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The Volunteer Review

AND MILITARY AND NAVAL GAZETTE.

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

VOL. VI.

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No. 8.

CORRESPONDENCE.

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

FROM MONTREAL.

[BY OUR OWN CORRESPONDENT.]

To the Editor of the VOLUNTEER REVIEW.

Last summer during the elections here a portion of the volunteer force was called out for civil service, on the requisition of two justices of the peace Messrs. Lighthall and Bellevue. The accounts were subsequently sent in to the corporation for payment, but payment was refused, and by advice of the city lawyers, on the plea that it was unauthorized by the proper authorities, there being no occasion or need for such services, that Messrs. Lighthall and Bellevue acting as they did without sanction of the Mayor did so unwarrantably and should pay the piper themselves. Legal proceedings were then instituted by the commanding officers, Col. Mackay, Col. Bethune and Major Muir, against the city for the recovery of the amount, but pending proceeding Col. Smith, D. A. G., the principal witness in the case left the city, being removed to Manitoba, and the officers were thus prevented from prosecuting their claim. Last week they memorialized the corporation suggesting that some means be devised whereby these claims might be satisfied without interfering with the suit instituted to test the legal questions involved, in order that the council might have a judicial decision in the future.

At a meeting of the city council on Monday, a very long discussion ensued,—when it was resolved to pay the amount, under conditions that if the pending suit was decided in favour of the corporation it should be refunded.

Col. Martin, commanding 6th Batt. volunteer militia entertained his officers on Monday, to a supper at his residence. Col. Bacon acting D. A. G. of the district honored them by his presence. A very pleasant time was spent, the usual toasts were responded to in the most enthusiastic manner. Speeches were made by Col. Bacon, Dr. David, Col. Isaacson and others, expressing the utmost

confidence in the present state of military affairs and expressive of their devotion to their Queen and country.

The cost of repairing the roof of the drill shed will not fall far short of \$50,000

The members of the Sergeant's Mess of this Corps, including the band, were invited to supper at their Colonel's residence, St. Catharino street, last evening. At about half past 8 they met at the armory, and, preceded by their fifes and drums, went up to the Colonel's. Before entering, the band executed several pieces of music and sang two or three good choruses; they then discussed the splendid supper that had been prepared, which was followed by speech making, breaking up at an early hour.

B.

NEWS OF THE WEEK.

The excitement consequent on the presentation of the United States claim against Great Britain appears to be subsiding, and it is even rumoured that Gladstone will be content to retract his bellicose utterances, and that a way out of the difficulty will be found to suit all parties, in other words the Whig radicals will abandon all the Yankees desire, and we hope the Geneva Arbitrators will see their way to awarding them the full amount sought, as it would squeeze the purses of the cotton spinners dry, or lead at once to what the whole affair will eventually be decided by—the arbitrament of the sword.

Trouble of the gravest character is anticipated in India on the 5th inst., the Governor General the Earl of Mayo was stabbed by a Mahomedan convict at the Andaman Islands in the Bay of Bengal, and died almost immediately. This crime has caused the greatest excitement in India and grave apprehensions in England.

An expedition has been sent in search of Dr. Livingstone.

The health of the Prince of Wales still continues to improve.

In consequence of the unsettled state of diplomatic relations, United States securities have declined in value in the English stock market.

The French Provisional Government are

busily engaged in searching for concealed arms in Paris by domiciliary visits. The Washington Treaty mutille is condemned by the leading statesmen, as every court in Europe has a thorough contempt, for Gladstone's ability, any contra temps arising from the action of his administration causes no surprise.

In Spain the radicals appears to be giving an unlimited amount of trouble, their latest manœuvre being a decision to refrain from voting at the election for the Cortes their object being to make all Government impossible.

Victor Emmanuel has been allotted a portion of the Quirinal Palace as an official residence at Rouen. The Pope is about to publish an encyclical letter on National education.

The United States minister at Berlin has placed the case of that country respecting the San-Juan difficulty before the Emperor. The German press generally condemns the claims of the United States for indirect losses.

Revolution is the order of the day in Mexico, Republicanism means nothing but lawlessness and it is fully exemplified in that unlucky country.

At Sutton, County of Brome, a dinner was given to Judge Dunkin by his late constituents (he was recently minister of agriculture), and Sir George Cartiers speech thereat will be found in another page.

If the British statesmen would look to Ottawa instead of Washington for the means of keeping the peace of the world they would arrive at the solution of all their difficult diplomatic problems speedily.

Canadians have but one opinion on the Washington Treaty, and that is its abrogation would be the most pleasant news they ever heard in connection with it.

Advices from Manitoba and British Columbia show that everything is going on prosperously. A report is current that Mr. McNab and thirty men belonging to one of the parties employed on the Pacific Railway survey have been lost on Lake Superior.

Our affairs in the Dominion are still prospering, and the utterances of our statesmen put to shame the imbecility of English political leaders.

MOBILITY IN MODERN ARMIES.

(From the *United Service Magazine*.)

The aim of Napoleon was always to destroy his enemy. This was his first object. Afterwards he manoeuvred at his ease, in the presence of a beaten army.

With inimitable art he disposed his corps in such a manner as to be able to mass them in the shortest possible time on any point of the theatre of war; and then, with consummate genius and cunning, he enticed and induced the enemy to march and disclose his projects.

If he succeeded in his plan, he fell upon his adversary like an eagle upon its prey. Hence, his veterans of the Guard used to boast that the leader won all his victories with their legs and not at the cost of their lives. Endowing his army with great mobility, he secured great strategical and tactical advantages at a small cost of bloodshed.

The secrets of success in all conquering armies have ever been the same, and assuredly, the most important is—Mobility. Among the moderns, Frederick the Great was the first to discover its advantages, and by securing it in his armies he not only carried all before him, but also established his highest claim to martial glory. Marshal Saxe was of opinion that marches contributed more than battles to the success of a campaign, and he laid down the celebrated maxim that "success in war depends upon the legs of the soldiers;" and no improvement in the appliances of war will ever enable an army to dispense with that essential guarantee of victory—the utmost rapidity of motion—disciplined mobility.

The great merit of Frederick consists in having foreseen all the advantages that might be taken against heavy masses so difficult to set in motion, of troops capable of manoeuvring, accustomed to march over extensive ground in good order, capable of passing in the shortest time from the order of march to the order of battle, and *vice versa*—in a word, troops sufficiently trained to be able to manoeuvre in the presence of the enemy—to threaten one of his wings, to outflank him, &c.

All Frederick's efforts tended to this grand development, and it must be admitted that the means he employed were Herculean. Prussia became one vast camp. His regiments were drilled every day, according to a new regulation, which was the most perfect in Europe. His army was divided into manageable fractions, and placed under the orders of permanent generals; the *cadres* of the companies were augmented; they had fourteen non-commissioned officers (corporals and sergeants), whilst those of Austria had only six.

Frederick revolutionized infantry tactics by introducing the formation and deployment of close columns by divisions. In the hands of his generals, his columns executed numerous tactical combinations before unknown—changes of front, echellons, passages of lines, &c.

The thin order was his invariable order of battle and order of manoeuvring in the presence of the enemy, and so his soldiers were exercised in moving in deployed lines; the country round about Berlin often beheld twenty battalions extending over a space of some four thousand yards, executing a march of twelve hundred paces in order of battle with admirable regularity and precision.

In such a system any amount of confusion would be fatal; and so this was rendered next to impossible by a severity of discipline totally inconceivable at the present day; but

certainly it was the effective means of keeping the Prussian soldier in rank and file. He had no will of his own; personal initiative or effort was out of the question; they made a machine, of him, the better to dispose of him. The punishments awarded by the Prussian military code were excessive, almost barbarous. Whilst slaps in the face and blows with a cudgel were inflicted on the private for the slightest offences, the non-commissioned officers were castigated with the flat of the sword.

But, to the Prussian mind, there was a compensation for these indignities. The army was the first body in the State. The citizen bowed before the uniform of the soldier, and the simple ensign ranked on an equality with the highest civil functionary.

It must be remembered that the ancient Romans were subjected to an equal degree of inexorable and pitiless discipline. It can scarcely be denied that they owed to it their world-renowned superiority, which elicited the fervid and characteristic encomium even of Paul, the Apostle; but it is certain that outrageous treatment did not degrade the Prussian soldier in his own estimation; on the contrary, pride and discipline made the Prussian lines veritable bars of steel; whilst their mobility made them irresistible in the onslaught, by enabling them to be massed with the greatest rapidity, and in the greatest numbers on the critical point to make the crisis of battle at their own pleasure—thus being ever confident of victory.

This explains and accounts for all the success achieved by Frederick the Great, in spite of the enormous faults he committed, as it were at pleasure, against the most elementary rules of the art of war—his concentrations operated in the sight of the enemy—his flank-marches within cannon range of his antagonist. This also explains his bold marches across a country menaced by three formidable armies—his successful retreats after lost battles—his voluntary abandonment of the lines of operation, which he knew right well he could regain when he pleased. In one word, the Prussian army was more mobile than its rivals.

And the Emperor William—perhaps the most fortunate conquerer ever vouchsafed to earth—owes to the revived and enhanced mobility of his troops the largest part of his undoubted claim to martial admiration. Austria was crushed, as of old, by means of Prussian mobility; and then came the turn of France, in one short month almost annihilated by some twenty reversed Jena's—blows dealt with such rapidity that Kaiser Wilhelm might well be excused for considering them somewhat supernatural and "Providential," as would appear, by his persistent thanksgivings to the Almighty.

It was at the very commencement of the campaign, namely at Wiessenburg, that the Crown Prince's sudden movement exhibited German rapidity and decision in contrast with French vacillation and delay; betokening on the part of the Germans a purpose and a plan and giving them the grand prestige of a victory on the territory of the Power which had challenged them to war. It was the same at Worth, at Gravelotte, at Le Mans; but nowhere so striking and so glorious in results was superior mobility exemplified as in the entrapping of the entire French army at Sedan. Of course, it was the eye of Count Moltke that at once took in all the possibilities of the situation; but, without the perfect and disciplined mobility of the German troops—their rapid marches—Count Moltke's calculations would have failed, and Kaiser Wilhelm would not have won his glory and enormous war-indemnity.

And yet it appears that the Prussian offi-

cers are not satisfied with the excellence in this respect which they have hitherto attained. They believe that still more can be done, and without loss of time, so important do they consider this guarantee of victory, they are earnestly seeking for improvement.

No wonder, then, that our late manoeuvres did not "show" very favourably to our enlightened and preoccupied German critics in this essential attribute of armies. It was quite evident that the British Army has not yet secured the celerity of motion possessed by the Germans, even when they crossed the French frontier at the commencement of the last war. This, however, is not the fault of the material, but of those who shape and fashion it. Our military leaders do not appear sufficiently impressed with the necessity of progress in this direction; but, like "everybody" in England, rather inclined to sacrifice to the traditional and boasted *steadiness* of the British infantry that rapidity of movement which, to be effective in the field, must be practised on the drill-ground as much as any other "preparation" for a campaign and a field of battle.

Steadiness in the army is essential, but mobility, or celerity of movement, is indispensable. The possession of the former is the very soul of the latter; and the Prussians both of the former and recent date have acted on this principle. We have alluded to the severe drill-practice enforced by Frederick to secure the steadiness of his men, and it is certain that the utmost severity of discipline prevails at the present day in the armies of Germany, especially of Prussia. Therefore, our soldiers cannot be too steady, but they are taught to acquire that celerity of motion of which steady drill should be merely the groundwork.

The military value of mobility is absolute—that is to say, its superiority will be manifest in all conditions of warfare; but it has become immeasurably more indispensable under the new conditions of warfare introduced by breech loading arms of precision. The extended range and accurate aim of modern fire-arms render it necessary that troops should be able to rush with great rapidity from one place of cover to another. Serried columns, or unwavering lines, moving in rigid formation across open ground, within many hundred yards of a hostile position, are now things of the past—abolished by necessity. The late war must be considered the type of all future European wars, and it taught us nothing more forcibly and conclusively than that the *Tirailleur*, or skirmishing, method of fighting will be ever in requisition. Now, it is obvious that efficiency in that form of warfare depends upon the power of rapid advance and rapid retreat.

It must be admitted, however, that the acquisition of mobility and its application in war must be preceded by important military reforms—reforms in organization. It is now agreed upon by all military authorities that no army in which the battalion is constituted the smallest tactical unit can manoeuvre with much rapidity in action.

And why? Because of the altered conditions of warfare. In time of war, a battalion must consist of about one thousand men, if it is to be effective and repay the cost of the staff and general direction. This might answer in former times when, in battle, battalions could be kept in massive columns, or when deployed, were ranged in closed lines, on the "shoulder to shoulder" principle—enabling the commanding officer to observe the conduct of every individual, and to direct the general action of the whole body by word of mouth.

How different is the case now a days? The skirmishing order must be the order under fire in these days of paramount and overwhelming artillery practice. The infantry must be spread out, the men must be at considerable intervals, it will be necessary to give a much more extended front to the battalion than it showed formerly. The result must be that, as cover depends upon the inequalities of ground, no regular line, no unbending formation, can be maintained.

Such are the plain, undeniable facts of the case, and the Prussians, in preparing for their grand martial epiphany, took good care to accommodate their tactical unit to the requirements of modern warfare. In their army the company is the tactical unit; and in battle it is a semi-independent command. Thus the difficulty before mentioned is readily met and disposed of, and all know how well the Prussian plan succeeded.

But here arises another difficulty on our side. Almost every subaltern in the Prussian Army can take the place of a field officer at least, at a moment's notice; and it may be safely avowed that no Prussian subaltern, certainly no Prussian captain of a company, was ever ignorant of the general plan of an action about to be commenced, or was ever at a loss as to what he had to do in any emergency. We have, therefore, not only to adopt this change in our organization, but we must take steps to insure that the officers commanding companies shall be competent to assume such a grave responsibility.

Perhaps those who were bold enough to abolish purchase before securing an adequate system to it efficiently, will be bold and good enough to lose no time in training the efficient officers who are to be insured to the service by that great revolution in the Army.

In the meantime, however, no time should be lost in introducing into the infantry a more elastic, pliable, and manageable formation.

The requisite training should be applied both to officers and men; and as all is now to be settled by merit, natural competition alone will doubtless stimulate our young officers to such efforts as may enable them to compare favourably with the patient, submissive, indolent, bloated subaltern peddlers of the Prussian Army, who being competent to command an army corps, contentedly spoke their pipe, wondering if they will ever be promoted! Doubtless, it is "a fine time coming" for young British officers; and, fortunately, even intelligent privates—since any of them may find a marshal's baton in their brain and character. In our previous number we detailed the Prussian method of training their officers. We commend it to our administrators, perfectly assured that some such method resolutely pursued will soon reassure those who tremble for the efficiency of the command of our Army, in the abolition of one mode of its officering before securing another—namely, promotion by merit, throughout the Army—as an adequate preparation for the abolition of purchase at the time when it would have had the character of a revolution.

The adoption of the Prussian company system would secure other advantages. As the responsibility of each company leader—in independent action—would be increased, less superior supervision would be required, and thus the three field officers now attached to every battalion could, without risk, or rather, perhaps, with advantage, be reduced to one.

Secondly, this change would enable us to discover the weakness of companies in every battalion, as discovered by the Prussians in

theirs, establishing the fact that a small number of large companies is more effective in the field and more economical in garrison.*

In advocating these changes in our military system, it is impossible to omit calling attention to existing evils, which, if continued, would, neutralize all the advantages that might be secured by the increased mobility or rapidity of movement of our Army. The equipment of the British soldier is not adapted for rapid locomotion. We must considerably diminish his impediments, the appropriate name given by the Romans to "baggage," clearly pointing to its effect on the feet of the soldier. It has been truly observed that, when exposed to the privations of war, our infantry soldiers are forced to bear a burden which would handicap any pedestrian in the height of training out of any chance of successfully meeting his engagements. That the cruel absurdity has always existed, and still exists in other armies, is no reason why we should not take the lead, for once, in effecting a sensible military reform. If modern campaigns will not necessarily be so short that the soldier will not require any change of raiment during their progress, at any rate, it is pretty certain that continuous active operations will never be maintained for more than a few days consecutively, and after a few days of rapid movement a halt must ensue, when the soldier may have recourse to his knapsack, which it is certain, he rarely opens during the course of operations. Let the knapsacks be then brought up by the army transport. Of course, lines of railway will frequently do this service in future, since lines of operation must always follow lines of railway.

It is certain that Napoleon had the strongest objection to baggage, and animadverted on any excess beyond the limits which he prescribed.

Again, the preparation of tents or camp equipments is absurdly profuse, seeming to infer that our troops will find no towns or villages to shelter them. It was a long time before the Germans received tents during the late war; and they fared very well without them—besides being in better condition, by the diminution of their burdens, to derive all the advantages of their mobility secured to them over their hampered antagonists. Camp equipment, excepting for distant wars, as in China or Abyssinia, is unnecessary, expensive in itself and in its conveyance. It is found that the camp equipment of a battalion on a war footing would require twelve waggons for the carriage; and thus the total transport necessary for that item in an army of 60,000 men would be of enormous and unwieldy bulk.

Surely, it will be advisable for our administrators to take this matter into consideration. The abolition of the abuse will not only "save money," but will also promote that mobility which is now found to be the essential and indispensable guarantee of success in armies.

The altered requirements of future battle fields must certainly tend to simplify our field exercises and drill. Much less will be henceforth required; but the little to be retained must be thoroughly well done. In this department, however, there is one

*Nine years ago (in the *Volunteer Service Gazette*), the writer of this article advocated the leading principles now again in vogue, after their sanction by France in the late war, especially the necessity for efficient independent command in companies, owing to the extended sphere of battle-fields consequent to the introduction of arms of precision and the more effective employment of artillery; and most of the suggestions have been since incidentally reproduced by him in the *United Service Magazine*.

thing which may be abolished with great advantage, with reference to the acquisition of mobility—we mean the rigid holding of the left arm steady at the side in marching. Of course, in a campaign this "regulation" will not be attended to, why hamper the soldier with it in the time of preparation for warfare? It is certain that it intensifies the physical distress of evolutions, and destroys that sense of equilibrium or poise which is an essential aid to rapid locomotion.

It is different with the regulated step. This should be accurately acquired since it is an aid in calculating distances to be gone over in a given time—which is all-important in warfare. Napoleon said that "in battle men are nothing, minutes are all." This may be questioned, but the Prussians in the late war demonstrated the importance of certainty as to time in their operations.

In conclusion, let the *uniform* of the British soldier be adapted to the increased rapidity of motion which will be required of him in future service. If we must still fondly cling to the objectionable scarlet, at any rate let the soldier's garments be shaped with a view to freedom and comfort in locomotion and in action. The notions of pipe-clay etiquette and elegance should be discarded, whilst an appeal may be made to the wiser principles of physiology and the Army Medical Department, rather than continue to submit to the dictates of the tailor-martinetts in authority.

The *Paris Figaro* gives the following method of obtaining light instantaneously without the use of matches and without the danger of setting things on fire: Take an oblong vial of the whitest, and clearest glass, put in it a piece of phosphorus about the size of a pea, upon which pour some olive oil, heated to a boiling point, filling the vial about one-third full and then seal the vial hermetically. To use it, remove the cork and allow the air to enter vial and then recork it. The whole empty space in the bottle will then become luminous, and the light obtained will be equal to that of a lamp. As soon as the light grows weak its power can be increased by opening the vial and allowing a fresh supply of air to enter. In winter it is sometimes necessary to heat the vial between the hands to increase the fluidity of the oil. Thus prepared the vial may be used for six months. This contrivance is now used by a watchman of Paris in all magazines where explosive or inflammable materials are stored.

A large lynx was lately killed after a sharp contest with the dogs, by Mr. Jas. Cooper of Luther, on the town line between that township and Proton. Another was killed shortly afterwards on the town line between Egremont and Proton, by Mr. William. McPhee, of Egremont. These animals have been doing considerable execution among sheep and fowls in the townships named.

The *Chatham Planet* now says it makes no difference, as the Ontario Legislature is only a big County Council anyway!

Mr. Edgar has been formally nominated for the Commons by the Reformers of Monck and has accepted the nomination.

A consignment of 85 cases of butter, weighing over 5 tons, was shipped from Carleton Place to a firm in Brockville by rail on Saturday last.

The *Collingwood Enterprise* comes to us in an enlarged form and in a new dress.

The Queen has sent three pounds stg. to Mrs. Seals, of Toronto, who gave birth to triplets last January.

The Montreal Drill Shed has caved in

OUR NAVAL RESOURCES.

(From the *U. S. Army and Navy Journal*.)

There are some fifty odd iron clads of the monitor class laid up, for the most part at League Island, many of which are not worth the cost of their repair. The Secretary of the Navy frankly admits that their usefulness has passed away or is passing away, and he correctly adds: "They make a part of the necessary expenditure of the great war, and the nation must accept the loss, and from its abundant resources must supply the deficiency thus occasioned." This view we trust congress will promptly accept and act upon in their current legislation for the Navy.

For our part, we are satisfied it is wise to throw out of present consideration a large part of our iron-clad Navy, and transfer many if not most of the vessels to the scrap-iron heap. It was created for a special purpose, and it served that purpose very well; contributing at least its due proportion to the suppression of the rebellion. Therefore its present diminished value is no more to be considered than the arsenals left full of small arms at the close of the war, the value of which improved breech-loading weapons had so reduced as to make the Government glad to sell them at one-fourth of their cost value. Precisely in the same spirit these useless monitors should be disposed of at whatsoever price they will bring in the market, or even at the worst for old iron. For any naval purpose, the entire lot are mere rubbish, and should be so estimated in all efforts towards the maintenance of the naval force required by the exigencies of our commercial position, and the national interests that require watch and protection.

At the same time we have one great advantage that we are able to profit by the vast and continuous experiments in naval as well as in military resources of offence and defence which the great European powers are obliged to make. But to rely wholly on such experiments will not be safe or expedient by any means. Under the inspiration of that great practical genius for invention which characterizes our people, we assuredly have our independent field to be occupied, and from which to make important contributions of inventions calculated to enhance our naval resources. Nevertheless, we repeat, the necessity that such a maritime power as England in her insular position, is under to stimulate and develop every possible means of naval improvement is fortunate for us, and may, if properly utilized, save us large expenditures, very much as the enterprise and sharp spirit of competition on the part of private individuals in this country have saved the Government nearly all the expense of having at its disposition at least three different breech loading rifles of American invention, better than any as yet produced in Europe.

Already the costly, prolonged, and far reaching experiments made in England, at Shoeburyness—that marvellously obstinate battle which is there being fought out between armor and armament—have demonstrated that while there are rigid bounds to the possible thickness and impregnability of armor plating which ships can be made to carry, no such limit has yet been reached in regard to the size of ordnance and projectiles, with their corresponding destructive power. And added to that fact, as we said in our last issue, is the torpedo, that terrible auxiliary force against iron armored vessels of any present construction.

Upon this subject there is no division of sentiment. Our highest naval commanders

our naval constructors, and our military engineers agree as to the important part which torpedo vessels and torpedo contrivances may be confidently expected to take in naval and military operations hereafter.

In the French navy there were no less than fifty iron clad vessels of the most powerful description as yet devised at the outbreak of the Franco Prussian war; with an armament of more than 640 guns of the heaviest calibre; and yet, simply from fear of a thorough torpedo service on the part of the Prussian engineers, that great force, created at an enormous cost, was rendered wholly inactive and as powerless for offence in Prussian waters, as if built of deal boards and armed with fire-engines. And we may add, that these French armor-plated ships although of a high degree of impregnability as a class were also faster than the wooden vessels of the American navy. The English have constructed even a more formidable iron-clad navy than the French, both as to numbers and characters of vessels, and with guns of weightier metal. Many of these ships have attained the speed of fourteen knots an hour, and no expenditure of money has been spared in their construction, yet it is now apparent that not the best of them, afloat or under construction, not even the *Glutton*, would be impregnable in a conflict with ordnance already in use; and there is not one of them that would not be pitifully at the mercy of a readily contrived torpedo boat of comparatively small cost. Hence it would look very much like an absolute demonstration that all this enormous expenditure in England and France upon iron armored vessels, in great part, has been to no material purpose, so far as the future naval warfare between two great powers is concerned, except to develop the resources of artillery and torpedoes.

Happily we are in the condition to profit by this European demonstration and experience, and we shall be grossly culpable if we do not profit both in regard to what we should provide and that which we should avoid. Of course we should not run into any wasteful expenditure in the unnecessary attempt to keep pace with European navies in their extent, but we can never safely consent to be inferior in the ordnance of our vessels, in their speed, and in their general fitness as single ships for the exigencies of modern naval war. At present we are demonstrably deficient and inferior in these respects.

In efforts towards the education of our naval officers we have likewise something to imitate. The growing and controlling influence of modern science upon the business of war, makes it imperative that the naval officers' field of knowledge and acquirements should be something very different from that of a Decatur, a Lawrence, a Perry or a Stewart. The school at Annapolis may fill its measure, but it is a cadet school at best, a school for boys, and open to what we have said in connection with all such. It is effective and most valuable as far as it goes, but there is something more needed for naval as well as army officers than mere cadet education. This is comprehended in England; we should at once follow their example; and the cost involved would be trifling. There should be founded either at Annapolis or some convenient naval yard, an advanced class for naval officers of at least three years sea-service, at which they shall be taught all that the most advanced sciences may have to impart that can be of value or bear upon naval operations, and thus serve to keep our officers, as they have always been hitherto, the peers in all things of any naval officers in the world.

In another particular, immediate efforts are exigent. In dry-dock facilities we are absolutely inferior to the appliances of a single private establishment in England, that of the Lairds. And in this connection we hope our Congress will be induced to weigh the report of the present accomplished chief of the Bureau of Yards and Docks who has lately made a survey of foreign naval yards. Our dock resources are dangerously unequal to contingencies, the possibility of which it were folly to overlook or not provide for. The English Admiralty is expending \$30,000,000 in dock yards, and Germany having invested \$9,000,000 in her prudent, economical fashion upon the establishment at Wilhelmshaven, is doing as much more at Kiel. Even the Italians have dock accommodations at Spezzin, far greater than any establishment in the United States.

The Hon Judge Dunkin's late constituents marked their pleasure at his elevation to the judicial bench, and the services he has rendered the county by a public dinner at Sutton, in the county of Brome, on Thursday the 8th inst. The Hon. Sir G. E. Cartier, Bart, Minister of Militia and Defence, in reply to the toast of the Ministry delivered the following statesmanslike and patriotic speech:—

"Sir George E. Cartier, on rising to reply, was received with the most unreserved applause. He said he had expected a great deal of kindness in being among them. He expected of course, in coming to the dinner to be surrounded by the British inhabitants of the county of Brome and adjacent counties, and though not belonging to the same race and religion as the majority of those around him, he expected a good and hearty welcome at their hands. He did not expect, however, that at that festival they would have had the delicate kindness—so to speak—at the moment he was going to respond to the toast, of greeting his ears with the music of a song which he had composed when he was a student at law. Every young man liked to sing, his national song, and nothing could have been more pleasing to him than to hear the song he had composed so long ago now sung as a cordial greeting to him by the people of that county. He would recollect it all the remainder of his life. But coming to the toast with which he had been connected as a member of the Privy Council, he would return, both on account of his colleagues and himself, his most sincere thanks. In doing so he knew there were gentlemen present who did not approve of the policy of his colleagues and himself. Still he was very much obliged to them for having drank the toast in so hearty a manner. He (Sir George) had been alluded to as having been connected with public life for so long a period, and it would be false modesty on his part to say that his career had not met now and then with a certain measure of success. If it had, the credit was not due to himself but to the party to which he belonged; and it was due also to them, the inhabitants of the county of Brome. The principal cause was in the fact that he had been supported not only by a majority of French Canadians, but by a large proportion of the British inhabitants of the Province of Quebec also. The inhabitants of this Province were not only of different races but of different religions, and no public man could expect true success who did not respect these. Well this was what himself and colleagues had attempted to do, and the result was that not only had har-

mony existed between the two races and religions in Lower Canada, but the Liberal Conservative party had been able to carry out measures which had promoted the prosperity of the Province of Quebec and of the Dominion. The History of the Liberal Conservative party would show this. If they looked back on the old regime when the Provinces were united under one government it was that party which carried those measures which secured the Confederation of the Provinces. It was that party which supported him (Sir George) which carried those measures, notwithstanding that, as usual when any really great measure was carried, every party claimed it as their own, and cried out, "We have done it." The country had wanted energy and happily Providence had supplied him with a little, which he had done his best to turn to its good. Since what time had the prosperity of the Province began? Since the Grand Trunk was built; everybody would acknowledge that, and yet it was almost impossible to calculate the amount of prejudice that a great undertaking had created in the minds of a large portion of the community. There were others afraid of the indebtedness which it was going to involve, and who cried out against the burden it was going to lay on the public. There were other and similar measures which had also met with a fierce opposition, but which were now contributing largely to the prosperity of the country. At the time the Grand Trunk was built it put the country fifty years ahead all at once. There could be no doubt of that now. Another great undertaking which the Liberal Conservative party had the honour to carry out was the task of subsidizing and establishing a line of steamships in connection with our ports, and one of the finest in the world was the result. They had great difficulty in carrying through Parliament all these measures. It would occupy too much time to go over all the Acts which were carried by them, and which it was now admitted, had done much to promote the well-being of the country. There was another party calling itself the Liberal party, but what had it done? The Liberal Conservative party had been the party of action in this dear old Province. He would speak of another subject which he (Sir George) had been mainly instrumental in carrying into effect, and that was the codification of the laws of Lower Canada. It had occurred to him that it was a great injustice to the British inhabitants of the Province that they could not read the text of the law, which they appreciated so well, and of which they had so much use. To remedy this he had a law passed to have them codified and they were now placed side by side in English and French so that every one could read them. These were a few of the great political measures which had been achieved by the Liberal Conservative party notwithstanding great opposition. But the greatest work was still to be mentioned. He alluded to the Act of Confederation. Previous to this event political matters in Canada had arrived at such a state that they could not have continued to legislate without coming to some agreement. The scheme had met with great opposition in certain quarters, but it had at last been accomplished. There was no necessity for him to repeat what had been so eloquently put by the Hon. Judge Dunkin. There were nearly all the Provinces both on the east coast and on the west now in the Confederation, and the great territory lying between them. By whom was this accomplished? By the interference of what party were these immense territories added to the Confederation? By the action of the Liberal Conser-

vative party in the Province of Quebec. (Cheers.) It was a great thing for him to see the majority of each race voting for these large measures. The country had achieved it seemed to him, under this new system of government more political advancement and greater prosperity in a few years than any other country in the world. The Dominion was to be the great northern power of this continent. Like Russia we might say that we were protected in the rear by the North Pole. (Laughter.) All we had to do was to look after our southern frontier, and if there were any people able and willing to do this it was the Eastern Townships men. (Cheers.) He—Sir George—would not like to detain them too long, but he could not help alluding for a few moments further to other topics on which they might like to hear something. The Liberal Conservative party, he would say, were most liberal in regard to religion. What he would say to them on this subject he could say as well in an audience of Catholics or Protestants. And he would say of the French Canadians that if they were distinguished by one thing more than another it was the respect they had for the religion of their fellow subjects of another creed. They did not believe in a man who had no religion at all. They understood that it is necessary to the moral and social welfare of a country that its people should be religious, and if they would like them next to be good Protestants. (Sir George here alluded for some time to the benefits of a religious feeling in a community and went on to say:) It would not be well for the country that the Catholics should be disciples of Voltaire, nor would they in turn wish to see the Protestants following after Tom Paine. (Cheers.) If that was the case the Catholics would be bad Catholics and the Protestants would be bad Protestants. One of the principal causes of the success of the Liberal Conservative party was that they had worked together in such perfect harmony that there was a perfect religious feeling between them. In this country we were a great deal better off in this respect than our neighbours. We admitted their prosperity, but we did not admit their system was superior to ours. On the contrary we believed that our system is superior to theirs. We had a sufficient amount of democracy to bring public opinion to bear on public matters. There they had too much. There was an abuse of democracy. There we could discover that universal suffrage was not conducive to the welfare of a people and a country. There they were holding elections from the first of January to the last of December. (Laughter.) It was nothing but elections the whole year round. This was by no means desirable. It was necessary of course to have public opinion, as necessary as to have a pilot or rudder to a ship, which without these would be lost; but there was hardly time for their public men to realize great things, as it was a constant election from one end of the year to the other. They might, in some of these respects, take a lesson from us who had an election once in four years for the Local Parliament and once in five years for the general. In England they had the finest institutions in the world. (Cheers.) But these institutions, which were venerable with age, were being assailed by bad Protestants, such as Mr. Odger and Mr. Bradlaugh who had been carried away by the charm of Democracy. But, thank God, the institutions of Great Britain were strong. (Cheers.) It was the only country in the world which possessed really stable Government, and the only country under whose flag you enjoyed real peace. We all believed that the institutions of Great Britain were the best in the

world, and we ought to show the people of the old country from here, that they ought not to fall into universal suffrage, voting by ballot, &c., which they have on the other side. But he (Sir George) wanted to speak of this new party, calling itself "The National Party." They did not state what nationality they referred to, or what nationality they claimed to represent, but if it meant the Canadian nationality, as it was presumed to mean, he had no hesitation in saying that the name was a misnomer. When you ask for the views or intentions of a party you must look at the organs which it employs. In Quebec they had *L'Evenement*, the editor of which had always been foremost in every movement for a closer connection with the United States. At the first meeting of this party what did one of its members say—that it was formed to bring about annexation. The *Montreal Herald* was another journal which approved of the formation of this party, and if they wanted to show themselves unaffected by it they must continue in the future as they had in the past. They had been the true Liberal party, not only in politics, but in religion. (Cheers.) It was a great pleasure to him (Sir George) as a member of the Government to have an opportunity to say something to them on a movement with which many there present were connected. He referred to the volunteer system. The volunteers had been drilled and organized in such a manner as to protect the frontier from invasion. The prosperity of the Dominion still depended in a great measure on the connection with Great Britain. (Cheers.) If there was any other party which, on this basis, was struggling to bring about a better administration of the affairs of the Dominion, it should be encouraged. But it ought to be recollected that the prosperity of the country depended on the connection with England, and on the continuance of that connection, and he hoped it would last."

The *Daily News* learns that the British War Office has directed the confidential publication of the reports prepared by Col., C. C. Chesney, R. E., during a recent tour, occupying some five or six months, which were spent in gathering information for the government on the various military questions, engineering and other, arising out of the late war, including also the results of official visits to Switzerland, where Colonel Chesney was sent to study the military system of that country; and to Italy, where Major R. Stotherd, R. E. (who was associated in the work), attended the annual manoeuvres held near Verona, under King Victor Emmanuel.

Krupp's establishment at Essen, as the following figures will show, has now reached gigantic dimensions: There are 514 smelting, roasting, and cupent furnaces; 160 forges; 249 welding and heating furnaces; 245 coke furnaces; 140 furnaces of various other sorts; 340 turning lathes; 198 planing machines; 91 grinding machines; 65 grooving benches; 114 boring machines; 120 various other machines; 150 steam boilers; 256 steam engines, having a total of 8,377 horse-power; 56 steam hammers, having an aggregate weight of 3,091 dwt. The number of workpeople is 7,160; and the amount of cast steel produced last year was 130,000,000 lbs. Of the steam engines, one was driven at 1,000 horse power, three at 800, and one at 200, one at 160, three at 150, one at 120, three at 100, with 242 of a smaller power. Of the steam hammers one weighed 600 cwt., one 400 cwt., two 110 cwt., one 200 cwt., one 150 cwt., one 149 cwt., three 300 cwt., with forty six smaller ones.

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The Volunteer Review,

AND

MILITARY AND NAVAL GAZETTE.

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

OTTAWA, MONDAY, FEBRUARY 19, 1872.

The next construction of importance in a field fortification is the powder magazine, the principle rule to be observed with respect to its position is that it should be shot proof, and that the powder should be kept perfectly dry, it may be made in a traverse placed at the foot of a barbette, or if the soil is dry wholly or partly underground.

The magazine should be at least six feet high and about the same internal width, its length must depend on the quantity of ammunition to be stored. It may be constructed of fascines, gabions, coffer work, or logs, or any other material which may be used to effect the end in view.

If fascines are used, the sides should slope outward to resist the pressure of the earth; the fascines should be secured by pickets and anchoring withes, it should be roofed by joists laid two feet apart 6 inches by 12 in size, they should be covered by two layers of fascines, laid side by side, and the whole by at least four feet of earth.

The bottom flooring should be plank laid

on joists, and the earth underneath should be sloped from each side to the centre in order to have an outfall for drainage, which should be carried towards the door, the walls and ceiling should be covered with tarpauling.

A coffer work is formed of frames of 6 by 12 inch scantling, each frame is composed of two uprights, termed staunchions, and a cap and ground sill, all well nailed together, each frame is six feet high and six feet wide in the clear, the flooring joists formed by the ground sill, the frames are set upright two and a half feet apart and connected by a wall plate 3 by 12 inches spiked on to the cap sill, the whole is sheeted with two inch plank, fascines are laid upon top and the work finished as before described.

To build a magazine with gabions, a trench the size of the proposed work is excavated in the ground, it will be about 3-6 in depth, the gabions are placed in two rows close together around it, leaving a berme of a foot in width between the innermost and the ditch or trench, they are filled with earth, the top is formed in the usual way as also the internal arrangements.

No error can be committed in building a magazine if the rules laid down be adhered to, logs flattened and pinned to one another will make a very effective structure, strong and capable of bearing a large depth of earth, especially if they are covered with the same material, as the walls are built of; it will also be dry, and more likely to resist the effects of shot shell or weather than any of the other structures.

The entrance to a magazine ought not to be direct, it should be parallel to the side for half its length and thence turned at right angles to the true door, the outer entrance should be further protected by a splinter proof, which is simply a structure formed either by scantling of the same size as that described in the coffer work, laid at an angle of 45 degrees against the face of the slope or a regularly built shelter of logs outside it, in either cases a lean to with sufficient earth to render it shot or splinter proof.

The best description of magazine is that wholly underground, the roof formed of heavy logs, covered by at least six feet of earth.

Excellent splinter proofs for trenches and enclosed works are made as follows: piles 12 inches in diameter and 12 feet high, and driven into the bottom of a ditch, twelve feet wide and three deep to a depth of three feet, the inner row which is the longest is driven in a line near the centre of the ditch about three feet apart; at the outer side of the ditch, a corresponding row ten feet in length is driven to the same depth, a cap sill projecting three feet beyond the inner row is morticed into both, and three inch plank laid for roofing along the top, over which a layer of earth four feet deep is laid, a flooring is laid on joists along the bottom of the ditch, and a casemate six feet high at the outer, and eight feet at the inner, face of

parapet or traverse is thus formed, the earth should be sloped on the outside.

It may happen that field works of a permanent character which would be occupied for an indefinite period will have to be constructed, capable of standing a siege and resisting the fire of heavy guns and mortars.

A very strong and permanent work of this description can be constructed of logs twelve inches diameter, flattened at the sides, placed close together vertically on ground sills with a wall plate at the top of two inch plank spiked on to every log, and with a flattened log roof of fifteen inch logs, notched for a depth of two inches to catch the wall plate, over those a layer of logs should be laid, the centre being a fifteen inch log, and the sizes should diminish to each wall so as to give a proper pitch for roofing; earth is packed solidly in between those logs till the surface is levelled, roofing boards one layer of inch and half grooved and jointed is first laid, a good coating of asphalt is then put on, the second layer will be inch boards coated on the outside with asphalt, the whole covered with eight or ten feet of earth, the flooring is of joists and plank, as this kind of magazine is generally excavated for three-fourths of its depth, its ventilation is secured by a very simple process, it is on each side eighteen inches wider at the base than at the top as the log walls are perpendicular, this leaves an air chamber all round the magazine of that width, planks are set on end against the wall plate to serve as a facing to the earth, and shafts are carried out to the top of the mound covering the magazines as ventilators.

The entrance may be secured by a bomb-proof shelter made of heavier logs than the splinter proof, but on the same plan, care should taken in all cases to adapt those works to purposes of possible defence, the inner row of logs could be closed by sheeting them with plank, covered with iron to render them bullet proof, leaving loop holes at suitable distances while the lower portion might be masked with earth. The drainage of all those works should be a first consideration, and might be effected by fascines, saplings or other ready and effective means, the skill of the military engineer will be signalized by adopting each description of work to its peculiar locality.

Traverses are structures designed to cover guns or men from enfilade fire or to close the outlet to a work or its gorge, when used to cover guns it is termed a gabionade, it is generally constructed of a double row of gabions set close together, enclosing a space of twelve feet from out to out by about twenty four or thirty feet in length, an inner row is placed inside each of the outer rows, all are filled with earth, four rows of fascines laid on each, and on the top a single row is placed resting on the two fascines covering the outer rows, the earth is heaped on top, making the gabionade nearly eight

foot high, other methods will present themselves to the practical engineer for accomplishing this work, it is not at all necessary to tie him down to one rule.

A stockade is the best enclosure for the gorge of a work, the plan should be a small bastioned front or tenaille, the structure should be formed of trunks of trees about twelve inches thick, and eleven feet in length, they should be flatted on two sides so that about six inches may be in contact, the top of the stockade should be at least eight feet above the ground, a banquetto one foot nine inches high is thrown up against it on the inside, the tops of the trunks should be pointed, and a strip about two feet in length should be cut with a saw on every two adjacent lengths, so that a loop hole two feet long, two inches and a half in width on the exterior side, and eight inches on the interior should be formed, about four feet in front of the stockade, a ditch should be formed twelve feet wide and three feet deep, the earth of which should be thrown up in a slope from the bottom of the loop hole to within six inches of the ditch.

Outlets through a work should not be more than six and a half feet wide except where waggons are used, when they should not be less than ten feet, when cut through a parapet the sides should receive a slope of three to one, and revetted with sals, it should be closed by a gate properly protected.

The great event of the past week has been the ball given by the Commander-in-chief (Colonel Robertson Ross) and his lady, to the officers of the Canadian army, it came off on Monday evening the 12th inst., at the Russel House, and was attended by a large number officers in full uniform, and over two hundred and fifty of the *elite* of the city.

The ball room was splendidly decorated, between every window were stars formed of bayonets, and ramrods supported by crossed sabres, festoons of evergreens crossed the windows on each side, descending to the gallery of the orchestra and passing along its front in three graceful curves, over the main door-way and connecting with the window festoons, on either side were two large festoons, the loops at the junction of each being tastefully filled with flowers, which were also plentifully bestowed on the festoons. Over the centre of the gallery a splendid gilt Prince of Wales' feather was placed, two of the flags of the gallant militia regiments that defended the Niagara frontier in 1812-15 were tastefully draped on either side, the whole front of the gallery was draped with ensigns, two bayonet stars shone with particular brilliancy, on either side the Prince of Wales' feather, while below two R's. the Monogram of the Adjutant-General occupied a similar position, four others of the old historic flags occupied positions on each side of the entrance, the door of which was covered by two large

draped ensigns, two mirrors one on either side was beautifully and tastefully decorated, and altogether the effect was most brilliant.

The ball was opened by the Adjutant-General and Lady Macdonald, Sir G. E. Cartier, and Mrs. Robertson Ross. The Hon. the Minister of Militia and Defence, was in full Windsor uniform, and on his entrance the band struck up "God save the Queen." Amongst the distinguished guests were the Hon. the Speaker of the Commons, the Hon. Alex. Campbell, Hon. Mr. Tilley, and Hon. Col Gray.

The Canadian Army was well represented by Lieut.-Colonel Powell, D.A.G.; Lieut.-Colonel Wiley, Lieut. Colonel Macpherson, Lieut.-Col. Jackson, Lieut. Col. D'Orsemens, Lieut.-Colonel Brunel, Lieut.-Colonel Chambelein, Lieut.-Colonel Aumonil, Major Worsley, Major Ross, Major White, Captain Eagleson, Captain Cotton, Lieutenant Harris, Lieutenant Cotton, Lieutenant Esmonde, and many other officers. Owing to recent domestic bereavement, His Excellency, the Governor-General and Lady Isagar were unable to attend, the vice-regal suite being represented by the Hon. Lieutenant Ponsonby, A.D.C.

The ball room presented a gay and unique scene, the supper room was tastefully decorated with flags and the centre piece of the table was Sir Peter Tait's presentation cup, of which we published an extended notice some time ago.

The honors of the ball was well performed by the gallant host and his amiable and accomplished lady, Lieut. Colonel Macpherson, Wiley and Stewart, deserve great credit for the tasteful decorations which received the finishing touch from the hands of Mrs. Robertson Ross.

The officers of the Canadian Army owe a deep debt of gratitude to the Commander-in-Chief for his constant solicitude for their welfare, and in this case at very great expense he has endeavoured to bring them together outside the routine of discipline, as a means of establishing a proper *esprit de corps* amongst classes widely different in their daily pursuits.

It was a happy idea and will be crowned with all possible success, and Mrs. Robertson Ross may well feel proud of the result of her kindly feeling and consideration. This was undoubtedly the most brilliant affair which the capital has yet seen.

The calamities of a war between the United States and Great Britain appears to have suddenly been discovered by the people of the former country, and especially by their military journals, the flicker of resentment exhibited by the Press and people of the latter at the impudent, insulting, and outrageous claims made by the Government of Washington for indirect losses arising out of the Alabama claims, occurring so soon after the report of the Secretary of the Navy would lead most people to suppose that this sudden desire for peace by a particularly

truculent people was caused more by their inability to wage war than any desire to spare their neighbors, the horrors so feelingly depicted when likely to be endured by themselves.

We do not forget in this connection the insulting, outrageous, and mischievous message of the four years mob puppet of the United States, when the idea was prevalent that the mass of old scrap iron at League Island was worth something more than the cost of demolishing it, nor the action of that other sudden convert and apostle of peace at any price principles the *Army and Navy Journal* whose warlike articles so strongly savoured of the true genuine Jefferson. Brisk style of argument. It is very evident that circumstances alone have changed, principles still remain the same, and on the next fitting opportunity we shall have the President's message filled with as stiff a dose of insult as the stomach of the English Whig radicals can bear, while the military journals will howl the war song threatening to annihilate Great Britain with the *Canonius*, and wind up all by blowing the tight little island out of the water by torpedoes, manœuvred from a North river mud scow.

All this is very neat and probably brilliant, but unhappily there are parties between the bullies on the one side and the imbeciles on the other, who do not quite admire all this Punch and Judy play, and whose interests have been more than once sacrificed to pay for the expense of the exhibition.

The civilized world was congratulated on the advent of the true millennium when the Treaty of Washington should have been ratified, the high contracting parties with a lofty desire to accommodate each other at somebody else's expense, forgot on the one side to secure substantial advantages and on the other to guard against dishonest claims.

As a consequence the people of Canada have to be consulted in the first case, and in the second the natural Yankee peculiarity of appropriating unconsidered trifles has broken out in such a serious fashion as to reverse what is supposed would be the condition of mankind after the settlement of the Alabama claims, and make the beating of ploughshares into swords or rather Snider Enfields, a wise and profitable operation.

That there may be no doubt about the little bill presented to John Bull by his dearly loved and rebellious Spring Jonathan, the following from the *U.S. Army and Navy Journal* will show what is exactly meant, and we would draw attention to how neatly the case is put.

"Happily, the language of the Queen's speech sets the example of moderation, whatsoever may be the intemperance of some of the English press and opposition politicians in Parliament. Evidently the Government at Washington will follow the same moderate course, and we may hope for a calm consideration of the question

whether or not, under the Treaty of Washington, our Government is entitled to set up at Geneva any claims in the name of *indirect losses* arising from the careers of the English built rebel cruisers, of the following character.

1. The national expenditures in the pursuit of those cruisers.

2. The loss in the transfer of the American commercial marine to the British flag.

3. The enhanced payments of insurance.

4. The prolongation of the war and the addition of a large sum to the cost of the war and the suppression of the rebellion.

It is contended on the English side, that the express language of the Protocol, and the letter and spirit of the Treaty preclude the least consideration of any such claims for indirect losses, and it is alleged that the Protocol shows the American Commissioners abandoned all such claims at the very threshold of the negotiations. To which, on our side, the reply is that the abandonment was conditional upon an amicable settlement of the claims for direct losses which it is now asserted was not effected by the Treaty, at least in the sense designed by the Secretary of State when he introduced it into the discussion.¹⁷

The indirect losses caused by the English built rebel cruisers are clearly defined, and the explanation of the Treaty rendered dependent on the intentions of the United States Secretary of State.

In every treaty Great Britain has negotiated with those people, the plain meaning of the text was set aside when it suited their convenience, and the intentions or explanations of some obscure individual set up as the true rendering. So well is that understood that people in Canada laughed at the efforts of the Joint High Commission and confidently predicted, the very issue at which it has arrived.

What shape negotiations may eventually take it is hard to say; but for England there is no escape with honor from being outrageously plundered while the Whig radicals hold power.

The proper reply to this false and hollow canting about peace is to abrogate the whole treaty, refuse to entertain the Alabama claims at all. Compel the United States to fulfill her neutrality obligations before she pleates to others about their duties and negotiate on other basis than the position on which she stood during her own interminable war.

Such a subject as the San Juan difficulty might be referred to arbitration, although the claim, like all others, is dishonest; but there is nothing either affecting the Empire on her North American dependencies which any English Ministry has a right to submit to irresponsible tribunals; this country was won by the sword, and will be held by its present occupants by that clear and simple title.

If a plain course of this description was taken with our enterprising neighbors a much larger stride towards universal peace would be taken, than by stupid negotiations in which the fools are outwitted by the wares to the detriment of political morality

the loss of the mass of the people and the great danger to the peace of society.

In the last issue of the *VOLUNTEER REVIEW* an article appeared analyzing the conditions of the Naval forces of the United States, in which the total inability of that power to defend her own coast from aggression or insult was demonstrated.

With any other people or government than that of Great Britain, the continual and pertinacious assertion of unjust claims and the insulting boastfulness of self assertion habitually indulged by the United States Government and people towards the Empire would meet its just and well-merited mode of chastisement at a time when resistance was impossible, but accustomed as the British people have been to weigh all their actions with judicial calmness, this impotent and politically dishonest people are likely to escape scathless.

The English of to day and their rulers can only remember that their country is the workshop of the world, and that any particular squeamishness about national honour or safety might interfere with their profits, to political optimists without an idea beyond the hour, a little more dirt beyond the conventional peck full does not so much matter, and, therefore they are bullied and cheated by a power who stands in relation to them pretty much as the renowned Wackford Squeers stood physically to the jolly Yorkshireman, John Broodie, and accept the ridiculous spread, eaglesism of press politicians and people, as to the mighty resources of the United States and their power to fit out future Alabamas on that 1,500 miles of coast, whose capabilities furnished matter for a display of stump oratory on the part of, Mr. Caleb Cushing.

Singularly enough our views of the extreme weakness of the United States as a naval power receives exact confirmation from no less an authority than the *Army and Navy Journal* of that country in its issue of the 10th inst., which will be found in another column, in which the editor proves that the naval force of his country is not only contemptible in point of numbers, but that nearly every vessel they possess is good for nothing but scrap iron, and that the country has not the means or appliances to create a fleet.

It is quite possible that the diplomacy of the English Whig radicals will furnish the necessary funds as the French have been compelled to satisfy the craving aspirations of Germany for the means to build a fleet, and that in the next complication English money, arms and vessels will be found endangering English national existence.

We differ entirely with the *Army and Navy Journal* as to the part Torpedoes will play in naval warfare, admitting at the same time, that the political exigencies of his country are served. If he can succeed in frightening his enemies by talk of unknown

danger, it is a decidedly cheap method of national defence, and could only be successfully operated by the astute people of the States upon simpletons such as the people of Great Britain and their leaders have proved themselves to be. But to those living alongside the model republic and knowing how hollow a pumpkin that celebrated nationality is, such flap doodle, although braked up by Caleb Cushing's thunder in a small way, won't go down.

Our objections to the Torpedo simply its great defect,—it is *unmanageable*. Most of the difficulties attending modern artillery and its application have been successfully overcome, the time is not far distant when shell fired from a gun at sea was a novelty—but guns or other offensive weapons cannot be concealed, and the very conditions under which Torpedoes can be at all successfully operated demands, as a primary consideration, absolute privacy; with the power of locomotion possessed by all modern war ships evasion, except in certain cases which can be provided against, is always possible, it is not so with a cannon shot, its effective range may be three or four thousand yards, the Torpedo hardly three hundred feet.

It is all nonsense to talk of a Torpedo vessel moving under the water; when it is possible to make a man breathe with gills that probability will have arrived, meantime as the vessel must be operated on the surface, and as the *Army and Navy Journal* says: "there are rigid bounds" to the capabilities for resistance to shot of armoured plated vessels, no such limits can be placed to the power of artillery or the form of projectiles; in which case it is evident that the boasted Torpedo vessel would be sent to the bottom before she could approach within a mile of her sphere of operations.

Till a Torpedo is invented that will have a penetrating, as well as simply explosive power, the weapon is no more effective than its ancient prototype, the fire ship of two hundred years ago, which was always more dangerous to friends than foes.

If the United States will be confined to that weapon for coast defence in the event of trouble a very small Alabama indeed will suffice to destroy the small remains of a commercial marine she possesses.

Speculative philosophers are to be found in all classes of society with a theory fitted for every condition thereof, but, unfortunately for the projectors its application is generally rendered impossible, because it has not attained value from practical experience.

In Canada we have a very small and busy knot mostly confined to our chief commercial city whose theories are limited to the substitution for our form of government of one to which the great mass of the people manifest most decided aversion founded on practical knowledge.

A means towards that end, free and

unrestricted trade with the United States is persistently held up as the great effort; to accomplish which every possible exertion should be put forth, while it is carefully kept out of sight that the only free trade the Washington politicians want is a customs Zollverein by which we would be compelled to impose differential duties on British manufactured goods, thereby compelling our farmers to purchase of the Yankee monopolists at fancy prices, one uniform class of manufactures to the great detriment of our interests.

That this is in no way an overdrawn picture the following extract from a leading New York journal will show, and it would be well if our speculative philosophers would seriously consider that pork and flour do not constitute the whole trade of the Dominion, nor does that trade tend naturally or otherwise in the direction of the United States, their attention is invited to the extract because it is not ten years since the case was reversed and then we had Reciprocal Trade with the States.

"The Boston Post points out the contrast between the ship yards on either side of the St. Croix River. On the New Brunswick side the yards are alive with busy workmen, while on the Maine side there is silence and decay. The Maine merchants are not able to build ships, because they are forbidden under heavy penalties—for such is the practical effect of the tariff—to import materials, while Congress absolutely prohibits them from crossing the river and buying the ships that are awaiting purchasers. The magnificent harbors of Maine are bare of the national flag, and the ships of New Brunswick are forbidden to enter them except under the flag of a foreign power. This is the result of the care which the Radical party exercises over the interests of a few monopolists in States where its supremacy is precarious. Should Congress, in order to secure the votes of the employees of the Erie Railway, forbid the citizens of the United States to travel over any other road between New York and Cleveland, the country would be aflame with indignation. Such a course would be precisely analogous to its conduct in forbidding the Maine merchants to purchase New Brunswick ships."—*New York World*

It is obvious that the great principle governing the trade is simply to sell in the dearest and buy in the cheapest market. Commercial legislation interferes with this, and a Zollverein would restrict the trade of Canada to one market, whereas, unfettered, it has that of the whole world.

Moreover, the United States produces the same articles we do, and, therefore, to obtain a footing in their market we meet with competition which would have the effect of lowering the value to the Canadian producer, in Great Britain and her colonies we stand on a totally different footing, that we are in a far better position than we could possibly be the following will show.

"The people employed in the lake fisheries have just discovered one of the beauties of the Washington Treaty. There are several thousand persons engaged in this business, and the amount expended for labor is large. Packed whitefish and lake trout are becoming as familiar in our mar-

kets as mackarel or shad. The new treaty proposes to admit fish from the Provinces free of duty, and this promises to put an end to the American lake fisheries. The reason is obvious. As the Canadian fishermen use twine and other materials which can be bought in the Provinces for about half what they cost here, and have free salt with which to cure and pack their fish, they can sell their catch in every port of the United States from forty to sixty per cent cheaper than the Americans can afford to do, and so drive the latter from their own markets."—*N. Y. Sun*.

THE attention of the readers of the VOLUNTEER REVIEW is directed to the speech of the Honorable the Minister of Militia and Defence Sir G. E. Cartier Bart, at the dinner to Judge Dunkin.

As the REVIEW is, in no way concerned with the immediate issues of local politics—the speech is republished because its tone and sentiment is that of a patriot and statesman.

Canada has produced many great men in every sense of the term, and equally under the *drapeau blanc* and *golden lilies*—as under the Old Red Cross, but we question whether under either regime any individual has written his name in broader, bolder or deeper characters on its history than the Hon. baronet, and his speech is simply a condensed history of the services he has rendered his country and the British Empire.

It is undoubtedly a grand position for an individual to occupy when he cannot refer to any of the incidents now emblazoned on pages of history in lasting characters without showing some act of statesmanship by which his country benefitted, and which was due to his foresight, skill and consummate tact, and throughout the whole of this speech such incidents form themselves into prominence without any such intention on the part of the speaker.

The Grand Trunk Railway; the Confederation of the British North American Provinces; the Militia Bill, are all great measures, the combined operations of which have resulted in consolidating British power on this continent; in building up out of a few weak provinces without a foreign trade and laboring under that worst of earthly evils—financial difficulties—a powerful Empire, extending from the Atlantic to the Pacific, ranking in its extreme youth as the fourth naval power in the world, and possessing a single banking institution that governs the Stock Exchange of the first commercial city in the neighboring republic, and second only in actual capital to its national bank; and all this has been, in a great measure, the work and labour of one man; no other country in the world can show such a record, nor is there a living statesman of the present day so thoroughly identified with such a great and noble work.

Well may the people of Canada reverence his words, and in this case what are the principles he inculcates—loyalty to Great Britain and adherence to monarchical institution—a lesson we are happy to say his countrymen are not likely to forget.

The man who can organize an Empire, give stability to its institutions, provide it with an army, raise it from abject poverty to prosperity and affluence, deserves well of his country, is a benefactor of mankind and an honor to his race, such a man is Sir G. E. Cartier, Bart.

PEOPLE and press in the United States alike concur in studied reticence respecting the monstrous demands made on England. At Washington the matter is simply discussed as any other ordinary business operations. It is evident the politicians understand the Whig radicals and are sure of obtaining all they ask from them, there is a remarkable absence of *war talk* one; journal indeed intimates that it is on foreign bayonets they rely, but the report of the Secretary of the Navy showing that the boasted Naval defence of monitors and other craft was a useless heap of scrap iron, has induced a caution accounted for by their utterly defenceless conditions. They are safe however for they could not kick the English Whig radicals into a fight.

REVIEWS.

The Sherbrook News is the latest addition to our journalistic literature, it is published every Thursday, and is a neatly got up sheet, devoted to the local interest of its district, from the number before us there is no means of judging what its political bearings may be, but it exhibits the Royal Arms and, therefore, must be of the right sort. We wish it every success.

Broad Arrow speaking of the present condition of the British navy says: "In fact we still hold to our opinion that the Navy is, on the whole in a better state than it has been for years, that we have a finer fleet of iron-clads than any power in the world; that our sailors are well treated; that to remedy the grievances and disabilities under which our officers have for so long labored almost superhuman efforts have been made. But in admitting this, we by no means forget that there are defects which require remedy, faults which want adjustment, and errors which, if not rectified judiciously may be dangerous if not fatal." Of our service it says: "In spite of the apparent weakness in ships, the American naval service has in it great elements of strength. It is well manned, and great care is taken in the education and selection of both officers and men. Indeed the educational system is peculiarly good, and contrasts favorably with the principles adopted in the British navy, and in any scheme which may be adopted when the education question is settled, the present system adopted by the Americans cannot fail to be seriously considered. One greater element of strength lies, possibly, in its very weakness. The superb consciousness of power in regarding the comparative weakness of the navy as a matter of comparative indifference cannot fail to strike every impartial observer. At the same time the absolute necessity of a powerful navy is not so imperative to the United States as to this country; and much as we admire a country which in time of peace unhesitatingly maintains its navy on a minimum peace footing, we should be worse than foolish to imitate such a policy."

A DOUBTING HEART.

Where are the swallows?
Frozen and dead
Perchance upon some bleak and stormy shore.
O doubting heart!
Far over purple seas
They wait in sunny ease.
The balmy southern breeze [more]
To bring them to their northern homes once

Why must the flowers die?
Prisoned they lie
In the cold tomb, heedless of stars or sun.
O doubting heart!
They only sleep below
The soft white ormino snow
While winter winds shall blow,
To breathe and smile upon you soon again.

The sun has hid its rays
These many days;
Will dreary hours ever leave the earth?
O doubting heart!
The stormy clouds on high:
Neth the same sunny sky
That soon for spring is nigh.
Shall wake the summer into golden mirth.

Fair hope is dead, and light
Is quenched in night;
What sound can break the silence of despair?
O doubting heart!
The sky is overcast,
Yet stars shall rise at last,
Brighter for darkness past,
And angels' silver voices stir the air

THE 35-TON GUN.

An old student and experimenter in rifling, R.W.W., recently drew attention in our correspondence columns to one of the great evils attending the employment of an increasing spiral groove in great guns. He points out that "it is a necessity of the gaining twist that studs only should be the guiding arrangement, as they, of course, by touching only at a mere point, or very limited surface, allow freedom of rotation in the varying curves of the helix of the rifling; though, of course, with (in the case of an iron projectile) some wobbling when the increasing spiral is being traversed." Colonel Owen, in his "Modern Artillery," also points out that "in hard projectiles having studs, there will be a slightly oblique movement of the axis of the projectile, and he tells us that the 8-inch gun gave 33 feet less initial velocity with the gaining twist than with the uniform, whilst at the 7-inch gun competition we learn that the gun with the gaining twist required 25lb. of powder to send 110lb. shot the same distance that it was sent by the uniform twist with 20lb. of powder. That is to say, the shot had so much greater difficulty in getting away from the charge, and this is the measure of the extra strain put upon the gun by an increasing twist. What "R.W.W." calls "some wobbling," and Colonel Owen "a slightly oblique movement," is in practice experienced to such an extent that long shells cannot be used without employing a more rapid spiral, which the "mere point" bearing would not endure. Whitworth with his long bearing rifled surfaces, which both support and rotate the shot, on an area of 187 inches in the 9-inch projectile, can give a very rapid twist and fire shot as many as seven diameters in length: whilst the corresponding service studded shot, the rotatory motion is given by only 1.6 inch. "No practical engineer," says Sir Joseph Whitworth, "would think of providing so small a surface to give even a small amount of rotation to a body weighing 250lbs, much less when the rotation of the shot at the muzzle of the gun has to be at the rate of 2,400 revolutions per minute. The increasing pitch which has been adopted, prevents the use of more than one stud to each groove for giving rotation. This varying curve is the worst possible mode of imparting rotation, for each rear stud can only

bear against the side of the groove of the gun on a line of its surface, on account of the ever-varying curve, except by excessive pressure, which jams and distorts the soft metal, and occasions liability to accident. The greater the amount of windage, the greater will be the liability to accident." Sir William Armstrong never used increasing twist. Mr. Lancaster did so at first, but after tearing off several gun muzzles, Mr. Lancaster repudiated it. Parrot's American hybrids were thus rifled, until several muzzles were blown off at the siege of Charleston. In our longitudinally weak converted guns, the increasing spiral is avoided. Our field guns are also considered unequal to such extra tension. Nowhere is it used but in our strag wrought-iron guns, with their short bearing studs, which necessitate deep and wide grooves, the late Director-General of Naval Ordnance wrote, "The Woolwich system retained the disadvantages of a grooved gun and studded projectile." This it is which so vastly increases the escape of the gas above the shot, with its erosion of the upper part of the bore, and its hammering down upon the base of the projectile, a hammering communicated exclusively by the lower stud upon a circular point in the lower groove, where the split of the 35-ton gun, as of the 7 inch., and other "Woolwich" rifled guns occurred. The 35 ton gun was spiked by its own stud, using a charge 25lbs. heavier than would have produced the same initial velocity with a uniform twist, as the 7-inch gun competition showed. Do away with the increasing twist, the deep wide groove, and the short-bearing stud, and a 100lbs. charge will do the duty of 125lbs. The stud will not be liable to be wrenched out; the "slightly oblique of the movement of the axis of the projectile," or "wobbling" in the bore, and the "noise" and "unsteadiness" of flight will be avoided, a more rapid spiral with better rotation will enable a longer projectile to be used; and we shall not have to record projectiles breaking up through the studholes in the gun or during flight. As it is, the 12-inch shell has had 105lbs. taken from its weight, and 10½lbs from its bursting charge, because of the insufficient rotation given by the "mere point" bearing, which increased spiral necessitates. The 11-inch shell has similarly been obliged to be reduced 12½lbs. in its weight, and 15 lbs. in its bursting charge. The 10-inch shell has had 5½lbs. taken from its burster, by thickening its walls to sustain the effort of rotation. The same process has taken place in the Palliser shell, which also broke up through the studholes, by the concentration of the effort of rotation upon them. All experience is against the gaining twist. No country and no system uses it for hard projectiles but the "Woolwich," and even then only in the strong wrought iron guns, and that by sacrificing the power and efficiency of their shells. If the crack in the 35 ton gun leads to a reconsideration of the recorded experiences, and a substitution of these for the spacious theories have crippled the efficiency of our magnificent guns by a bad system of rifling, the cost of retubing will not have been incurred in vain.—Broad Arrow.

THE MISHAP TO THE "WOOLWICH INFANT."

We recorded last week the cracking of the steel tube which forms the inner lining of the "Woolwich Infant," as the 35-ton gun is familiarly called. It will be remembered that these guns are built up of six parts, consisting of a forged breech screw, and of ductile coiled iron tubes, shrunk over a har-

der tube of steel, intended to give tensile strength and resist excoriation. This tube was originally bored up to 11.6 inches, and subsequently to 12 inches calibre; whilst nine grooves, 1.5 inches wide, and .2 inch deep, were cut spirally with a twist, increasing from nothing at the seat of the shot to one turn in thirty five calibres at the muzzle. The steel tube was originally 2.45 inch thick at the muzzle, and one inch thicker at the breech, but these thicknesses have been lessened by .2 inch, whilst enlarging the calibre. The original Palliser projectile was 700lbs weight, and thirty-three inches long, whilst the common shell was 534lbs. weight, and twenty nine inches long, with a powder capacity of 10½ lbs.; the charges being 120lbs. and 75lbs of pebble powder. It was believed that by the enlargement a less strain would be brought on each square inch of the bore, and a greater effect produced on the enlarged base of the shot, thus giving an increased initial velocity with less effect upon the gun. We need hardly point out that the increased calibre gives a shell of larger powder capacity, an advantage which quite makes up for the reduced penetrating powers due to its greater diameter.

The accident to the inner tube occurred in the grooving at the seat of the shot, a pressure of sixty-tons per square inch having been realized, instead of thirty or forty tons, as was due to the 120lbs. charge used whilst this lining was intended to bear fifty tons. How this discrepancy in the pressure arose is by no means clear. Pebble powder is remarkably uniform in its action, and the gun is supposed to be strong enough to withstand the action of as much powder as it will consume, so that a pressure double that which is due to the charge points to a cause other than its mere amount. It is not the first gun the tube of which has cracked in the grooving, but the pressure was not measured on former occasions, and was therefore unknown. Though we do not pretend to be able to solve the cause of this extraordinary and wholly unexpected pressure, there are some considerations bearing upon it so evident on the surface as to deserve notation. The tube is necessarily weakened by the removal of metal 13½ inches broad and two inches deep, extending 135 inches, being the length of the grooving, and the split might have been predicated to arise in that weakened part. Weak or doubtful guns, such as the converted ones and the field guns as well as those made in foreign countries, are invariably rifled with a uniform spiral. A trial between guns rifled with a uniform or with an increasing twist, occurred in the 7-inch gun competition, when the one with the studded shot and increasing spiral suffered very much more than its competitor, and being ordered to be fired, "under precaution," that is to try, with the care usual when a burst is anticipated, subsequently cracked its tube to a much greater extent than the 35-ton gun. But the Fraser construction in heavy guns have shown so much endurance that an increasing spiral which failed so signally in the 7-inch gun competition, and cannot be safely applied to converted or weak guns is applied to it with comparatively little danger. The extra difficulty which the shot has in getting out of the bore was shown in the same 7-inch gun competition, when the increasing spiral gave so much less initial velocity, that it required a 25lb. charge to produce the same results as were achieved with a 20lb. charge, by the uniform twist and ribbed shot. Colonel Owen, in his "Modern Artillery" states that a similar deficiency of initial velocity when using the increasing spiral, was recorded in compar-

sons made with the 8 inch gun; and we may presume, would arise in other calibres. Moreover, the 12-inch projectile is balanced on two rings of gun metal studs about six inches apart, and equidistant from the centre of gravity, the effort of rotation being chiefly borne by one of those rings, thus bringing on them so great a strain that they are sometimes squeezed over the lands, or wrenched out of their sockets. A more ingenious arrangement for concentrating the effort of rotation on the smallest possible surface is hardly conceivable. Now, if we imagine that the gas escaping over the shell forced down its unsupported base and raised its point, we have an irregular motion set up, which might well force the soft studs out of the grooves and on to the lands, producing a momentary jam. Though such a check might not mark the gun, yet the squeeze would produce a severe local strain, and give time for a greater consumption of powder than usually occurs when the shot has advanced so little. Thus an unusual pressure would be recorded in the powder chamber, over and above what would arise when the shell is free to travel out of the gun.

Again, the object of all rifling is to give rotary motion on an axis parallel to that of the bore or coincident with the line of fire. In rifled small arms and with all expanding bullets, this coincidence of the two axes is a natural consequence of the whole cylindrical portion of the shot bearing against the bore. But in hard projectiles with studs there will generally be an oblique movement of the axis, and, as the soft metal wears away, all attempt to centre the projectile in the bore, fail. On the other hand, if the shot be furnished with iron ribs running along the cylindrical part, and arranged for rising up the groove, on firing so as to centre the shot in the bore, the axis of the projectile will coincide with that of the gun, and it will proceed as steadily along the bore as a lead bullet, and continue so throughout its flight. The grooving for such a center-iron ribbed projectile, would take much less metal out of the gun, each groove being only 8 inch wide, and at the deepest part .124 deep. As the whole length of the cylindrical portion of the shot would be utilized for the rib bearing, fewer grooves would suffice, and the surface removed for five such grooves would be only four inches, or one-ninth of the circumference of the bore, instead of one-third as with the present studied rifling: whilst the depth of each of the five grooves would be only three fifths that of each of the nine.

Had the projectile in the 35 ton gun been provided with iron centering ribs, cast along the whole length of its cylindrical portion, no irregular motion in the bore could have been set up, and no squeeze would have occurred, and had the bore been only weakened by its grooving to one-ninth the width and three-fifths the depth actually in use, the steel lining would have been more capable of sustaining such strains as might have been imposed; whilst these would have been divided over a much greater surface. Whether the unexpected tension of 66 tons on the square inch of the bore arose from the cause suggested or not, there can be no question, that a smaller depth, less width, and a less number of grooves would be less weakening to the lining; and that a bearing which spreads the effort of rotation along the whole cylindrical length of the projectile must be less straining than one which concentrates it upon half an inch. If the mishap to the "Woolwich Infant" lead to a closer investigation into the strains incidental to the Service rifling, the £700

worth of damage will not have been incurred in vain.—*Broad Arrow.*

OPINIONS OF THE PRESS ON THE GENEVA ARBITRATION.

IMPERIAL PARLIAMENT—THE ALABAMA.—At the opening of the British Parliament on Tuesday last reference was made in the Queen's Speech to the Treaty of Washington; but after the manner of Royal Speeches, the reference was vague and unsatisfactory, and in the House, and in the Country, excitement is intense. It is charged against Imperial management, that the Americans have outwitted our Commissioners, and that in presenting what are called "consequential" damages, they are warranted in doing so by the treaty, and the protocols. Mr. Gladstone, simply expresses the hope that the Americans will recede from the position, and that the conference will be able to complete its work. Every English paper with one voice asserts the impossibility of England yielding to the American view, and the *Telegraph* extremely radical as it is, leads the resisting spirit. Having the seeming advantage, opinion in the Republic is less excited, but quite as firm; and Secretary Fish in instructing Mr. Schenck, repeats the President's instruction as follows:

"You are authorized to affirm that in no event will the Government of the United States recede from the position it has taken in relation to the Washington Treaty."

Although Mr. Gladstone will endeavor to ward off a direct expression of England's ultimatum in order to keep terms with the "peace at any price" party, it will be impossible for him to counsel the degradation of England, or advocate the acceptance of the American position. After looking carefully over the treaty and protocols, there is certainly nothing to prevent the Washington government from embracing the English view of the case, nor is there anything to bar the Americans from the right to make these claims a part of the work of the conference. It simply amounts to this, that England's rulers, so thoughtful of what others may say in respect to English liberals, and so anxious for undisturbed commercial supremacy, neglected those diplomatic niceties of detail, which would leave nothing to be understood. The case, as it stands, is not such as to permit indifference, although a year may pass before the arbitrators be called upon to agree or to differ, and the policy of both Governments will be to procrastinate—the American to assure the reelection of Grant—and the English to retain power. We have faith in the spirit of the British people—home and abroad, that they will resist at all hazards, a claim which if recognized in the least particular might be extended to imply compensation to every citizen of the Republic for asserted losses consequent on the continuance of the war. On the other hand, it is the duty of England the moment America has declared her intention to press for consequential damages to withdraw from the conference; choosing what alternative may follow, to national degradation. This game would only be the resort of a common foot-pad and must be resisted, come what may.—*Woodstock Times.*

THE DIFFICULTY WITH ENGLAND.—Up to the present moment it cannot be said that there has been any difficulty, nor that there is any cause to apprehend any difficulty. So far as the official communications between the two Governments are involved, everything is quiet, peaceable and pleasant. But it happens, unfortunately for the peace of the public mind on both sides of the Atlantic,

that in making up a case for presentation to the Court of Arbitration in Geneva, our own Government did put in claims for consequential damages, which Englishmen as a sume was done for no other purpose than to irritate their feelings by preposterously claiming damages which no one could expect to have allowed. It was for the Arbitrators to decide whether the claims were admissible or not; and we were bound to accept their decision whether favorable to our claims or otherwise. But the English press, for the lack of some more exciting topic of discussion, thought proper to make a row about our claims for "consequential damages," and so worked upon the popular feelings by representing our claim as an insult, that it has become necessary for the ministry to take notice of the matter, and the result is a request to our Government for the withdrawal of the obnoxious claim. This, of course, will not be done, and it is not likely that the arbitration will continue its sittings, and we shall be left just where we were before the Joint High Commission met in Washington. There we can very well afford to await our opportunity. There will be no war, nor any talk or thought of war, until England shall find herself engaged in a conflict with some European power, and then we shall be at liberty to follow her example during our war, and Alabamas will be built here to prey upon her commerce. But England cannot afford to let the subject remain in abeyance until then, and therefore she will take some steps for effecting an amicable settlement of the difficulty. There will be no war, whatever else there may be.—*Brooklyn Union.*

THE WASHINGTON TREATY.—The English journals are working themselves into a state of great excitement over the case presented by the Washington Government to the Geneva Conference. The Americans with characteristic assurance, have presented enormous claims, asking for all sorts of indirect damages. They say the Treaty did not limit their claims. It only established a means whereby those claims could be considered and decided upon. They agreed with the English Government to abide by the decision of an impartial body of the arbitrators. They claim the right to present their case before that body in as strong a light as possible, and they have done so. That is the position of the American Government, and it must be admitted that looking upon it in the light of the treaty and negotiations which led to it, it is a perfectly tenable one. The British Government knew officially, at the time the treaty was assented to, that the Americans could claim consequential damages, and yet they ratified the treaty, and the London press, with a few exceptions, hailed it as the dawn of the millennium. And now, when the conference has met and these indirect claims presented, these same English journals get frightened, and cry out that the Government should demand the withdrawal of these claims, and if they are not withdrawn repudiate the treaty. The position of the British Government is indicated in Her Majesty's Speech in opening Parliament.—Referring to the meeting of the Geneva Conference she says "Cases were laid before the arbitrators on behalf of each party to the treaty. In the case so submitted by America large claims were included which were understood on my part not to be within the provinces of the arbitrators. On this subject I have caused a friendly communication to be made to the Government of the United States." Judging from the tone of the despatches from Washington, the American Government is determined to stick to the letter of the bond

and there is very little prospect of their withdrawing the obnoxious claims. On the other hand the Imperial Government have notified the United States of their objection to the consideration of these claims, and Mr. Gladstone stated in the House of Commons that his Government would remain firm in the position they had taken in regard to those claims. So the matter stands at present. While there is very little danger of the difficulty leading to war, every one will watch the progress of the matter with anxiety.—*Ingersoll Chronicle*.

THE GENEVA ARBITRATION.—The lofty sounding title of "The Joint High Commission" is already assuming the phase of a misnomer, if we are to judge by the utterance of the leading organs of public opinion in England. Low Joint Commission would seem to be the more appropriate so rapidly is it sinking in popular estimation. When the Alabama claims treaty was first published, not enough could be said in praise of the Commission by the journalistic advocates of the peace at any price policy. Canadian interests were sacrificed by the Fisheries clauses, but what of that trilling objection? The interests of the Colonies must always be treated as subordinate to Imperial policy, especially on questions which might involve the ultimatum of peace or war. The Geneva Conference, however, had scarcely had time to assemble and commenced deliberations on the liability of Great Britain for the depredations of the Southern Cruisers than, as if by magic, the discovery was made that our Yankee cousins had again sold the British Commissioners, and got them into a fix which they can hardly get out of without surrendering the just rights and honor of the British nation. A Telegram from London, dated Feb. 3rd, brings the astounding information that Chief Justice Cockburn has counselled the Gladstone Cabinet that England must recede from the Treaty of Washington immediately, leaving America to decide between a new treaty and war, the advice to repudiate the treaty being based upon the claims put forward by the representatives of the United States at the Conference for indirect damages, above and beyond the ascertained losses inflicted by the Alabama and her consorts, such as the cost incurred by the American Government in pursuit of those cruisers, and others equally untenable in the opinion of the English expounders of the obligations of International law. We are afraid, in the first place, that the news is too good to be true, that it has been manufactured as a feeler for public sentiment, and that the English Government is so inextricably committed to the treaty that she will submit to any penalty almost rather than revive the anti-British feeling in the United States. Such too appears to be the opinion at Washington, whence comes the information that the Government has no information which excites fears that the Geneva Arbitration will fail of its object notwithstanding the comments of the London press respecting the American statement of the case before that tribunal, and it is plainly stated that in commissioning the "High Commission," Queen Victoria pledged her royal word that whatever thing should be transacted and concluded by her High Commissioners should be agreed to, acknowledged, and regulated by her in the fullest manner, and that she would never suffer either in whole or in part any person whatsoever to infringe the same or act contrary thereto, as far as lay in her power.

This very appeal, however, leads to the suspicion that the American Government is quite aware that it has gone beyond the in-

tent and meaning of the treaty, by advancing its propositious claims for all indirect or constructive damages in accordance with the doctrine laid down in Congress by Mr. Sumner. It cannot be ignorant that the Queen and her Ministry would both be powerless to compel the ratification of a treaty embracing such dishonorable conditions if the public voice refused, through its representatives in Parliament, to be bound thereby, and that in all probability the Treaty of Washington in that case would be repudiated by England in the same way that the Congress of the United States repudiated some years since the Treaty of Ghent. Perhaps out of this unforeseen difficulty Canada may yet gather her advantage and save her Fisheries.—*Brampton Times*.

THE WASHINGTON TREATY.—The telegrams received from England and the United States within the last few days, on the subject of the Washington Treaty, are exciting. We have often felt constrained to say that this Treaty was the most dishonorable to Great Britain—the most utterly disgraceful that any negotiators or the part of that country had ever entered into. It now seems that the press and people of Britain are, with very remarkable unanimity, arriving at the same view of the case. Whilst it was supposed that Canada alone was to be the victim and the scape goat, the Treaty read all right in the eyes of the Gladstonian Whig Radicals of England. The *London Times* could coolly tell us that we should calmly acquiesce in giving away "the priceless heritage of our Fisheries" for the "general good." But when it comes out that the Treaty which, unquestionably and on the face of it, proposed to rob Canada, is also constructed to mean a demand upon Great Britain to hand over some six hundred million dollars—\$600,000,000—to the modest Yankees, the *Times* and all the rest of the English press are indignant. It is now seen that the Treaty effects British pockets and with a vengeance. For the man who could read the Washington Treaty and suppose for a moment that the United States would not make such a monstrous demand as they have made, we can entertain no more respectful feelings than that of utter contempt. The idea of men who have read history—who are familiar with the former Treaties and diplomatic relations between Britain and the United States, supposing that any result of the Geneva Arbitration which would satisfy the latter country could be other than an eternal disgrace to the former! One cannot wonder at the Halifax *Colonist* and such like weaklings that cling to Sir John A. McDonald's skirts so supposing; but that men who are called statesmen and that journals upon whose utterances the whole world waits with interest, should stultify themselves with such a delusion, is almost incredible. It would be difficult to find such an other instance of insatiation.

It is all over now, however. The telegrams to which we have referred, do not contain many words; but they comprise a great deal of meaning. The "Washington Treaty" is, as dead as *Balloghlanagh*. There will, of course, be more words about it; but they will end where they began. This cannot be other than a cause for congratulation to all true hearted Canadians, for although a few toadies of the McDonald Government piped up with their puny voices in praise of the Treaty, the great body of the people felt that by it they were wronged, insulted and disgraced.

Already there is much talk of war. We anticipate nothing of the kind. Doubtless there will be what Fluellan called "pravo words." The United States will threaten

menhously. It is possible the British Government may propose some less disgraceful settlement of the (pretended) "Alabama claims" than that now under consideration; but we incline to think that, at last, the British blood is up and will stand no more nonsense. Undoubtedly Great Britain will not go to war if it can be avoided with any semblance of honor; and the United States, notwithstanding demonstrations to the contrary, will not do so under any circumstances.

Thank fortune, however, the Washington Treaty is as dead as above said. For the reputation of humanity and out of regard for the blushes of the posterity of all those who were in any way concerned in framing it, it is to be regretted that all records of it could not be removed from the annals of our time.—*Acadian Recorder*.

The *Army and Navy Gazette* referring to the new Regulations issued regarding the practical training of Staff officers says: "They will be scarcely less interesting to that very large portion of the English public who now devote so much attention to all those reforms and changes which are intended to increase the efficiency of our army. It may be said that staff officers are the brain of an army. Any human frame, however gigantic and seemingly powerful, is really nothing but a mass of useless matter unless it possesses brain power to direct its force; so an army without a general staff is unwieldy and helpless—the greater its size, the greater its helplessness. After the Crimean war it was felt that something should be done to improve the general staff, and to ensure a special and, to a certain extent, a scientific education among all officers thus employed, while, at the same time practical qualifications would not be ignored. The Staff College was formed very much on the model of the French. After ten years trial the results were pronounced to be not altogether satisfactory. A royal commission was appointed to consider the entire subject of military education, and the Staff College was included in the scope of its enquiries. All the general officers examined by the commission, with one exception, pronounced the Staff College to be a failure; they complained that its students were book-worms rather than practical soldiers—estimable, zealous, but not half as useful or practical as the fox-hunting rough and ready soldiers of bygone days. The commission abolished the system of personal competition; they did endeavor to make the instruction at the college more practical; and now a final effort has been made by the Regulations just published, to render all staff officers acquainted with all arms of the service."

Lieutenant-General Von Storsche, the newly appointed minister of the German navy occupies the same relative position to Bismarck, as Delbruck, the Minister of State. Therewith, the appointment of von Storsche to the ministry becomes more a matter of form. He also does not draw the income of a Prussian or German minister, but ranks in this with Delbruck, for whom the *etat* specifies 600 thalers, but half of the salary of German ministers. The functions, as far as relates to the right of public law, are the same as those of the plenipotentiaries of the Bundesrath. It is apparent that by this appointment of a special naval minister, the German marine will acquire new importance and, therefore, the separation of the administration of marine affairs from those of the war departments will be hailed throughout Germany as a sound and sensible act of progress.