,
Leaving us stunned, and sicken and alone.
But ah! we do not die with those we mourn,
This, also, can be borne.

Behold, we live through all things—famine curst,
Bereavement, pain; all grief and misery,
All woe and sorrow; life inflicts its worst
On soul and body—but we cannot die,
Though we be sick, and tired, and faint, and
worn;
Lo! all things can be borne.

The following remarks on the use of depressing Gun Carriages in *Barbette* batteries have been copied from the United States *Army and Navy Journal*, and is recommended to our readers because we are satisfied that the system of fortification to which it is applicable, must eventually supercede the parapet with embrasures.

It is much simpler, easier constructed, and stronger, affording consequently more cover to the artillery, and presenting a more massive profile, as well as a command, completely masking the ditch a matter of first rate importance in field work.

OFFICE OF BOARD OF ENGINEERS FOR
FORTIFICATIONS, ARMY BUILDING,
NEW YORK, November 11, 1871.

Brigadier General, A. A. Humphreys, Chief
of Engineers, U. S. Army, Washington, D. C.

GENERAL: The Board of Engineers desires to present for your consideration the following remarks setting forth the necessity for a depressing gun carriage for barbette batteries, having a low or even a medium reference above the water level, its utility for those which are even usually called high batteries, and the advantages derived from a high covering parapet for all open batteries. A tracing is submitted herewith, fully illustrating the remarks that follow:

In its general report of October 23, 1869, this Board recommended,

"1st. The construction, wherever the site will permit, of cheaply built barbette batteries with magazine traverses between each pair of guns, a parapet, where necessary, to guard against reverse fires, and generally wooden gun-platforms. Such batteries may hereafter be readily modified for the use of depressing or counterpoise carriages, and

unless on very elevated sites, should be planned having this in view.

"2nd. The substitution for the barbette carriage of one which will admit of the depression of the gun below the crest of the parapet for loading."

And further alluding to the Moncrieff carriage, and other forms under which the depressing carriage was then being studied in connection with these barbette batteries, the board remarked, "in the achieving of a practical result, may be found a way of attaining an efficient service of modern sea-coast artillery when the proper sites present themselves." It thus appears that this board has from the beginning regarded the introduction of a depressing carriage into our sea coast batteries, unless placed on very elevated sites, as a necessity. Indeed it is an acknowledged part of the system of defence by open batteries; for, if the iron-clad is not a failure, it can pass near enough to throw shells with some degree of accuracy at shore guns, and can at least use grape and canister with efficiency against them. It is not believed that the gunners will stand to their pieces and sponge and load them under such fire in low batteries, and probably not in those of medium height. Hence the Board of Engineers has favored trials of depressing carriages that gave reasonable promise of success, always regarding expenditures looking to the solution of so important a problem as being made in the right direction. If we must have barbette batteries, and there is as yet no other solution of the problem of defending our harbors by guns, we must have cover for the gunners while loading, and a high covering parapet to protect them as far as possible in all parts of the terreplein; and the only question that seems at all open for discussion in this reference is, how for a high battery may shield it from the severe fire which would make the low one unserviceable. Now, in the high battery, the men while loading are but partially exposed to the fire coming from ships that have approached as close as they dare to the shore, and in all parts of the terreplein they are quite as well covered. As the hostile fire becomes more distant, the protection due to height becomes less and less, but the accuracy of that fire diminishes rapidly with the increased distance.

To set forth fully this question of cover attained by high reference of parapet—by high parapet—and by the use of a depressing carriage, the board has caused drawings to be prepared, showing the trajectories of 12-inch rifled shot fired at angles of elevation from 1 deg. to 8 deg. inclusive, with charges of 70 lbs., and with initial velocities of 1,183 feet. In connection with these trajectories sections of the parapets of batteries have been constructed with different elevations so that these trajectories shall touch the interior crests of the sections at distances from the initial point, varying from 1.4 to 1.3.4 miles. The object of this drawing is to show the direction of solid shot as it passes over the terreplein of batteries of different heights above the water, and fired from ships at different distances. In fact, to exhibit the varying conditions of an attacking fleet in relation to shore batteries of various heights.

It is believed that vessels must be near enough to use grape and canister, or near enough to attain accuracy of fire with shot and shell, to silence a shore battery. Distant fire alone from ships cannot stop the fire of batteries, though it will give essential aid to close fire, especially if delivered very obliquely to the parapets. It is probable that canister will not be efficient beyond 1.4 of a

mile, and that grape will not be used beyond 1.2 mile. Solid shot beyond 1.2 mile, to be efficient, must be poured in rapidly. Shells, however, will doubtless be used more abundantly than solid shot at all distances. It is in fact the fire from 1.4 of a mile distances up to 3.4 of a mile, or, at most a mile, that fleets must rely upon to overwhelm sea coast batteries.

Comparing the different sections on the accompanying drawing* some estimate may be formed of the partial security gained for the gunners by elevating the battery. At the distance of 1.4 mile, and with a reference above the water level of 160 feet, the terreplein is well covered, and the gunners in loading are not so much exposed, not more so than through an embrasure or a port hole. Of course the cover is by no means perfect, and the exposure will somewhat interfere with the rapid and accurate service of the piece; still it is believed that gun for gun, the battery would maintain itself against an iron-clad.

At the distance of 1.2 a mile the protection due to the same height of reference is less than at 1.4 mile. The terreplein is well covered as against direct shot, in this, as in the former distance. It is probable that less accuracy of fire from the ship, by reason of increase of distance, will quite offset the greater exposure of the men in loading, and that grape would not silence this battery 160 feet high, providing the opposing armaments were equal, gun for gun. But at both of these, and at all intermediate distances, the fire either of canister or grape (though the greater part of the charges must of necessity be wasted) would attain the interior by so curved a flight that even in this high battery a greater cover than 7 feet, as hitherto practised, is desirable.

At 3.4 mile distance, shells would take the place of grape. While the cover due to height, both in loading on the terreplein is rather better in the high than in the low battery, the difference is by no means so great as at the low ranges. But it is more difficult to hit a mark on a height, than on the same level, and it is not at all probable that the exposure to solid shot or shell is sufficient to prevent the service of the pieces, unless there is a disparity of guns in favor of the attack. But at all these distances, there would be a better feeling of security, were the breast height 11 feet high instead of 7. As the distance of the ship increases, the difference of protection or cover, given by a high or low battery, becomes smaller and smaller and if the distant fire is oblique, as shown on the drawing, the height of 7 feet, hitherto practised for interior slopes, is entirely inefficient. The drawing illustrates this, by showing the relative positions of the descending curve of fire into the battery, and the two terreplein levels, one 7 and the other 11 feet, below the crest. It is true, that from the distant ships the greater portion of the fire must be lost, and that only an occasional shell would graze the parapet, or burst just at the right point to throw in destructive fragments. But the higher the covering parapet, the better are the chances for the gunners on the terreplein to escape these fragments. Now as batteries are, or may be liable at the same time, to all these attacks, by the different ships of a fleet taking distances from 1.1.2 miles down to 1.4 mile from the shore guns, it seems necessary, in order to procure efficiency of service in the land battery, even if high, to give the cannoniers all the cover that can be conveniently attained by

* This drawing, being 11 by 36 inches cannot be reproduced in the Journal.

a high parapet. This Board has incidentally touched upon this subject before, and in some of its drawings has represented a portion of the terre-plein behind the traverse circles as depressed, in one instance 3 feet. There can be no doubt that the depressing carriage will be served with more confidence by gunners in all positions, high or low. Still as its introduction involves more space, not always available, and an additional cost of perhaps \$7,000 per gun, there will be positions, (as for instance where there is a large array of shore guns on each side of the channel of approach to a harbor, or where hostile ships will have difficulty in developing themselves favorable for an attack), that will admit, in some of the higher barbette batteries of a good service of guns mounted on non-depressing carriages. In these batteries however, as much covering height for the parapet should be attained as possible.

It seems to this Board therefore, that the necessity for the depressing carriage admits of no doubt, and that, as before observed, its introduction is but a part of our system of defence by earth batteries; and further, that for high batteries, where it may be possible to dispense with its use, some further study should be made as to the application of the non depressing carriage to a higher covering parapet. A tracing to accompany the foregoing is herewith transmitted.

Respectfully submitted.

GEORGE W. CULLUM,
Col. of Eng's. and Bvt. Maj. Gen'l.
Z. B. TOWER,
Lt. Col. of Eng's. and Bvt. Maj. Gen'l.
H. G. WRIGHT,
Lt. Col. of Eng's. & Bvt. Maj. Gen'l.

Amongst the very ablest of Canadian Journals the *Acadian Recorder*, in dealing with the general tendency of public opinion, especially as applied to the position this country should hold in the economy of the British Empire, stands conspicuously pre-eminent.

It is simply doing justice to the Editor to say that there is in all the articles bearing on this great question a breadth and accuracy of statesmanlike practical views not excelled by those of any other Journal in British North America—it is evident the writer knows the Canadian people thoroughly.

In the issue of the *Acadian Recorder* of the 10th June is an article on the "Presidential Election" which will be found below, and to which we direct the attention of our readers, because of the sound and able views of our present and near future National policy it contains, and because it shews the fallacy of the idea that annexation would be a possibility, and the tendency of Canadian Conservatism to build up a free happy and God fearing states.

"We suppose that if there is any public routine event, more, than another, occurring beyond the borders of this Dominion, in which our ordinary readers could be expected to take a deep interest, it is that of a Presidential Election in the United States. A concurrence of accidents has thrown these British North American Provinces into the most intimate relations with the United States. We may search in vain through the pages of history, from the earliest authentic records down to the present time, to find such another instance of two countries politi-

cally foreign to each other and yet so intimately related. Speaking the same language and having an immensity of interests in common, we,—both people—pass and re-pass across on three thousand miles of continuous boundary, just as freely and with as little of parade, or fussiness, as we would pass from one county to another in our own little Province. Natives born in our own country flock by thousands and tens of thousands, to the United States to make that country their home. Native Yankees not indeed in a corresponding proportion, although every year increasing in number, cross over, and settle on our side of the boundary line. There is a sentimentalism, if not even a deliberately cherished principle, which guides these emigrations. There is a good deal of bosh talked and written about the feeling in favor of Annexation. It would be folly for us to undertake to make a political map of North America as it will be, five or six centuries hence; but regarding Canada and the United States as they are in our ideas of to-day, you hesitate not to say that neither of them can ever annex the other in the ordinary course of political events. That is, except as to part. It is probable enough that Maine, and possibly Oregon and Alaska, will become annexed to Canada. He is but a poor observer in the signs of the times, who can think he sees a near prospect of any further or greater annexation than that. The two countries represent two entirely distinct principles—two diverse classes of ideas; and, every year, this is become more observable. Canada represents the monarchical principle in politics. Some people may, and some do talk about all America becoming Republican. The tendencies of a great part of it are decidedly in the opposite direction. Canada and Brazil represent on this continent, the monarchical principle in very full vigor—more so than it is really to be found in most countries of the Old World. The United States represents the very extreme Democracy—what is indeed sometimes scornfully called Mobocracy,

"There is a certain other aspect of these two countries—Canada and the United States—according to our way of seeing things, which we feel some delicacy in mentioning; because we know that many people will indignantly deny that our view is correct. We believe, however, that Canada, along with its other conservatism, is going to be the stronghold of—putting it in its broadest sense, apart from any sectarian signification—the Christian Church in America. Some of our readers may think that such events as we have had reason to record from day to day, as occurring among our public men, do not favor such a conclusion. They do not, we admit, but a closer view of the signs of the times, such as we shall not undertake to depict to-day, will, we think, bear out what we say. In the United States, in religion as in politics, there is a headlong tendency towards some thing for which we have no word to express. We may describe it as Mobocracy and Infidelity, and very imperfectly describe it by so doing. It is a tendency downwards—to chaos, as we understand chaos to be; but it may be, for aught we know to the contrary, a chaos out of seething of which a millenium will be evolved.

"We have wandered, owing to the very suggestiveness of the subject, from the Presidential Election which we had in view in commencing. The result of the contest to take place, in Yonkeeland, next November, is one in which we cannot but feel some interest. What agonies are being endured

now among the millions of that country relative to the settlement of that great question; whether shall Mr. Grant, the tanner and currier, or Mr. Greeley the practical printer, be President of the United States for the next four years. We do not mention the vocations of these gentlemen in any sneering humour; but only as an evidence of the wonderful progress of democracy. Here are two mechanics, men who have earned their bread by the sweat of their brows, contending for what we may call the Cæsarship of a country as large, as rich, and as powerful, as the Roman Empire in the palmiest of its days. There is, of course, no earthly reason why they should not be candidates for such a position because they have honestly earned their bread by their own labor; but what we have misgivings about is whether, looking especially to such a Presidential contest as this, representative institutions have not been carried to excess in the United States. People who have not been and studied a Presidential Election in the United States, have little idea what it is. From the Atlantic to the Pacific, and from Canada to Mexico, that country is, and for five months to come will be, day and night, in city, hamlet, woods, and prairie, in such throes as could only be otherwise produced by a long spun-out earthquake. Why does not Sir Charles Dilke come out to the United States and do a Presidential Election? Let him but travel about that great country from—say now until November, and then write a book. Let him put in it all that has occurred to him in the course of his travels; and if he does the work honestly, we would predict that he would astonish some of his English chartist readers.

"It is scarcely worth while to hazard a prediction as to who will be the next President of the United States; everybody we suppose, will predict for himself. We have a very strong conviction, however. There are only Grant and Greeley in the field as yet. The Democrats may bring out a Candidate, but if they do, there is little chance of his being elected. It is just barely possible what has never occurred before, nobody may get the popular vote: and then it is difficult to say who would become President. We believe, however, that Grant and corruption will carry the day. Mr. Horace Greeley is a man of too much ability to be President of the United States. That country has produced many great men, not a few statesmen, many talented politicians; but none of whom ever could get himself elected President. There has never been a President of respectable ability since Jefferson's time; and he was only a clever quack. We therefore think there is a poor prospect for Greeley."

It was reported last week that the House Committee on Naval Affairs had before it a project for adding ten steamers to our naval force, and we heartily trust that the measure will be adopted. Unless we begin building, we shall never have a Navy, and to wait until some wretched quarrel wakes our Congressmen to the necessity of providing the ways and means of war fare is disregarding the Scripture, which asks: "What king going to make war against another king, sitteth not down first and consulted whether he be able with ten thousand to meet him that cometh against him with twenty thousand? Or else, while the other is yet a great way off, he sendeth an embassy, and desires conditions of peace." We have adopted the latter course with reference to

our difficulties with England, but we may not be so fortunate in other cases, and must provide for the worst. The narrow escapes through which the Washington Treaty will reach success, if it reach it at all, is not very encouraging for the peaceful settlement of international disputes.

We noticed recently that the British Admiralty had decided upon practically testing the strength of the turrets of the iron-clad *Glatton*, by sending her sister ship *Hotspur* to pound away at them with twelve and a half ton guns in the English Channel. The English newspapers now report that Lord John Hay, at one time a Lord of the Admiralty, is going to try an experiment which will not certainly be *in core viâ*. The gallant officer is to go on board the *Glatton* to ascertain what effect will be produced upon her by the guns of the *Hotspur*.—U.S. Army and Navy Journal.

FOREIGN, MILITARY AND NAVAL ITEMS.

A special commission has been appointed at the Seraskieriate to consider tender invited for the supply of 200,000 breech-loading rifles for the Turkish troops. Several proposals have been received.

To counterbalance the advantages which France derives from the possession of Bel-fort, the Prussian War Department has adopted a plan for fortifying the city of Altkirch; this plan consists in forming an entrenched camp and in erecting fortifications on the heights around the town.

The *Broad Arrow* is disgusted that the American Mediterranean Squadron is supplied with Harvey's torpedoes, and that the officers are instructed how to handle them. While so far as can learn, the British fleet in the Mediterranean has not one of these weapons on board, and the officers are ignorant of their use.

The *Morning Post* writing on the text, "Forts versus Guns," comes to the inevitable conclusion that both will sink into a secondary position, when the torpedo is perfected. "The experience of the late American war," it remarks, "demonstrates that a combination of forts and torpedoes will effectually prevent a fleet from passing a channel which could with impunity be entered if its defence were entrusted to forts alone.

M. Jules Simon, the French Minister of Public Instruction, has a kindly heart for Jack. This paternal minister has just addressed a circular to the five ports of Cherbourg, Brest, L'orient, Rochefort, and Toulon, stating that he is disposed to grant subventions to such theatrical managers as will reduce their prices of admission for sailors of the fleet, so that they may be kept as much as possible out of the wine-shops.

A Paris paper says: "The Navy Department has had a detailed inventory made of the French men-of-war. It results from this work, which will be communicated to the as-

sembly at the time of the discussion of the naval budget, that our fighting fleet is of such a nature as to be able to face all events." What a satire! This navy has neither been increased nor improved since the recent war, during which it did nothing, absolutely nothing, either in the Baltic or the North sea.

Mr. Reed being afraid that the "Captain" would beat the "Monarch" in sailing, used very large masts and spars in the construction of the latter ship. He so pushed his desire to make the ship sail well as to endanger her safety. In doing so we find that the "Monarch" now in dock at Pourmouth, under a course of repairs and alterations preparatory to being placed in the first reserve for commission. The alterations being made include the reduction of size and weight of topmasts, topgallantmasts, and all yards aloft, and the abolition of square yards on her mizenmast.

Prussia evidently does not intend to give up her grasp upon her newly acquired possessions. Her engineers have already determined upon a vast, complete plan for the fortification of Strasbourg, and have already commenced the work of construction after Prussian fashion.

BREAKFAST.—EPPS'S COCOA.—GRATEFUL AND COMFORTING.—The very agreeable character of this preparation has rendered it a general favorite. The *Civil Service Gazette* remarks:—"The singular success which Mr. Epps attained by his homœopathic preparation of cocoa has never been surpassed by any experimentalist. By a thorough knowledge of the natural laws which govern the operations of digestion and nutrition, and by a careful application of the fine properties of well selected cocoa, Mr. Epps has provided our breakfast tables with a delicately favoured beverage which may save us many heavy doctors' bills." Made simply with boiling water or milk. Sold by the Trade only in 1lb., 3lb., and 1lb. tin-lined packets, labelled—JAMES EPPS & Co., Homœopathic Chemists, London, England



GOVERNMENT HOUSE, OTTAWA.

Thursday, 20th day of June, 1872.

PRESENT:

HIS EXCELLENCY THE GOVERNOR
GENERAL IN COUNCIL.

ON the recommendation of the Hon. the Minister of Customs, and under the Provisions of the 8th Section of the Act 31st Victoria, Chapter 6, intitled: "An Act respecting the Customs," His Excellency has been pleased to order, and it is hereby ordered, that the Port of *Apple River* in the Township and District of *Parrsboro*, in the Province of *Nova Scotia*, shall be and the same is hereby erected into an Out-port of Customs, and placed under the Survey of the Port of *Parrsboro*.

WM. H. LEE,
Clerk Privy Council,

Ottawa, July 1, 1872.

CABINET ORGANS.

As organs are fast superseding melodeons in public favour and are generally more complicated, we have thought it advisable to describe a few of the additions and improvements used in our organs.

All our ordinary styles have the famous Automatic Swell, with which the performer can produce the most beautiful crescendo and diminuendo effects by merely blowing with greater or less force. They have also a knee swell, which, when turned to the right swells instantaneously. This stop, besides being fully as convenient as the toe-swell on the pedal, is infinitely more simple in construction, and, therefore, less liable to get out of order. Those wishing to use the knee swell alone, or to see its full effect, must turn aside the wire of the automatic, which runs from the back part of the organ above the wind chest and under the swell for the back set of reeds.

The Sub Bass is composed of one octave (seldom more) of very large bass reeds, turned an octave below the lower set in an ordinary double reed instrument.

Our improved Vox Humana consists of a revolving fan, which by its motion produces a pleasing effect, resembling the "shake" of the human voice in an emotional passage of music.

The Vox Celeste is a new and valuable improvement, bringing into use an extra set of reeds, which, by their peculiar arrangement and method of tuning, produce a peculiarly beautiful quality of tone with a most astonishing power. This most admirable and pleasing improvement has been recently introduced by us, and has been so rapturously received by the public that it has far surpassed our most sanguine anticipations.

The Octave Coupler is a mechanical contrivance by which, when a key is pressed down, its octave also sounds, thus almost doubling the power.

The Æolian or Campanella Stop consists of two or more octave of steel tongues in the upper part of the manuals. It combines the qualities of the Piano and Cabinet Organ, and when used with a soft reed stop, resembles a chime of bells or enchanting music heard at a distance.

W. BELL, & Co.

27-281n



GOVERNMENT HOUSE, OTTAWA.

Thursday, 20th day of June, 1872.

PRESENT:

HIS EXCELLENCY THE GOVERNOR
GENERAL IN COUNCIL.

ON the recommendation of the Hon. the Minister of Customs, and under the Provisions of the 8th Section of the Act 31st Victoria, Cap. 6 intitled: "An Act respecting the Customs," His Excellency has been pleased to order, and it is hereby ordered, that Hudson's Bay Trading Posts, known as York Factory and Moose Factory, in the North West Territory, shall be, and the same are hereby constituted and erected into Out Port^s of Customs. York Factory to be under the survey of the Port of Winnipeg, in the Province of Manitoba, and Moose Factory, under the Survey of the Port of Sault Ste. Marie, in the Province of Ontario.

WM. H. LEE,

Clerk, Privy Council,

Ottawa, July 1, 1872.

2-31n

Agents Wanted Everywhere.

EMPLOYMENT at home for either sex, to canvass for an *Illustrated, Literary and Musical Magazine*. Samples and terms sent free.

WILSON & Co., Toronto, Ont.