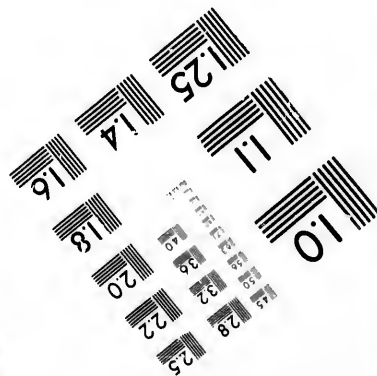
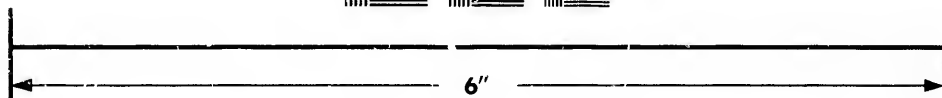
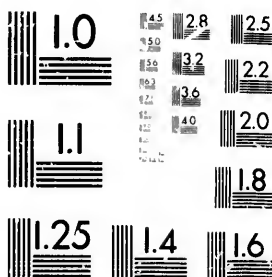


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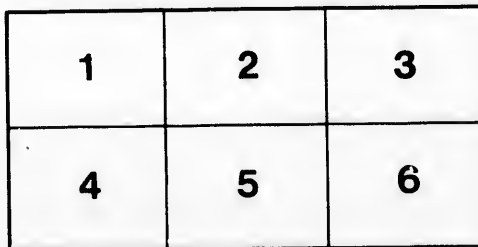
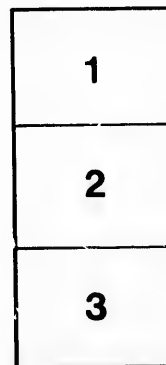
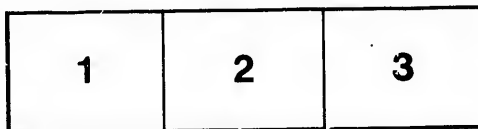
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THOUGHTS ON DEFENCE,

FROM A

CANADIAN POINT OF VIEW.

BY A CANADIAN.

DEDICATED, BY PERMISSION,
TO THE
HON. SIR GEORGE E. CARTIER, BART.,
AND OFFERED,
AS A TRIBUTE OF RESPECT,
TO THOSE STATESMANLIKE QUALITIES
WHICH HAVE MADE HIM
MINISTER OF MILITIA AND DEFENCE
FOR THE
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Montreal:

PRINTED BY JOHN LOVELL, ST. NICHOLAS STREET.
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THOUGHTS ON DEFENCE.

As the relations, to be or not to be, between Great Britain and her Colonies have become, of late, the subject of very general discussion and of increasing interest, any information offered at this moment, and tending to show that one of them, at least, is neither the cause of weakness, nor the cause of expense, which some nervous people predicate, may be of use.

It is our wish to dissipate a delusion, perversely propagated, that our country is indefensible, that its long frontier provokes attack at a thousand points, and that it is at any time at the mercy of the only invader it can ever expect to encounter.

This is not so. Canada has a long frontier, but it is wonderfully protected by nature in nine-twelfths of its length. That frontier is formed by noble rivers, now expanding into inland seas, periodically vexed by storms of unusual force, which lash lee shores and shallow waters, justly shunned by navigators, now contracting to rocky gorges, and miles of seething rapids, which are simply as impassible as the defiles of Abyssinia. These natural obstacles, which may be improved, for the occasion, by a thousand appliances of the noble but primitive art of self-defence, are increased by difficulties of country on many leagues of the frontier, and by the rigor and vicissitudes of the climate on its whole length. By profiting thoughtfully and providently by the defence which nature has provided, Canada may be made inaccessible, except at five or six points well known, which were bravely

defended, in olden wars, and where the present population, which can turn out 500,000 fighting men, could easily hold its own until succored from without.

These men, when the time comes, will do their duty to their country and to their children, but to be sure that they are in the right line of duty ; that the sacrifices they are willing to make will not be made in vain ; that success will have an object and produce fruits, these men expect, and have a right to expect, an out-spoken unqualified response, coming from the heart of England—"in the hour of danger succor will come."

The discussion which is taking place in the Old Country is, from our point of view, so general, so *œcumenical*, as to create some confusion. The Colonies of England, scattered the wide world over, presenting every imaginable variety of climate, of geographical situation, and of physical condition, containing an aggregate of 7,500,000 inhabitants, with but one common bond of cohesion, a common language, are dealt with *in globo*, in the popular parlance of the day. The same Procrustean argument is applied to Canada and to the Falkland Islands, to the Cape of Good Hope and to Australia, and thus it runs : "It is time that these countries should relieve us from further cost and responsibility. It is time that they should provide for themselves. It is time that, being independent, they should act for themselves, in peace and in war, for us or against us, as they may think best. Come what may, we shall continue to supply them with cutlery from Sheffield and dry goods from Manchester."

How far this argument may apply to Colonies in the Indian Ocean, or the Southern Pacific, it is not intended to discuss. It is our object and our duty to show that it is fallacious so far as it relates to Canada.

The Dominion of Canada enjoys under its present Constitution all the independence it desires. The voice of its people,

as represented in Parliament, affirmed this resolve in its last session, and has again solemnly reaffirmed it at this present writing. Let it take but one step beyond and it plunges into the gulf of Annexation, but it is most clear that Canada, for years to come must, however independent, lean for support either on Great Britain or on the United States. Under the present Constitution, the moral support of England, backed by practical demonstration, will suffice to maintain her, prosperous and progressing, a good customer, a faithful fellow subject and a devoted ally. Exchange this for the material support of the United States, and with the latter she takes a prohibitory tariff, a whole heritage of wrongs, Irish and American, aggravated by a sense of loyalty repulsed with scorn, and of love requited not.

This sentiment may provoke a sneer, but it will not promote the sale of Sheffield whittles or of Manchester cottons. Independence in advance of the present Constitution of the Dominion will simply give from six to ten new States to the American Union ; it will thrust Great Britain off this continent and make it more exclusive, in a commercial sense, than Japan. It will give Bermuda and the West Indies, Newfoundland and its fisheries, to a people which may be forced to respect but which can never love England ; and, while she is deprived of even a coaling station on this side of the Atlantic, it will not deny them all manner of supplies in the ports of France or Russia, when she is fighting with the one nation for the possession of the Isthmus of Suez, or encountering the other amid the deserts and rocky fastnesses of Central Asia.

But, on the other hand, independence, in the present constitutional sense, leaves Canada free to the future occupation of many millions of Englishmen, willing to remain British subjects, willing to consume British manufactures, willing to go heart and hand with the empire, without involving any

special expense, or provoking any special anxiety beyond that which a great nation, resolved to hold her own, accepts as the inevitable penalty of power and the natural consequence of her "pride of place."

Canadians ask for no more independence than what they possess, guaranteed to them by the Parliament and people of England; and to relieve the oppressed mind of the British tax payers, let it be said at once, they require no further support either from the Exchequer or from the Horse-guards. We are reproached, incessantly, with an indifference to our own defence, and with a servile dependence on the military force of the Mother Country. The reproach comes from sciologists and empirics, who, ignorant of the past, coin theories for the future. The colonists of England had, no doubt, and still have, a right to demand the support and protection of their native land. Our forefathers contributed both blood and treasure to the glory and the greatness of England. We, their sons, inheritors of the fame of their great deeds, inherited also the great burthens those deeds entailed, and under the pressure of these burthens we passed forth from our pleasant places under an implied and not the less solemn agreement with our fellow countrymen, that if we labored to create colonies and to build up the commercial greatness of England, to increase her prosperity and to lighten her burthens, we could, on the other hand, command her protection. But we will let this pass. We believe that, in the best interest both of Canada and of Great Britain the present policy is the right one. We still expect protection, but in a shape which will neither increase her expenditure nor imperil her honor. With all respect for the noblest army in Christendom, we look for succor in the hour of our need to the navy of England.

Let England withdraw every regiment to-morrow if she so wills it; we shall miss the social qualities of the officers, and the familiar faces of many of the most charming of our women,

won from us by men whose choice approves their taste; we shall miss the welcome presence of a grave and respectable soldiery; our farmers' daughters will lose many good husbands, and the country a wealth of useful settlers, but we shall be thrown upon our own resources; we shall gain a priceless amount of self-reliance, and the moneys now expended on the accommodation of Her Majesty's troops will be applied to promote the efficiency of our own militia. In time of peace Canada can protect herself from marauders; her college boys have done so already, and have died in the doing of it. In time of peace she will prepare for war, and should war ever come, she will be able to hold her own until England comes to her aid. The fleets of England will then be the real succor of Canada. A squadron of iron-clads appearing on the Atlantic sea-board would draw off every invading soldier from the Canadian frontier, for the defence of Portland and Boston and New York and Philadelphia; while swarms of gun-boats, swift, heavily armed and invulnerable, would cover our coasts from the mouth of the St. Croix to St. John's, Newfoundland, and from the Straits of Belle Isle to the foot of the falls of Niagara.

Let England, therefore, if such is her interest, withdraw every soldier from the Dominion; but let us understand one another beyond all peradventure. Let us know what we have to do, and the way to do it will be found. If Halifax and Quebec, Montreal, Kingston and Toronto, are to be left to the safe-guard of their own people, so be it. They are prepared for fresh efforts and new sacrifices. Having chosen their part boldly, they will perform it thoughtfully. Mind, as well as body, intellect, as well as thews and sinews, will be called into exercise to develope and make intelligible their means of defence, to enable them not only to defend their country but to defend it to the best advantage. They will soon learn how to counter-balance supericrity of numbers

by the resources which nature and climate, a rugged or a take bound frontier, have placed at their disposal.

We have, in fact, but one enemy to fear, and, if we are to preserve our independence, but one friend to rely upon. Our only enemy must be the United States, our only ally England. Without the help of the latter in time of war, given to the uttermost, we could do no more than imitate the example of the Swiss under William Tell, or of the Tyrolese under Hofer, and die, like brave men, with some little dramatic effect, but with very little practical use. With the aid of her power, resources and wealth, we may dare to encounter the very worst. Let it be kept in mind always, that, at the present day, the purse is the true arbiter of war. If the enemy can be taught at the outset to calculate the cost of conquest; if he can be taught that by an unprovoked aggression on an unoffending people he has nothing to gain but hard blows and an increased expenditure, he may take thought, and pause in his career; he may compute and compare the costs, the chances and the consequences of such a war, for among the consequences of modern warfare, is the inevitable penalty visited upon the aggressor, of paying to the injured every penny of the expenses incurred. In such a warfare the accountant follows, with equal foot, the tread of the invading soldier; every house that is burnt, every farm that is despoiled, nay, every shot that is fired, finds its entry in this great National Ledger, and the price of peace is the payment of all expenses, and the reimbursement of all losses. Let the aggressor call to mind the millions upon millions paid by France at the end of the war of 1815 to compensate the burning of Moscow, the despoliation of Madrid, and the exactions levied from Germany. He may take warning, and pause in his career, for a war with Canada must be a war of aggression. We want nothing from the United States but a continuance of good will, of mutual intercourse, and reciprocal benefits. We want not

their laws, nor their institutions, nor one inch of their territory. If war is forced upon us we should stand purely upon the defensive, nor should we depart from that policy, except where outrage demanded retribution and compelled reprisals.

But, it may now be asked, what defensive attitude or precaution could you take which would answer any practical defensive purpose? You have a frontier 1,500 miles in length and vulnerable at any point; how could you practically defend such a frontier with the forces at your disposal? These are questions easy to put, and difficult often, on the spur of the moment, to answer, but they can be answered, and, we think, satisfactorily. In the first place, the frontier of Canada is not vulnerable at any point. In the greater part of its length, by present preparation, and by the aid of British gun-boats in the hour of need, it is simply invulnerable. The time of real need will be the summer season, the winter will extemporize its own defences. The weakness of a frontier will be found, not in its dimensions, but in its assailable points, and its strength consists in the ingenuity, the engineering skill, by which those assailable points can be made unassailable. The wit of man, the forecast of statesmen, have been, and still are, the true defence of England. The coast-line of the British Isles presents a frontier of four thousand miles, open at all times to the hostile combinations of foreign nations and to the attack of steam fleets, but, before foreign nations can assail her ports, they must get out of their own. In the words of the old song, she "needs no bulwarks nor towers along the steep," simply because until her navy is swept from the ocean, no foreign foe can affront her frontier. When the economists have got rid of Gibraltar and of Malta, of Halifax and Bermuda, England may be doomed "to point a moral and adorn a tale," but not till then.

Foresight and forethought are the cheap defence of nations. To know what to do and how to do it, at the right time, to provide beforehand where provision is necessary, to

be forearmed for expensive contingencies, will cost little and may economise much. In this spirit we now proceed to trace the outlines of our frontier, to mark its characteristics, to point out the facilities it offers for defensive purposes, and to show how it may be defended. The frontier line of Canada, liable to attack, and for which, therefore, defence should be provided, may be divided into three sections, irrespective of the sea board. From the mouth of the river St. Croix to St. Regis on the river St. Lawrence, 600 miles; from St. Regis following the Lake shores to Cabot's Head on Lake Huron, 550 miles; from Cabot's Head, the rear front on the Georgian Bay of Lake Huron, 350 miles or thereabouts. From the mouth of the St. Croix on the Atlantic to St. Regis on the St. Lawrence, the first section is conterminous to the States of Maine, New Hampshire and New York, divided by a line run, and by monuments planted, on mountain and through forest. So much of this section as includes Lower Canada, now the Province of Quebec, backed by the St. Lawrence, lies on the map like a huge ham, with the choicest slices cut out to gratify the greed of American diplomacy, illustrating at once the duplicity of Webster, and the simplicity of Lord Ashburton. This immense wedge—contents some 8,000,000 of acres—plunges into the Canadian frontier, and almost cuts off communication with New Brunswick. It is a deplorable source of weakness in a military point of view, but still, not irremediable. Of the defence of the Atlantic coast line, in time of war, of the Bay of Fundy, of the shores of Nova Scotia, and the Gulf of the St. Lawrence, but little need be said. If the navy of England, or the united navies of Great Britain and Canada, are unequal to this task, it were bootless to pursue the question further. This first and fundamental proposition must be granted or the whole fabric falls.

It is not pretended that any frontier can be hermetically sealed against hostile incursions, or that every man's land can be guaranteed against the spoiler; individuals will and must suffer in the common cause, and, if it is the highest privilege of freemen to make sacrifices in defence of their independence, so it is the first duty of the Commonwealth to compensate their sacrifices, in due time, as has been before suggested. The line of the Ste. Croix may, no doubt, be easily forced at many points, by superior numbers. The farmer and the lumberman, become soldiers in self-defence, will fall back with their flocks and herds, their household stuff and families, to strong defensive positions in the rear. Woodstock, on the St. John's River, and Fredericton, the beautiful capital of New Brunswick, offer just the positions wanted. An intrenched camp at the Grand Falls would maintain and protect the communications on the left bank of the St. John's, between the mouth of the Madawaska and the cities lower down the stream. Here, earthworks and intrenchments, with which the siege of Sebastopol has made us all familiar, planned before hand, and ready to rise at the magic touch of patriotism, would rapidly cover a population, handy with the axe and spade, and marksmen with the rifle. These men, trained systematically, but simply, as recommended in the Annual Report of the Adj.-General of Militia for 1869, p. 11, par. 15, and armed with the best weapon, would be able to hold their own against tenfold odds, until diversions, reduced numbers, and General Frost, the leader of our winter array, poured "iron sleet in arrowy shower" on the retreating and discomfited foe. Fredericton and Woodstock are both so situated that an easy communication could be maintained with the left bank of the St. Johns River, securing re-inforcements and supplies, and means of retreat, if ever required, to stronger positions in a more difficult country, while a glance at the map will show that so long as Fredericton is held strongly,

no sane enemy would dare to advance on the city of St. John by the coast line, with British steam cruisers on his right flank, and exposed to attacks from Fredericton on his left flank and rear. To secure the real prize, the city of St. John, he must invest formally both Woodstock and Fredericton, and by the time he had expended thousands of men and millions of dollars, on a few miles of the great Canadian frontier, he would begin to appreciate the value of his investment. Consult the map again, and it will be seen at a glance that Fredericton and Woodstock and St. John must fall, and the intrenched camp at the Grand Falls must be brushed aside, before an enemy could with impunity attempt to invade Lower Canada by means of the crater sprung in our line of defences by the Ashburton Treaty. Into the top of this ugly chasm debouches, at the Little Falls, the River Madawaska, flowing out of Lake Temiscouata. Both are bordered by a noble Provincial road, an engineering work of great merit, which leads without interruption to the Rivière du Loup on the River St. Lawrence, and which offers an inviting entrance to an invader, by placing him at once among the populous French settlements on the line of the Grand Trunk and Intercolonial Railroads, intercepting also railway communication between Quebec and Halifax. But the whole road is a defile 80 miles in length, coiling through a most difficult country, and is easy to be defended or destroyed. No general, worthy to command an army, would venture on such an advance with an unsubdued foe in his rear, knowing well that, even if he found a passage, he would, on emerging in a shattered and exhausted state, encounter, on the shores of the St. Lawrence, the accumulated force of Lower Canada proper, the strength of Quebec, gunboats on the river, and an auxiliary force from Gaspé and New Brunswick debouching on his right flank and rear by the line of the Metapédic.

To make this more plain, attention is again invited to a

good map, and to the grand inner line of water communication between Halifax and Quebec afforded by the Gulf and the River St. Lawrence. This line of communication will be supplemented hereafter by the Intercolonial Railway, now under construction ; but the connection between Canada and New Brunswick on the Laurentian frontier is maintained at present by the Metapediac Road, like its twin sister of Temiscouata, an honor to the civil engineering skill of Canada. This road, descending the ravines of the river of the same name, strikes the Restigouche, the frontier line of New Brunswick, and descending the Restigouche, reaches Dalhousie, at the head of that noble estuary, the Baie des Chaleurs.

Dalhousie, as yet but little known, is destined to be a place of importance. It commands a capacious harbor safe at all seasons, and possesses great natural strength of position. It is 342 miles from Quebec and 359 miles from Halifax—nearly equidistant—and a most valuable intermediate depot, where arms and ammunition could be stored for the supply of the militia of the country, open to reinforcements from Quebec, and to the support of gunboats from Halifax. It will be seen at once that this scheme of defence for the Maritime Provinces interposes New Brunswick between Nova Scotia, Lower Canada and her enemy, and would admit of the concentration of the forces from the three Provinces on the line of River St. John. 100,000 good, resolute men, as good soldiers as any which could be brought against them, would hold their own on this line of defence, until diversions operated elsewhere, or the approach of winter, would relieve them from pressure.

We believe that the River St. John, backed by the reinforcements to be found in Halifax, and by the resources which may be accumulated between Quebec and Dalhousie, would offer a line of defence, which no enemy would dare to attack, except with an army of men and material very superior

to the defending force, or to approach, except with great caution. On this Continent and in this climate, time rules inexorably all military operations ; to delay an invasion is to defeat it. The enemy we are likely to encounter will not fail to take into his calculations the delays and the difficulties of the situation, and the cost of maintaining it ; and the balance of profit or loss will weigh in favor of those who fearlessly show that they are prepared for resistance.

Thus having disposed of the first 200 miles of our frontier, and having protected our communications between Quebec and Halifax, we will proceed from the point where the Ashburton wedge cleaves into Canada, to the line 45, to Lake Champlain, and thence along the frontier of the State of New York to St. Regis, on the St. Lawrence, opposite to Cornwall in the Province of Upper Canada, a distance of 400 miles. For the first 250 miles the line of the frontier follows the sinuosities of what is known as the "Height of Land," that is to say, the rocky and mountainous ridge which divides the streams which fall into the Atlantic from those which fall into the St. Lawrence. This rugged ridge is in military parlance "very difficult," the roads are few, narrow, and at certain seasons, impracticable. Vast forests still extend for many miles on both sides of the frontier. Any traveller who can recall the peculiar features of the country on the Grand Trunk Railway between Coaticook, in the Eastern Townships, and Island Pond, in New Hampshire, will be able to form a fair opinion of the general characteristics of the whole line. It is admirably adapted for partizan warfare, a war of guerillas, for such a resistance, as a sparse, yet resolute, population could best offer. It would be impossible to move a large army with its *impedimenta* through such a country. Burgoyne tried it ninety-four years ago and was destroyed ; a small force would be wasted in the attempt. The invader, too, would advance, without the apparent excuse of a military

purpose, simply as a destroyer, the tramp of his footstep would pass through the ashes of burnt homesteads, and over the desolated "clearings" of the hardy frontier settler. A warfare of this nature would excite the strongest passions, the deadliest thirst for vengeance, and exasperate the vehemence of resistance ; while the defender of the soil would be moved by the knowledge that a brave defence cannot fail to be a *successful defence, and that success*, at the end of the war, will secure to him, and from the pocket of his enemy, the full reimbursement of all his losses.

But this part of the frontier will always be free from attack so long as there exists close by, and upon the same line, an easier and more inviting access to the heart of the country. Where this Height of Land strikes the line 45° , it subsides into an open country, populous, highly cultivated, where the roads are good and railroads and canals facilitate human intercourse. The Grand Trunk Railway penetrates into Vermont through the Height of Land, and might there, easily be destroyed, but to the West, from Stanstead Plain to the waters of Lake Champlain, no natural obstacles exist of sufficient moment to impede military operations. The Valley of Lake Champlain has been from olden time an open portal into Canada. No enemy will attempt to force our mountain fastnesses while the best road into the country is to be found at their feet.

Lake Champlain, running north and south, divides the State of Vermont from northern New York, and by a further rectification of our unhappy frontier, under the provisions of the Ashburton Treaty, the Americans have acquired upon it a fortress, which covers them and uncovers us. An expedition prepared without let or hindrance, in the ports of Lake Champlain, could be disembarked, without interruption, at Fort Montgomery, on the very verge of our frontier, and within forty-five miles of the commercial heart of the country,

the City of Montreal. Railroads, on either side of Lake Champlain, converge on the same point. A railroad from Rouse's Point, two miles south of Fort Montgomery, runs side by side with our frontier line, to Ogdensburgh, on the St. Lawrence.

It would be idle to ignore the fact, that thus much of our frontier, 150 miles in length is, as a frontier, difficult to defend, and, being penetrable at many points, exposes the south shore of the St. Lawrence, from Point Levi, opposite to Quebec, to St. Regis, to the incursions of a powerful enemy ; but to occupy it, and hold it in force, will tax all his power, he will occupy what he holds and no more, his advance will have brought him face to face with the real bulwark of the country, and the mighty St. Lawrence will teach him, " thus far shalt thou go and no farther. " But with the men and resources at his disposal, an incursion at this point must be regarded as a foregone conclusion. Entering Canada, from either side of Lake Champlain, he would descend the River Richelieu to St. Johns, and, expanding, fanlike, seize the Grand Trunk Railway and the port of Sorel, thus securing communication with Quebec by land and water, and could, at the same time, and by the same lines of communication, aided by the St. Lawrence and Lake Champlain Railway, appear before Montreal. All this presumes that no opposition can be profitably made, and that non-resistance, to a certain extent, would be our policy at this early period of the contest. But, between Quebec and Montreal, and the south shore, rolls the River St. Lawrence, averaging at the least, one mile in width and absolutely impassable in its whole length, in the face of the gunboats which could be brought to bear upon its waters. The recent construction of the fortified lines of Point Levi has rendered Quebec itself unassailable from the south shore. Nothing short of a renewal of the exploits of the immortal Wolfe, and a fresh battle on the Plains of

Abraham, could imperil Quebec, and under the conditions of modern warfare, the whole *insula* of Quebec, from Cape Diamond to Cape Rouge, could be made an impregnable refuge for the population, the flocks and the herds, the supplies and resources of the southern, eastern and northern counties. The whole strength of the lower Districts of Quebec could be assembled within that *enceinte* if required for its defence, with ample space to live and move and have their being, covered by intrenchments which three times their number would assail unsuccessfully, even presupposing that the flag of England had first been swept from our waters, and an assault made possible by the co-operation of the American navy.

So long as the war-ships of England command these waters the north shore of the St. Lawrence is safe; but to secure this superiority beyond peradventure we must also hold fast to the port of Sorel. This is the only port of construction and of safe winter refuge between Quebec and Montreal. It is 45 miles below the latter city, and being at the mouth of the River Richelieu, would, in the hands of the Americans, become a dockyard and a fortress at the same time. Water communication between Lake Champlain and Sorel is, in the summer, open and good; stores, both naval and military, could be transported to this point, from whence the navigation of the St. Lawrence may be obstructed by batteries, and where an armed flotilla might be prepared under shelter.

It is well to know, that this most important point has been, for long, under the careful eye of our Royal Engineers, that lines have been planned, and a system of defence projected, which, on the first rumor of war, could be realized, and would make Sorel strong, whether for defence or for offence, in connection with a similar system of fortified outworks, devised and provided for the protection of the City of Montreal.

The reduction of Montreal would be a heavy blow and sore discouragement ; more than any other conceivable casualty, it would jeopardize the independence of Canada. Situated, as this city is, in the centre of the Dominion, a centre at once of commerce and manufacture, at the head of the ocean navigation and at the foot of the chain of lakes, and canals which connects it with the boundless West, containing 125,000 inhabitants, replete with resources and wealth, intelligence and enterprize, and destined to a development beyond thought, the fall of Montreal would shake the land to its foundation ; but there need be no apprehension of any such catastrophe. Montreal is naturally of great strength, a strength fortified by abounding supplies of men, material, and provisions. It could hardly be reduced by famine. Properly cared for at the first outbreak of a war, it would stand a siege as long as that of Troy. We speak not of the city alone, but of the whole Island of Montreal. The city itself, backed by Mount Royal, is almost impregnable, but the inhabitants will never be driven to seek refuge in this, their last stronghold, so long as they improve wisely the natural defences which encircle their island, and defend them, as brave men are wont to defend, all that they hold to be most dear.

The defence of Montreal consists in the network of rivers, rapids, shoals and other natural obstacles by which the island is surrounded. This island is as large, and very much of the shape, of the Isle of Wight. Its own resources are great, but the supplies from a hundred miles round might be poured into it by a provident Government, and would there find shelter and sustenance, and furnish food for the large force which could be brought together for its defence. The men of the north shore would all be available for this purpose. The men of the south shore, burning with anger and the rage of resistance, would fall back slowly on Montreal, covering their retreating families, their herds and household

goods. Thus, there might be concentrated at this point a force of 80,000 men, very angry, and fired with every incentive to defence.

They would be confident in the strength of a position protected in front, looking towards the foe, by the wide St. Lawrence, and in the rear by a labyrinth of streams, interrupted in some places by rapids, impassable at all seasons; in others by shoals and tortuous channels, which compel approaches to be made in open boats, exposed to a commanding fire, while these channels could be further strengthened by gunboats and floating batteries. From the head of the Lachine rapids to below St. Helen's Island, the front of the city and island are unapproachable, except in the face of difficulties such as these. Like means of defence apply to the rear of the island, but the rear of the island is safe from hostile attack so long as the river below Montreal, and the Lake St. Louis above, and the Lake of the Two Mountains on the north-west, are occupied and protected by a sufficiency of armed vessels.

But to the men of the city, to the citizens themselves, the incentive to resistance would be stronger still. Their arms would be nerved by the knowledge that a system of defensive works has been projected, which reinforce those supplied by nature, and which, if bravely held, will protect their wives and their children, their homes, their stores, and their industries, from the very aspect of the foe. The revolutions of the age have revolutionized the arts of defence, the days of fenced cities have passed away. In the time of Vauban, curious intricacies of earthwork, and ditch, and stonework, surrounded the body of the place; fires and cross-fires of infinite variety enfiladed its approaches; massive casemates protected the soldiers; but in despite of all their ingenuity the houses of the citizens stood up in the rear, exposed to bombardment and cannonade. Every shot which missed the

rampart, wounded women and children, and destroyed property, until the citizens exasperated by a defence which destroyed all that they cared to defend, muttering curses on friend and foe alike, rose in their mad might, and forced the garrison, as phrased in that day "*à battre la chamade.*" The story of the campaigns which preceded the French Revolution multiplies these instances of enforced surrender, and this inevitable consequence, constantly recurring, suggested the remedy. The modern, or German, system of defence, operating on a principle both philosophical and practical, removes the points of defence—the actual scene of conflict—so far from the central point to be defended, that the defender fights, cheered by the knowledge that he risks his life to protect and save, and not to drag down destruction on all around him. This object is reached by a system of detached works connected, as occasion offers, by trenches, and so placed as to be mutually supporting, and yet, covering at a safe distance, the body of the place. So long as these works or lines are maintained, the city in the rear is safe from shot, and shell, or foot of foeman. This system has been illustrated at Lintz on the Danube, at Coblenz on the Rhine, in the fortified *enceinte* of the city of Paris, and in the series of detached works which surrounded the city of Washington during the late Confederate war.

Upon this principle have been designed the lines of St. Lambert, on the south shore of the St. Lawrence opposite to Montreal. The width of the river, proof against an attack "*de vive force,*" is no protection against a bombardment, or the long range of the artillery of the present day. A mischievous enemy planted on the southern shore, might, in the very spirit of mischief, do much harm to the town, with but little good to himself. The lines of St. Lambert have been devised to intercept all approach to the city on its most exposed side, and to act as a *tête du pont* to the Victoria

Bridge. The besiegers of Montreal must break ground in front of these advanced works, out of cannon shot of the city, and until these works are subdued, the city itself is unassailable. So long as they are maintained, and the river remains under our control, both city and the island are safe from attack, in front and rear. A work of smaller dimensions but of equal importance has been designed as a *tête du pont* to the Grand Trunk Railway bridge between Isle Perrot and Vaudreuil. These works indicate, if they do not complete, the scheme of defence projected for the *insula* of Montreal; only under one conceivable circumstance can they be turned, and that will be adverted to hereafter.

But nature has bestowed upon Montreal an inner line of defence of greater strength and, though more contracted in area, still more defensible by smaller numbers. The main features of this inner line of defence are St. Helen's Island, Nun's Island, and the St. Lawrence in front, and Mount Royal in the rear. Upon this line, nature has constructed redoubts and bastions of her own, which, strengthened by human labor and human skill, brave men can hold as long at least as the Southerners held Charleston, long enough to receive help from without, and to teach an enemy to calculate the cost of an empty conquest.

It should be observed also, that the lines of St. Lambert like the lines of Point Levi, although constructed for defensive purposes, facilitate offensive operations. The lines of Point Levi can pour forth its defenders to re-inforce River du Loup or to occupy Melbourn, and to destroy, on retreating, the railway communications of an enemy advancing from the west. Combined with the proposed defences of Sorel, a hostile movement on the line of the Richelieu would be exposed to an attack in flank from the lines at St. Lambert. The very power to attack will operate as a check, for when known to exist, it will compel caution, create delays, demand in-

creased forces and increased expenses, and augment the difficulties of aggression by a constant appeal to the real *ultima ratio* of the present day, the practical *pabulum belli*, money. The defence of this Dominion of Canada depends on the patriotism of its people, and the support of two powerful auxiliaries, the navy of England and the severity of its climate. Of the first, something has been already said and more remains to say ; of the second, something may be said at once, and not inopportunately, in relation to the defence of Montreal. The winter in Canada may be held to commence on the 1st November, and to terminate on the 1st May. Within that interval no military operations of any magnitude could be undertaken safely. Indeed it may be questionable if an army with its *impedimenta* could penetrate our country before the first of June. No preconcerted or combined movements at distant points could be relied upon before that time. Between the 1st November and the 1st January the flat country is submerged, the ice takes imperfectly, and yet forms in sufficient masses to make navigable waters impassable. From April, often, until far into May, masses of ice impede navigation, and the St. Lawrence, obstructed by ice-dams or dykes, floods the surrounding country for many miles. The period of pleasant fighting, on civilized principles, would not exceed five months. Before May and after November the weather is often open and fine, but always uncertain. Men in masses do not, like the beasts of the field, change their coats to suit the climate, overclad one day, and underclad the next, they would be tempted to exposure, and be exposed to transitions suggestive of medical comforts and enlarged hospital accommodation. Then, with sudden gripe, comes stern, unmitigated winter. The snow-roads of this country are at this time unimaginable to the unsophisticated mind ; narrow tracks with deep ditches on each side, filled to the level, and snow beyond, waist high, through which neither man, nor horse, nor vehicle, can pass

unaided by the snow shovel. These tracks too are filled in by every successive snow-storm or snow-drift, and require to be opened afresh. When the river "takes," or freezes, with sufficient strength for traffic, the cold has become intense, and the ice "takes" in solid, rugged up-hoven masses, many feet in thickness and many more in height. Through these ice dykes a road, when made, has to be chopped out with the axe, an operation slow, laborious, and trying with the glass at ten below zero, and would be still more so in the face of resistance. The sky may be bright and clear, but the breath congeals in the very nostril. Men move about rapidly in fur coats and mits, and overshoes, fortified with all sorts of under clothing, and run into houses, and warm their fingers, and talk fast, as if to warm their tongues, and roused by the occasion, enjoy it, rather than otherwise; but under such conditions of climate and communications no organized force, of the dimensions, or pretensions, of an army, could move and live. Shelter for such a force would be unattainable, and exposure is death.

These characteristics of climate prevail with many sudden and eccentric variations, as, for example, take the 15th February last (1870) Register, "bright sun, genial weather, glass ten above zero"; 16th, "the same, bright and more genial perhaps, most inviting for a *promenade militaire*, even without overcoats"; 17th, "soft, with a moist atmosphere and heavy sky, during the day the glass rose rapidly, about midnight it rained heavily." In the morning, 18th—"the whole country was converted into a heavy, sodden mass, impracticable to man or beast. At noon came on a blinding whirlwind of snow and sleet, which continued until night, 18th 19th, when it was succeeded by sudden and intense cold; the glass fell as rapidly as it had risen to fifteen degrees below zero. Any force of men and animals, exposed in such a night as this, would, in the morn, be as the host of Sennacherib.

Such is the climate which extends on the course of the St. Lawrence, from Montreal, easterly to the Baie des Chaleurs, and slightly modified by marine influences, to Halifax, Nova Scotia; Westerly to Lakes Ontario, and Erie and Huron, and to the great Peninsula, bounded by these waters; but westerling, the climate measurably improves, and it must be always kept in mind that campaigning may, under a favorable conjunction of circumstances, be adventured in the west a month earlier than in the east, but not with overweening confidence. *Tempestas melior, via pejor*, the weather may be better, but the ways worse.

Having traced and followed the frontier of the Dominion from the ocean, on the east, to Montreal, in Central Canada, we will now pursue the same line above Montreal westerly. Above the Lachine Rapids, and at the mouth of the Lachine Canal, we find the Lake St. Louis, an expansion of the River St. Lawrence, 12 miles long by 6 miles in breadth, which covers the Island of Montreal up to the foot of the Cascades Rapids and to the *Tête du Pont* designed at the head of Isle Perrot. Gunboats, which would find winter harborage in the Lachine Canal, could most effectually defend this part of the coast, and maintain the communication with the mouth of the Beauharnois Canal.

This, the first link in that series of canal communication which connects the great lakes with the St. Lawrence, the east with the west, by some act of engineering perversity, not unintelligible, but most reprehensible, has been constructed on the wrong side of the River St. Lawrence. This canal, the result of a political necessity, was built in 1842, in defiance of the best military authority and the all but unanimous opinion of the country, for the benefit of the Seigneur of Beauharnois, then the Hon. Edward Ellice. A line of country, far better suited to the purpose, was well known to exist on the opposite or north shore of the St. Lawrence, superior

in a military and commercial, in an economic and national aspect, but Lord Sydenham required Parliamentary support and the price of that support was the Beauharnois Canal. It is twelve miles in length and surmounts three dangerous rapids, the "Cascades," the "Cedars," and those of the "Coteau." It debouches into Lake St. Francis, 25 miles long by $5\frac{1}{2}$ wide, whence the navigation is uninterrupted, and continues to St. Regis and Cornwall.

There can be no question, but that, in the event of a war, one of the first efforts of American strategy would be directed to obtain possession of the Beauharnois Canal, and to employ it as an aggressive point against the Island of Montreal. In self-defence, therefore, we may be compelled to dismantle, or to destroy it, but to reach it the Americans must traverse the olden field of Chateauguay, and before this sacrifice is made, from the lines of St. Lambert an opportunity may be seized to repeat the far famed feat of de Salaberry, but, while preparing for the worst, we will make the best use of this misplaced canal, by putting through it, in time, the steam gunboats requisite for defence on our upper waters. Coming events, pregnant with war, cast their shadows a long way before, we shall always be sufficiently fore-warned to admit of rapid preparations for defence, if we are sufficiently fore-armed, if we have provided, in peace, to meet the sudden emergencies of war.

To recapitulate, we have from the mouth of the St. Lawrence to Montreal an uninterrupted navigation for the largest class of sea-going vessels through Canadian territory of 986 miles, and from Montreal to Cornwall, or St. Regis, a combined navigation by river and canal of 67 miles, 1053 miles in all perfectly defensible. Defensible, in summer season, by a judicious exhibition of gunboats, directed against an enemy which, on these waters, possesses no corresponding resources, nor the means of creating it. The configuration of the "north

shore," from the Island of Orleans to Lake Ontario, suggests the idea of a gigantic natural fortress of which Quebec, Montreal and Kingston are three huge bastions, moated by the St. Lawrence, which forms the intermediate curtains, armed by the guns of an ubiquitous flotilla. Until the enemy can, with a superior force, breach this barrier, the whole north shore of the St. Lawrence is unassailable. The south shore may suffer but the suffering will be short. The vain, costly and profitless character of the contest will soon develop itself, and the enemy will cool down, calculate chances, retire discreetly, and, to use a familiar phrase of his own, will "foot the bill."

The series of the St. Lawrence canals recommences at Cornwall, and extends upwards in four divisions, connected by navigable reaches, the united length of canal is 32 miles, the whole distance from Cornwall to Kingston 108 miles. The locks on these canals, including the Beauharnois, are 200×45 , with 9 feet of water on the sills. They are all subject to the same inconvenience, but not to the same reproach. In time of war they are liable to quick destruction, but on the upper canals there was no choice of site, the evil was unavoidable. On the Beauharnois canal the remedy was within reach. They were built to subserve commercial purposes, and have done their work as evidenced by the progress of the country. In the event of a war, they would be useless. In preparing for a war we must use them as best we may. They may be considered to be open for navigable purposes between 1st May and 20th November.

There is, however, another line of water communication between Montreal and Kingston lying to the north of the St. Lawrence, and not directly exposed to annoyance or interruption in case of war. It is composed of the Ottawa and Rideau canals, which ascend the River Ottawa to the capital and from the capital extend to Kingston. The whole length

of this interior line, from Montreal to Kingston, is 246 miles. These works were constructed for military and defensive purposes fifteen years before the St. Lawrence canals were commenced. Although inferior in capacity and convenience, the dimensions of the locks being 134×33 and 5 feet water on the sills, they are of great importance as a subsidiary line of defensive transportation, and, failing the St. Lawrence, would be of immense value.

Thus it will be seen that we possess a line of interior defence, re-inforcing our frontier, of peculiar strength and capability which extends from the ocean to Cornwall, a distance of 1053 miles, and a farther line from Montreal to Kingston by way of Ottawa, of 246 miles, impenetrable to an enemy. He can put no war ships on our waters below Cornwall, and without aid such as this, he could not transport an armed force across the St. Lawrence. Even presuming that he possessed the command of Lake Ontario, and could use the dockyard at Sacketts Harbour without interruption, he could no more run down the rapids above Cornwall under our guns than we could ascend them under his. It must be obvious, therefore, that under these conditions of offence and defence, the north shore of the St. Lawrence, for a distance of 1053 miles, is, as has before been said, unassailable.

From Cornwall to Kingston, and from Kingston to the Sault Ste. Marie, on Lake Superior, the waters of our rivers and lakes divide the frontiers of Canada from those of the United States. From Cornwall to Pointe aux Iroquois the coast on both sides of the river are equally protected from a descent, by rapids, with intervals which could hardly tempt a predatory excursion by the prospect of a safe return. From Prescott to Kingston, and from Kingston to the entrance of the Welland Canal, at the western extremity of Lake Ontario, these inland waters are navigable by the largest ship that floats, without let or hindrance, beyond an adversary of

superior strength, and the superiority will rest with the party which can show its strength first.

"If you intend to hold Canada you must command the lakes," was a *dictum* of His Grace the Duke of Wellington, uttered some 50 years since. But 50 years have made a great change in Canada, and the lessons of wisdom, even though wisdom still, admit of some qualification now. The command of the lakes, although of great importance, is not indispensable to the defence of Western Canada, nor would the loss of it, at the first outbreak of a war, be regarded as irremediable or irrevocable. Railways and turnpike roads now-a-days, supply far greater facilities of communication and conveyance than existed by water way in 1812. Then, any interruption of water communication above Kingston threatened the soldier with starvation. He might, and actually did, march from 300 to 500 miles with his kit on his back and three days provision in his havresack, but when his store was exhausted how was he to advance, how retire, unless replenished. The wild forest, and the war path through the wilderness, offered no supply of food. Stores, therefore, had to be provided beforehand and at given distances, and to be renewed when reduced, and this provision could be secured, in sufficient quantity, by water communication alone. Hence we may be able to appreciate the value of the command of the lakes at this time.

But circumstances have changed, and the same importance does not attach to the command of the lakes which was justly assigned to it fifty years since; supplies and conveyance abound, independent of water communication, and, admitting any superiority in the American marine, at the first outbreak of war, a brief space would equalize numbers. The first iron-clad gunboat would redress the balance. The operation so skilfully conducted by the French Emperor during the late war in Italy could be easily renewed in Canada. Gunboats could

be placed as expeditiously on Lakes Erie, Huron and Ontario as on the Lago di Guarda. All that is required to accomplish this object, when the time comes, is due preparation now. An invasion of our lake shore by means of shipping, by the employment of a fleet of transports, is made doubtful, by the fact, that the American coasts offer neither ports nor harbors of sufficient capacity to shelter a fleet adequate in number, and sufficiently protected at the point of embarkation ; such an invasion would compel combinations, open to separate attack, and to the risks entailed on detachments. Such combinations would be costly and hazardous. They would, indeed, hardly be attempted, superfluously. Nature points out unmistakably the lines of advance upon Canada, and teaches her people how and where to meet them. They are now just the same that they have ever been. Buccaneers expeditions may be made to be repulsed and punished, but our lake shores are protected from expeditions in force, by the disability to make them in sufficient strength and with sufficient concert, and by the power of resistance to be found on our coasts, and in the natural defensibility of their approaches. We may also add that the power of modern artillery, and the defensive ingenuity which devised the torpedo, all combine in the present advanced school of civilized warfare, to strengthen artificially such parts of our coasts, as nature has not already fortified.

Other causes, moreover, have conduced, with the progress of time, to lessen the probability of a foreign invasion, water-borne, on our lake shores. Luxurious cities and populous settlements, wealthy and industrious communities, have grown up on the opposite shores of these lakes : Oswego and Rochester on Lake Ontario ; Buffalo, Cleveland, Sandusky and Toledo, on Lake Erie ; Detroit on the narrow strait of the same name ; Chicago in the remoter west ; are all cities of large population and great wealth. Any outrage on our shores would provoke

reprisals. The bombardment of any one of these wealthy cities, even only for a day, would inflict more material injury than could be caused by the devastation of a dozen of the happy villages which adorn the Canadian coasts. In a warfare between parties thus situated, the greater loss must always be on the side of those who have most to lose. The Cossack and the Arab risk life only, but inflict great ruin ; and those who assail Canada for the sake of plunder will find but little honey in a hornet's nest.

Moreover, the hornet's nest may be as difficult to reach as it is dangerous to disturb. The Canadian shores are, to a great extent, fortified by nature, and require but small help from the hand of man. The navigation of these shores present peculiar difficulties in uncertain currents, shoal-water and a changeful coast outline. Admiral Bayfield has delineated the topography and described the characteristics of these Canadian lakes with wonderful care and accuracy. His magnificent work, published by the British Admiralty, is to be found in the library of Parliament, but those grand folios are not within the reach of the general public, and the following details condensed from his valuable pages may interest as well as instruct those whose hearts are in Canada, and may not inappropriately find a place now, in relation to the question of defence. Few, even of our own people are aware of the fact that this series of great lakes is 1085 miles in length, from Kingston, on Lake Ontario, to Fort William, on Lake Superior, and that they cover an area of 80,000 square miles, or the superficies of England, Scotland and Wales, with many square miles to spare.

Lake Ontario, the least in size of these great lakes, covers a surface of 6000 square miles, and extends from east to west, from the city of Kingston to the city of Hamilton, 180 miles. Its greatest width is 65 miles, but that width prevails nearly from one end to the other, On the Canadian coast

we pass, in succession, the thriving cities of Kingston, Cobourg, Toronto and Hamilton, with villages, numerous and flourishing, farmsteads beyond count, and an expanse of wheatland and woodland, orchard and pasturage, extending in the richest luxuriance fifty miles to the rear. From the American shore of the State of New York the wilderness has been, for many long years, banished to regions in the far west, to States which in progress imitate her example. Cultivation the most skillful has been rewarded by a wealth of agriculture, unrivalled in the world. The rich cities of Rochester and Oswego are the centre of commerce, but Sackett's Harbour, the great naval station of the last war, is comparatively unfrequented. It is not conveniently placed for trade, and although suited for the requirements of a limited dockyard, or port of construction, could be blockaded by a power possessing more extensive convenience and power, and space for equipment. The noble harbor formed by the mouth of the River Niagara would be neutralized in the event of a war, as being impracticable to either party. On the Canadian side, independent of the harbor of Burlington Bay and Toronto, safe and sufficient for a flotilla of gunboats of small size but heavy calibre, we have the strong arsenal of Kingston, and within a few miles on the west, the Bay of Quinté, one of the finest combinations of roadstead and harbor, whether for defensive or offensive purposes, in the Dominion. The entrance is easy to protect, by works which, properly occupied, would tend to make the arsenal of Kingston unapproachable. At the western extremity of the Bay of Quinté is a narrow neck of land which separates it from Lake Ontario, and from Presqu'isle Harbor, which is believed to be one of the best natural harbors on Lake Ontario. It has been projected long since, to connect these waters by a canal ten (10) feet deep, wide enough to admit the largest vessels, and not quite two miles

in length, the cost has been estimated at \$200,000. The voice of the Legislature, the voice of the people, the opinion of the Governor and the inclination of the Government, all appear to have favored the project, and yet the "Murray Bay" canal is still in embryo. The usefulness of this Canal, both for commercial and defensive purposes, can hardly be exaggerated. It is satisfactory to know that it is a work to be accomplished in a short space of time, and it is to be hoped that *that* time will soon come.

Kingston is strong in itself, but its approaches from the lake above, and river below, contribute to its strength, and the plans designed by the Royal Engineers make it still stronger. In the case of war, it could only be assailed, with any promise of success, by a very large force, prepared for a siege, which would have to be created on the south shore of Ontario, and to be transported across, and landed in defiance of all opposition, and maintained during the next ensuing winter in despite of climate. An expedition of this sort may be regarded as a very costly and very doubtful speculation.

Both Toronto and Hamilton are, from their natural defences, unassailable from the lake on their respective fronts. The flanks of both, and the rear of both, may be protected by detached works, on the principle hereinbefore adverted to, in relation to the defence of Montreal. The existence of such defensive preparations would compel offensive operations, if attempted from the lake at all, to be made on the largest scale, with a requirement of transportation which the American lake marine could hardly supply, if more than one descent in force was attempted at the same time. If, on the other hand, no diversion distracted the attention of the defence, if the attack proved to be isolated, then the whole strength of the lake shore population would be directed to support the point assailed, and it should be always kept in mind that the

Grand Trunk Railway would facilitate the defence, not only of the whole line, but of the flanks of the place attacked.

Eleven miles west of the mouth of the River Niagara, at Port Dalhousie, lies the mouth of the Welland Canal, affording that communication between lakes Ontario and Erie which is barred by the great cataract. This noble work is exclusively Canadian. It is in length $27\frac{3}{4}$ miles, with locks $150 \times 26\frac{1}{2}$, having on the sills $10\frac{1}{2}$ feet water. It debouches on Lake Erie, at Port Colbourne and Port Maitland, the latter being one of the safest harbors on the upper lake. In time of peace it is of immense value to commerce generally. In time of war it must be defended or destroyed. The area of defence is limited to a track 12 miles in width, lying between the canal, and parallel both to it and to the River Niagara, the natural outlet of Lake Erie ; but in defending this frontier we defend one of the natural inlets into the country, and it is believed that a scheme of defence may be devised, which will not only protect the Welland Canal but daunt an enemy, unprepared to advance, except with overwhelming numbers, and upon two lines of attack ; and upon this point pivots the defence, for, if we can put such a stress upon our enemy as to compel him to employ overwhelming numbers, and those numbers are reduced or withdrawn to protect the Atlantic or the Pacific sea-board, then he ceases to overwhelm ; he may continue to annoy, but the power of annoyance will be equalized, and if he invades, the odds will be against him. We will now describe this Niagara frontier, created by the River Niagara, interrupted by rapids, and dislocated by the Falls. From the town of Niagara, the aboriginal capital, barbarously destroyed during the war of 1812, and then known as Newark, to Fort Erie at the southern entrance to Lake Erie, the distance is 36 miles, following the coast line. Passing along this line a railway connects the town of Niagara with the village of Fort Erie, crossing the Great Western Railway

at Clifton, in front of the great falls. In the event of a war, it would be necessary to destroy mercilessly the Railway Suspension Bridge, and it is believed that the best position which could be taken up to protect the Welland Canal and the frontier would be on the very frontier itself. We hold that the moral effect of an evident determination to defend the outmost edge of our frontier would be great, it would inspire universal confidence, confidence in the Government, confidence in ourselves; the man on the front would feel that all was being done that could be done for his protection, the man from the rear would know that the defence of his property depended very much upon himself. Between the far-famed Queenston Heights and the mouth of the River Chippewa the River Niagara is impassable. Strong ground for an intrenched camp will be found between these points including the high ground of Drummondville. This area is traversed from rear to front, and from flank to flank, by railroads. Detached works and lines of connection, planned beforehand, might be rapidly raised, sufficient in extent and strength to cover the whole fighting population of the Niagara District. The Welland Canal, in the rear, would form a second line of defence; the mills and other strong stone buildings erected at Port Colborne, Port Robinson, and Thorold, occupied in force, would protect the works on the canal, while the Port Colbourne railway, running down the western bank of the canal, would facilitate communication. No enemy would dare to advance on the Welland either by Fort Erie or Niagara, having an intrenched camp with a large available force on his flank and rear, unless supported by overwhelming numbers, and the general dispositions of the whole campaign must be so designed as to qualify this advantage.

Besides, in illustration of the costs of such a contest, no one, on examining the map, can fail to observe that while the great city of Buffalo is within easy shelling distance of the

ruins of Fort Erie, the ruins of Fort Erie are all that could be effectually shelled in return. A few farms, a small village, and many very pretty dwellings, would suffer on our side, but the devastation to Buffalo and Black Rock may be calculated by millions. God forbid that any thing should occur to drag down such dire destruction on the flourishing city of Buffalo.

At Fort Erie, opposite to the city of Buffalo, we enter upon the Canadian waters of Lake Erie, which is, from this point to the embouchure of the River Detroit, 240 miles in length, by an average width of 80 miles, and covers an area of 9500 square miles. The international boundary line divides the lake in two. The coasts of this lake are flat on the whole circumference. On the Canadian shore, marshy to a great extent, while the approaches are, for many miles, shallow and shifty mud banks, uncertain, studded with dangerous rocks. The harbours are creeks artificially enlarged, and but rarely offering a depth of water above 8 feet. The peculiar shallowness of this lake will be better understood by comparing it with the depth of others; while the mean depth of Lake Superior is 900 feet, of Lake Huron is 700 feet, of Lake Ontario is 500 feet, the mean depth of Lake Erie is under 100 feet. Deep water is, indeed, only to be found in the middle of the lake. Frequent and violent gales torment these shallow waters and flat shores, and to these peculiarities and these visitations this part of Canada will ever owe a comparative immunity from direct invasion. A large expedition must necessarily be conducted in a multitudinous flotilla of small, unsafe, and indefensible craft, while a small expedition would never reach beyond the beach. In the harbour at Port Maitland, we possess the best port at the lower end of the lake, and at the head of the lake, at the mouth of the Detroit, Canada owns the most important harbour on these waters for military purposes. This harbour is to be found between Bois Blanc Island and the town of Amherstburg, known also in the

story of 1812 as Fort Malden. It is at once the best harbour and the most practicable channel of the stream. Though other channels exist outside of the island, and between the island and the American shore, they are shifty, tortuous and uncertain; on the other hand the navigation of the Amherstburg channel can always be relied on. Vessels drawing 18 feet water may be built on, and launched from, Bois Blanc Island, too large for the ordinary purposes of commerce seeing that no other port of the lake could receive them; but for military purposes, combined with light draught gunboats, they would command the lake, the American roadstead of Put-in-Bay, and the navigation of the Detroit, and intercept all communication between Buffalo and the City of Detroit, and between Lakes Erie and Huron. Thus, the resources of Chicago would be restricted to the waters of Michigan, Huron and Superior, and Lake Erie being isolated, and left to defend itself, the strength on both sides would be equalized. No invasion in force could be attempted, no predatory attack made. The combination of two or three heavy vessels with a small squadron of light draft and swift gunboats would effectually protect the Canadian shores of Lake Erie and the upper entrance of the Welland Canal, and the use of the telegraph would render the presence of such a flotilla ubiquitous. These are the advantages to be derived from the occupation of Amherstburg. The Detroit, properly so called by the French, a strait, for it is not a river, though so styled in the vernacular, extends from Amherstburg, up and past the front of the city of Detroit to Sarnia, which is situated at the entrance from Lake Huron. It includes in its course Lake St. Clair, a large lagoon rather than a lake, with an area of 360 square miles and a mean depth of 20 feet. It is in fact a place of deposit for the mud and detritus borne down from the depths of the great lakes above. It is changeable, tortuous in its channels, and, in heavy gales, unsafe, if

not dangerous. It offers no facilities for a descent on our coast, except by way of the River Thames, which could easily be counteracted by torpedoes and other obstacles placed temporarily in the stream. Above Lake St. Clair the strait is generally known as River St. Clair. The stream here is deep, broad and strong, not to be bridged, but traversable in boats.

As in former wars, an inroad into Canada might no doubt be attempted both on the line of the Detroit and on the line of the St. Clair; but an intrenched camp at Sarnia, at the termini of two railways running each through the heart of the Peninsula, would bar all approach to the St. Clair from Lake Huron, intercept shipping and supplies from Lake Michigan and, by the power afforded of concentrating a large militia force at this point, would expose an invading army crossing the St. Clair River below to attacks in flank, in a difficult country being flat, marshy, and, in spring and autumn, and after heavy rains, impenetrable.

On the line of the Detroit, a similar scheme of defence will apply. The coast at Windsor commands the rich and populous city of Detroit. This place is the terminus of the Great Western Railway, and is well situated for aggressive defence. An intrenched work at this point would protect the approaches and command the river, and appeal strongly in the cause of peace, to very large interests. An intrenched camp at Fort Malden, Amherstburg, would control the best channel in the river, protect the best harbour on the lake, and afford to the militia of the country a refuge and rallying point, which an invading enemy could not pass with impunity nor leave behind unsubdued. The establishment of an intrenched camp at this point would inspire the whole frontier population with confidence in themselves and in the Government. To reduce it would require a large force, and involve a loss of time, and money and life, and secure to the defender that inestimable

amount of delay, which is the very fulcrum of our scheme for general defence.

Our object, thus far, has been to show that our frontier, far from being indefensible on account of its length, develops upon its whole length great power of defence, partly by natural and insurmountable obstacles, and partly by obstacles, which, created by nature and improved by thoughtful and timely preparation, may be rendered insurmountable;—by rivers impassable, by lakes not to be pontooned, by coasts unassailable, under the safe-guard of summer tempest and winter ice shoal waters, iron bound shores, and the iron resolution of a people determined to remain free.

We have endeavoured to show further, that under the above conditions of defence, the lines of invasion may be restricted, as of yore, to four well-known points of attack, the Sarnia frontier, the Detroit frontier, the Niagara frontier and the Montreal frontier, and to a fifth, hitherto unassailed, the virgin frontier of New Brunswick. Forewarned, we are forearmed. Upon these five points of attack the defence may be made very strong. That which a population, hardly numbering 400,000, did very effectually in 1812, can be done again by a population of 4,000,000 in 1870. The positions are the same, while the strength to resist has increased one hundred fold.

If Great Britain will undertake the protection of the tidal waters of the Dominion, we will take care of the lakes, and can furnish the men, and ought to provide the works, to maintain the assailable points on our frontier. By the last report of the Adj.-Gen. of Militia, 1869, we find that the fighting strength of the country, of the men who would be called out to resist an invasion, amounts to 656,000. We believe that the census for the present decade, to be made this year, 1870, will show that the numbers are much greater, but we can safely place the available force at 500,000 men. The dis-

position of this force we may leave to the judgment of the experienced officer who framed the above report, but we trust that we may presume so far as to venture upon one or two suggestions in relation to it.

And, first, that he should raise his present active and available force, with all convenient speed, from 40,000 to 100,000 men. Secondly, that in establishing the brigade camps of instruction to which he alludes—a happy and practical thought—he should endeavour to establish them permanently, and that, among the first sites to be selected, he should dispose of one brigade camp of instruction at or near Sarnia, another on the Detroit frontier, a third on the Niagara frontier, a fourth, fifth and sixth, on the lines of Montreal, Sorel and Quebec, and the seventh, eighth and ninth at the Grand Falls, Fredericton, and St. Johns, N.B. These camps of instruction should be permanent, with a small permanent staff; the regiments of each brigade should be constantly flowing in and flowing out, winter and summer; the training should be simple, but practically adapted to the exigencies of all seasons; and the men should be taught, systematically, the use of the rifle and the *use of the spade*, how to shoot truly, and how to utilize labour to the best advantage. By pursuing this course, the camp of instruction would soon become an intrenched camp, strengthening daily, and providing, in peace, the rudiments of fortifications which would prove invaluable in the event of a war.

Thirdly, we would suggest to him the encouragement of the formation and growth of artillery corps in all our large cities, where mechanics and artisans do mostly congregate. Men of this class have a wonderful aptitude for the service of this arm, it is in their line, it interests them. It presents some novelty every day which appeals familiarly to their minds. The ordinary infantry drill, simplified as it now is, palls upon the sense, and becomes monotonous. It could,

with stirring advantage, be combined with gun drill, and with the practice of that arm which has become the real weapon of defence. The men should be taught how to mount and dismount guns in position, of the heaviest calibre, to construct platforms, to make cartridges, gabions, fascines, and the thousand and one inventions which minister, in that branch of the service, to defence and destruction. We believe that many of the existing city corps would readily adopt the duties and the dress of the artillery, which, by the way, is a very taking uniform.

But we have not yet quite closed our "perambulation," nor the moral to be drawn from it. We had reached Sarria, when we last diverged, and saw the wide expanse of Lake Huron open before us to Cape Hurd, the north-western extremity of the Peninsula for western Canada. Lake Huron in its turn receives the waters of Lake Michigan and of the still more remote Lake Superior. Lake Huron covers an area of 25,000 English square miles. Its mean depth is 700 feet. From its north-western extremity, depends to the south upon the map a huge sack with a very narrow mouth. This is Lake Michigan; Michigan, in the Indian tongue, means "Great Lake." It is altogether American, being countersunk and dovetailed into American territory, and the Island of Michilimacinac, or "Macinaw" for shortness, situated in the narrow straits of the same name, bars all entry. It is, in fact, a *mare clausum*. The fortress of Macinaw, the first trophy of Canadian prowess in the war of 1812, was ours, when, in 1815, the diplomatic doctrine of *statu quo*, convenient to those who are dealing with the goods of others, transferred, in two words, to the United States, territories as wide and as fertile as France and Spain combined, and gave up a fortress which was then a protection, and which is now a standing menace to Canada.

Macinaw rises, like another Gibraltar, in the very throat of

the narrow strait which opens into Lake Michigan. It covers and conceals, as behind an impenetrable screen, the gulfs and bays and tributary harbours of the lake, many large and flourishing towns, but above all the wonderful city of Chicago, the emporium of western commerce, abounding in men and means, and so situated as to command, in a military point of view, the rear of the western peninsula of Canada.

Here, in the midst of the western population, notably the most warlike in the United States, projects of invasion may be matured on a scale denied to the capabilities of the lower lakes. Here the most formidable preparations may be made beyond our knowledge, and safe from all interruption. Here men may be assembled, disciplined, armed and equipped, steamers of the largest size may be collected, provided and provisioned, tug-boats may be converted into gunboats, and an Armada prepared, which, in a very few hours, could put 20,000 men down in the very rear of the city of Toronto.

It is with this *spectrum* constantly haunting the mind's eye, that we approach the defence of the northern shores of the peninsula and of the coast of Georgian Bay. This huge embayment of Lake Huron, though not hermetically closed like Lake Michigan, is within Canadian territory. It takes the whole of western Canada in reverse. The population from Sarnia to Cabot's Head, and from Cabot's Head to the mouth of the Severn, is numerous enough and ready to repel partial incursions, but it might be tried beyond its strength, were the invaders to obtain a permanent foot-hold in the country. On this rear-front of western Canada is to be found the harbour of Collingwood and the northern terminus of the Northern Railway, which falls direct on the rear of Toronto. The occupation of Collingwood by an enemy would place this line of communication at his disposal. Collingwood, however, is an open roadstead, in certain winds much exposed, and the harbour is wanting in the capacity to

shelter an invading flotilla of any number, but, hard by, to the north-east, is found a harbour fit to supply all these deficiencies. Penetanguishene is a port, long since pronounced by competent judges to be one of the best on our northern coasts. It is land-locked, safe from foe and tempest, easy of ingress and egress, open to navigation early in the spring, and offering great convenience for the repairs and construction of ships, while the structure of the country around contributes to defences which, he who first holds, will keep. It commands the open roadstead of Collingwood by taking it in reverse.

When, in 1813, after Proctor's defeat and Barclay's disaster, the channel to the west, by way of the Detroit, was obstructed, and the ports of Macinaw and St. Joseph, debarred from supply, were reduced almost to extremities, great efforts were made to meet their wants by new routes, from Lake Simcoe and the Severn River, Machadash Bay, and the River Nottawasaga, all at the eastern and lower end of the great Georgian Bay. Provisions, marine stores and supplies, arms and ammunition, were sent from Toronto up Yonge street to Lake Simcoe. The men employed chopped their way through the bush, and, at every step, surmounted obstacles, bridged streams, clambered over rugged ridges, extemporized windlasses, hauled up guns and anchors in hollowed trees, and thus, by dint of labour, won their way to that beautiful Bay which still bears the name of him who

With sword upon his thigh,
With hand upon his pen,
Brave Kempenfelt ! went down
With twice five hundred men.

At the close of the war, many of these weighty articles, unused, were abandoned and left where they lay, and the story is told of a wearied hunter on the banks of the Severn having selected, for his resting place, what he took to be a piece of

dry wood, quaintly shaped, was surprised, on closer examination, to find himself seated on the fluke of a large anchor, the remainder having, in the course of time, subsided and disappeared in the marshy soil beneath. This incident may remind the reader of a similar passage in the memoirs of a noted German baron, but it would not be quoted here, were it not from the belief that it has better foundation than dissolving views, beheld from a church steeple, in a fabled village of Thuringia.

At this time some shrewd explorer discovered the inlet of Penetanguishene, and those who saw its importance, welcomed the discovery. The harbour was adopted, at once, as a naval station of great value. For many years it was retained and occupied, but times of peace came, with a very proper reduction of expenditure ; our Indian allies had been left to form other alliances, Macinaw had been given up, and so Penetanguishene, without being abandoned, fell into disuse ; but nature had made it useful and it remains so. In early days its advantages were neutralized by distance and want of roads in a country devoid of conveyance, but now the northern railroad approaches within 30 miles of it at Barrie, and a very good government road, almost fitted for the reception of rails and sleepers, completes the communication.

It should be observed that Penetanguishene is to the north, and about 100 miles in the rear of Toronto ; that an enemy landing at this point in force would obtain a safe *pied à terre*, would in a few hours occupy Barrie connecting there with the Collingwood Railway, from thence, descending the line of the Northern Railway and passing through the most abundant tract, the very garden and granary of Canada west, would strike Toronto, where most vulnerable, in the rear. Holding Penetanguishene and Barrie he would also hold Collingwood, and thus secure the command of the whole Northern Railway, and if at this moment, feints on the Sar-

nia, Detroit and Niagara frontier should be converted into real attacks, it is impossible to predict or over estimate the pregnant gravity of the occasion.

In an earlier part of this paper we adverted to a danger which threatened Montreal from the rear. We revert to it now, and we ask our reader to follow us by the light of a good map. If, by a judicious concentration of force, the western Peninsula could be overwhelmed, then the natural course of an enemy would be down the lake shore of Ontario. Port Hope, Coburg, Belleville, attacked in flank and rear, would be turned and rolled down upon one another ; the Bay of Quinté would be neutralized ; Kingston itself, exposed to assault when least prepared, would succumb ; reinforcements would pour in to the enemy from an unobstructed rear ; steamboats laden with supplies would accompany the descending army ; men and means would flock over from the other side of the St. Lawrence, strengthening and feeding the advancing force ; Gananoque, Brockville, Prescott would fall, and then the foe would turn sharp upon Ottawa by two lines of railway, the Brockville, and the Prescott, and the capital of the country would again see the desolation of Little York. Here the enemy, relinquishing the line of the St. Lawrence without sacrificing any of its advantages, would follow the line of the Ottawa River, and then Montreal might find itself assailed from the rear, from St Eustache and Terrebonne ; nay more, by pursuing the same course, by following the northern shore down the St. Lawrence, Three Rivers would fall, Quebec would be endangered and the lines of St. Lambert, and the lines of Sorel, and the lines of Point Levi, would simply prove to be, for defensive purposes, on the wrong side of the River St. Lawrence.

It is impossible to ignore these dangers, but it is easy to provide against them if taken in time. Re-awaken to the importance of Penetanguishene, put it beyond the reach of a

coup de main, fit it to become a naval arsenal when required ; project a railway, and build it if practicable ; establish a brigade camp of instruction—the tenton—at Barrie, and accumulate in this part of the country, arms and ammunition, and an ample supply of all military stores ; protect warily the entering point of the wedge, look out for the rear, and the Peninsula is safe.

But the safety of the Hurontario Peninsula will not insure conclusively the safety of Montreal, and Montreal is still exposed to another great danger, always in the rear. Ottawa, the capital of the Dominion, is, so far as distance is concerned, within striking distance of Ogdensburg, say 50 miles. A blow successfully struck at Ottawa would, independent of the *prestige* to be derived from the capture of the capital, give to an enemy the command of the River Ottawa and the means of descending again, on Isle Jesus and the rear of the mountain of Montreal. But this felon stroke can be counteracted, if foreseen and provided for in time, by defensive and retarding works devised, first, to cover Prescott and Brockville and the heads of two railways, all of which are very susceptible of a protracted defence, and, secondly by the construction of out-works on the German system, for which the configuration of the ground is admirably suited, which would protect Ottawa from a *coup de main*, and compel a siege. Bring things to this pass, and Montreal, instead of being assailed, would become an assailant ; with Montreal upon one flank and Kingston on the other, and an inexorable winter in the rear, no sane enemy would even venture on an expedition against Ottawa, from whence he could not fail to be driven “ weather beaten back and lootless home.”

But this is not all, we must create a rear line of communication through the north country of Canada. Never mind how imperfect at first, it will improve every day. Continue persistently the line of Colonization road from Barrie to

Ottawa, from Ottawa by the River Gatineau to the St. Maurice, and from the St. Maurice, in the rear of Quebec, to the Saguenay. It is believed that the waters of the Saguenay are from their great depth open even earlier than those of the St. Lawrence, in the lower latitude of Quebec. It requires no great grasp of forethought to conceive an emergency, when it might be desirable to introduce reinforcements by a back way; and a line of telegraph following this line of Colonization road through the north rear of the country would supplement and secure intelligence which might be interrupted on the front.

Foresight and forethought, as has been said before, are the cheap defence of nations. Many of the precautions above enumerated, when impressed and appreciated, may remain upon paper, but camps of instruction should now replace military schools; artillery and snider rifles, ammunition and military stores, should be amply provided, and the men of the country should be effectually armed and carefully taught to use their weapons. Arms, ammunition and gunboats, these are the three great wants of Canada. Those who have followed the course of our argument cannot have failed to observe how much it relies on the support of gunboats. Nelson, before the battle of the Nile, raging at his want of "frigates" exclaimed, that if he died, that word would be found engraven on his heart. Certainly a sufficient supply of gunboats should be the heartfelt wish of every patriotic Canadian, and it is a wish which the wise liberality of England might easily satisfy. We are told, that there are now rotting in the royal dockyards of England, gunboats, built during the Crimean war, which can never again be used in European warfare, but which are well suited to the waters we have to defend. These boats should be transferred to Canada without stint and without price; even if the vessels are now from lapse of time effete and valueless, give us the armaments and

the equipments. The very points we require to defend in war are those which have been most exposed by the peaceful diplomacy of England. If the frontier of New Brunswick is exposed, if part of Lower Canada has no frontier at all, if on Lake Champlain we are weakened, if on the north and west we invite attack, it is due to the diplomacy of England. If in 1815-18, Canada was sacrificed for the good of the Empire, the Empire now owes us some return. In 1815 we had conquered the Machias Territory in the State of Maine and held it to the Penobscot; we were in possession of Macinaw, and of a western territory, which now constitutes a dozen of the best states of the American Union; all were given up for the sake of peace, by a stroke of the pen, and we are now debarred access to what is left, the great North-western Territory, by the cheap complaisance of British diplomatists. We feel that we are entitled to consideration and compensation. It is in no unkind or carping spirit that we recal the the past. Let the dead bury their dead. Let the errors of the past be a warning for the future and an incentive to just reparation. Let us go upon our path, but see that we are properly armed and sufficiently provided.

We can furnish the men and the clothing, the food and the transport, and make further sacrifices, in the time and the money, and the progress both represent. We can augment our active force to be ready at an hour's notice, from 40,000 to 100,000 in the course of the coming summer. Behind them will stand a force of 400,000 men. We want no aid in officers, the country teems with soldiers, and the descendants of soldiers. Since 1864, our military schools have passed 5,000 cadets "of whom 24 per cent. have taken first-class certificates." We have just now, returning from an excellent European school, the Roman service, a number of fine young men, who will help to infuse military ardor and military training among their fellow-countrymen in the Province of

Quebec. That which the Royal Canadian regiment, the Prince of Wales Own, the 100th, did for the English-speaking population of Canada, the Papal service will have done for them. We have at the head of the whole as Adjutant General of Militia, a British officer, popular, of talent, and of long and varied experience.

But we want arms and ammunition, camp equipage, intrenching tools, and all the warlike apparatus which the British magazines possess to repletion, which constantly deteriorate, which must be used, destroyed or changed. We require cannon, should have no objection to a few Armstrong guns, but would be content with any amount of refuse smooth bores, of any, even the largest, calibre. The rapid introduction of the Martini-Henry rifle into the British army will disengage a vast number of Snider-Enfields. Our people have tried this weapon, and are quite satisfied with it; its simplicity suits their simple notions, and they feel that they can give good account of its range and accuracy in the country over which they will have to fight. But it should not be forgotten that, until we can "do for ourselves," we require reserve arms also and reserve ammunition.

For gunboats, equipments, armaments and naval stores, we must again turn to England; we can furnish the sailors. By a return made to Parliament in 1868, we find that the sailors of the Dominion number 37,235, but these men and the officers of our commercial marine should be classified, commissioned, and registered. A naval reserve should be formed, as in England, and measures devised to identify the men and the service, to impart to it a national character, and to enlist in it their sympathies, their interest and their pride. On our great lake shores, hospitals and winter homes should be provided for the sailor, temporarily out of employ, and then often suffering from shipwreck, sickness, and frostbites. No better situations could be found for such asylums than at Niagara and Pene-

tanguishene, where ample buildings already exist, applicable to these purposes.

We will now sum up briefly the philosophy of our defence : It is, to give no offence, to do unto our neighbours as we would wish that they should do unto us. With this neighbourly relation we shall remain content. We have no desire to encircle this continent with a "Chinese wall." Neither men nor nations were ever intended to live, shut up in a box. A Montreal clergyman, lately inducted into the parish of Renpoint, in Dumfriesshire, has remarked "that men should not live narrow or isolated lives,"—no more should nations—we believe in that. We believe too in autonomies. We simply ask to be let alone, and to live as we like, confident that the very rivalries of contiguous peoples develop general intelligence, and call into exercise the highest powers of the human mind. We trust, however, that our rivalries may ever be friendly rivalries in the arts of peace, but if we are compelled to appeal to the arts of war, we will hold our own as best we may, and we know that we can hold our own until England casts her mighty buckler before us. With the Mother Country we shall always cultivate the most affectionate relations, relying upon her for much help, and not the less grateful if we do not get all we ask.

We wish also to impress upon our fellow-countrymen, happily not much exercised in such matters, that one of the first principles of a war of national self-defence is the mutual insurance of the defenders, that well known symbol "mutual" should be inscribed on the cap of every patriotic soldier. He fights individually to protect all that he holds dear, but the mutual compact is mutual protection. If he suffer loss he must have compensation for life, limb or property—compensation either wrung from the enemy or to be paid out of the national treasury. And we would furthermore remind those loud-mouthed denunciators of Canada, who write

with so much levity and speak so confidently of its conquest, that "on to Richmond" proved to be a "far cry." It cost—in time three years—in life and limb, killed and wounded, two millions and a-half, and dollars by the Billion. A march upon Canada would prove to be farther still, with less of honor, less of profit, more of cost and far more of peril to those commercial interests and maritime cities which escaped unscathed during the great Confederate war.

We might close here, but we had undertaken to encompass our whole frontier and we must complete our self-appointed task. From the south shore of Georgian Bay we will now ascend the coasts of the north, westward, until we reach the mouth of St. Mary's River, the strait which divides Canada from the State of Michigan, and connects Lake Huron with Lake Superior. At its uppermost or western extremity Lake Huron communicates with Lake Superior by means of the Sault Ste. Marie, receiving this name from the rapids, or "Sault" which are its prominent features. In the gorge which forms this strait lies the Island of St. Joseph, which, during the war of 1812, was the camping ground and strong-hold of the great tribes of western Indians. These tribes, expelled from their native haunts, year after year, by the encroaching and insatiable borderers, had thrown themselves upon the protection of the British, and though both a costly and an unsatisfactory ally, were a cause of great uneasiness to the American left flank and rear. But American progress has outflanked them very effectually since, and occupies, with thriving towns, mining enterprizes, agricultural settlements and growing railways, the whole southern coasts of Superior to Fond du Lac. Lake Superior, the most remote, is at the same time, the largest of these great western Reservoirs. It covers an area of 31,500 square miles, and has a mean depth of 800 feet. The birch canoes which thronged these waters in former days,

still, though in diminished numbers, dare the deep, dare danger by the side of the Leviathan steamboats, which find access to Lake Superior by means of the Sault Ste. Marie Canal a magnificent effort of engineering skill and $1\frac{17}{100}$ mile in length.

Here, on the very outskirts of civilization the obsolete savage gazes, as impassively as ever, on that wondrous progress which is fatal to his race. He dies and makes no sign.

And yet here, for a time, progress seems to pause. All that can be done has been done. The territory which surrounds this huge lake is not on its border, attractive to settlement; the shores are rocky, sterile, sandy, and forbidding. But nature provides compensation—great mineral wealth abounds. Mines of copper, of increasing promise are successfully worked, but the capital required makes progress slow. The further, however, we penetrate within, the richer, the more promising, and the more prolific becomes the soil, until the great western plains, extending from Winnipeg to the Rocky Mountains offer millions of unoccupied acres to future emigration and culture. But, until Lake Superior becomes the channel of communication with the Red River Settlements, and the vast plains of the Saskatchewan, it can influence but little the defence of Canada. Passing events too, hurrying on, anticipate and confound speculation. We pause and await ulterior developments, satisfied that the day is not distant when we shall see and appreciate, face to face, that which at present we behold through a glass darkly.

We abide the future; and, in the meantime, and at once, would arouse our people, not so much to a sense of their danger as to a sense of the ease with which that danger, foreseen and forestalled, may be encountered and repelled. We would familiarize the public mind to thoughts on defence. We know that our effort is an imperfect one, but if we can

induce others to think, that which is now imperfect will, in due course, be perfected. We are, no doubt, surrounded by difficulties ; the withdrawal of the British troops caps the climax ; but among the false impressions it may create we will not allow others to believe that we are inclined to quail. We know our weakness and our strength and are resolved to repair the one, and, with God's help and in a just cause, we rely upon the other.

APPENDIX.

THE BRITISH AMERICAN NAVIES.

A STRIKING CONTRAST.

RESPECTIVE STRENGTH AND COST OF BOTH ESTABLISHMENTS.

I commend to the earnest attention of the legislators and the executive officers of the United States, the fact that while the navy of their republic last year cost the country \$21,500,000, and will not cost much less this year, the British navy last year cost \$55,785,000, and this year will cost \$46,250,000. The American navy, including all its vessels, in and out of commission, old hulks used for store and schoolships, and even torpedo boats and yachts, consists of 188 vessels; the British navy consists of 763 ships, of which 249 are in commission. The number of men and boys, including marines, in the American navy, is only 8,000; the number in the British navy this year is 61,000. The building of ships in the American navy has ceased; but in the \$46,000 which the British navy is to cost this year is included the expense of completing a number of vessels now on the stocks; of building a first-class turret ship able to cross distant seas, carrying guns of the largest size, an unmasted ship of the Thunderer class, a frigate of the Constant class, one of a smaller size, and two small ships for service in the Persian Gulf; and of commencing the building of six other vessels. This contrast is so very remarkable, and deserves so much attention, that in order to make it plainer I place the figures in the following tabular form:

	BRITISH NAVY.	AMERICAN NAVY.
Whole number of ships.....	763	188
Ships in commission.....	249	80
Seamen, boys, and marines.....	61,000	8,000
Ships to be built this year.	6	None.
Ships to be commenced this year. .	6	None.
Whole cost for this year, including new ships	\$16,250,000	\$21,000,000
Average cost per each vessel in com- mission	185,742	262,500
Average cost per each man in the service	758	2,625

A DISGRACEFUL CONTRAST.

Is it possible to conceive of a more startling, instructive, and, to Americans, humiliating contrast than this? There is no mistake about the figures. Those relating to the British navy I have taken from the statement made in the House of Commons by Mr. Childers, the First Lord of the admiralty, when submitting his report of the management of the navy during last year, and the naval estimates for the present year. The figures relating to the American navy I have taken from the report of the Secretary of the Navy and the "Naval Register." It is scarcely necessary to add a single word as to the comparative strength of the two navies, ship for ship. You have seen the *Monarch*, and she is only one of many; *Ex pede Herculem*; judge of the British navy by that ship, and you will not be wrong in the belief that in case of a conflict between the two nations your ships would be swept from the seas like leaves before a gale, and your coasts ravaged from Portland to San Francisco. Happily there is no danger of a row, unless the United States provokes one, but it may as well be understood that in the event of a war it would not be this country that would get the worst of it. This, however, is not the point to which I am anxious to direct the attention of the men at both ends of the avenue in Washington. This point is the amazing fact that the British navy is proportionately so very much cheaper than the American navy, and incomparably more efficient, ship for

ship. How does this happen? It does not arise from the fact that the compensation paid to officers and men in the British service is less than that given in the American navy. The pay of the British officers is at least as high as that of the American line, and there is not, I believe, a very great difference in the pay of the men. For the pay of the 61,000 men and boys in the British navy this year the sum of £2,692,731 has been voted. This is an average of a little more than £44 (\$220) for each man and boy. A first-class seaman in the American navy gets \$240 per year; first-class firemen receive \$360; ordinary seamen, \$168; landsmen and boys from \$144 to \$96 per year. The average can scarcely be more than is paid in the British navy, and when the superior purchasing power of the money in which the British sailor is paid, and the greater cheapness of his clothing, are taken into account, it will be found that he is better paid than his American fellow. How is it then, that your ships, on the average, miserable as they are, cost \$262,500 for each one in commission, while the British ships, magnificent as they are, are kept in commission for an average cost of \$186,000 each? Where are the leaks in your Navy Department through which runs, unnecessarily, one-third of the money appropriated for naval purposes? There must be men in Washington who can answer this question. Can you not get some of them to do it?—
Am. Paper.

