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The Protection of Our Naval Base in the North Pacific

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Friday, April 6, 1883.

ADMIRAL SIR EDWARD G. FANSHAWE, K.C.B., Member of
Council, in the Chair.

THE PROTECTION OF OUR NAVAL BASE IN THE NORTH PACIFIC.

By Major-General J. W. LAURIE, late Deputy Adjutant-General
of Militia, Canada.

WITHOUT going into any elaborate statistics as to the importance of the British trade in the Northern Pacific, I may say that six months' residence on the coast of Western North America confirmed me in the view of the necessity, both moral and material, for the presence of a British squadron in those waters. Many able writers, foremost among them Captain J. C. Colomb, R.M.A., have pointed out the value of this position to the Empire, and every year adds to the strength of the arguments they have adduced. The Canadian Pacific Railway, which has been too often looked upon as a visionary creation, will, at present rate of progress, be completed in 1885, and if but a tithe of the expectations it has aroused are realized, an enormous trade from the so-called Far East will be carried on in British ships, and throughout, over British territory, thus multiplying our responsibilities in that quarter.

Every act points to the intention of Russia to remove her chief naval depôt from the land-locked Euxine and Baltic (where in the time of war her fleets can be held as closely sealed up as if they were actually blockaded in port) to Vladivostock, on what is practically an open coast, whence they can run out as opportunities offer, and work untold mischief before their career could be brought to a close. The experience of the Federal Navy in blockading the southern ports during the War of Secession, and the regularity and system with which the blockade runners passed the cloud of sentinel vessels employed by the North, show that numbers and experience cannot avail to really shut up steamers in harbour on an accessible coast.

It has been objected that Russia is only doing the same as ourselves, advancing the limits of her Empire, and carrying civilization into barbarous regions, and that we have no more reason to feel suspicious at her extension than she might at ours, but the slightest examination will show that our cases are entirely different.

We often describe our increase of empire by the following process : first the missionary, then the trader; and lastly, the man-of-war to

protect the interests thus created; but Russia has struck another line, at least in her settlements in Eastern Asia. There the man-of-war came first, and so far the trader has not followed; in other words, these settlements are exclusively military, and as there is no commerce to require protection, the reason for their existence must be sought elsewhere—not existing for protection, they can only be created for aggression; and the work is done quietly and not with a flourish of trumpets, as if intended to overawe some weak and semi-barbarous Power. It is quite clear that the preparations are not made as against the United States, with whom the relations are studiously gushing, the conclusion therefore forces itself upon one, that but one antagonist is regarded as possible, the only other great Power with large interests and large possessions in that ocean—that is, Great Britain. I am the more confirmed in this, from the tone of the Russian Officers with whom we were brought in contact during a visit paid to Victoria (or rather to Esquimalt) by the Russian flag-ship the "Africa," one of the converted merchant steamers. We were courteously shown over her, her armament pointed out, the expenses of conversion and strengthening discussed, a small matter of 272,000 dollars, or about 55,000*l.*; she carried guns equivalent to our converted 32-64-prs., and was, of course, stated to be satisfactory, but the whole tenor of the conversation was that she was intended to be used against us; that she was to chase and capture our merchant vessels, but was to run from our smallest fighting ships. She was in every way associated in their minds with a possible, almost a probable, war with "you English," and decently masked, but hardly concealed, expressions of regret fell from them that war had not resulted, as they felt they were in a position to do us much damage. I stood it for a time, but as we were standing on the quarter-deck of the "Africa," and this had gone on longer than my patience lasted, I looked up at the ensign, the St. Andrew's cross, and remarked that it reminded me of old times to see that ensign, I had not seen it since it was flying in the harbour of Sevastopol; a hint that the experiment of a war with us had not turned out well enough to encourage repetition.

Japan and China, too, are emerging from their former state of isolation, and will have to be considered in case of any trouble in that ocean, the more so, as they are becoming owners of powerful iron-clad squadrons.

Chili will more than probably be led by her late successes into an overbearing and high-handed policy; and, as the United States have allowed their navy to fall into a state approaching effacement, the duty of maintaining order on these seas and protecting the rights of neutrals (even if we ourselves do not become principals in a war) devolves on the squadron we maintain on the Pacific Station.

It is outside my province to consider the question whether the force maintained by us in the Eastern Pacific is of sufficient strength for its purposes, but such ships as are there should be thoroughly effective, and one point is clear, that the efficiency of the squadron stationed so far from the home dockyards must largely depend on its

depôt from which it replaces expended stores, and where the ships can refit for further service.

In the days of Nelson, when sails furnished the motive power and smooth-bore guns the armament, an enemy's ship when captured was the not uncommon source of supply from which stores of all sorts were replenished; but in these days of advanced mechanical art, our ships and their armaments are elaborate machines, every part of which must be thoroughly complete, or the machine is not merely crippled, but absolutely unserviceable; and as coal is contraband of war, it is more than ever important that our ships should have a well-stored depôt near at hand, where suitable supplies of every kind, for vessels and guns, as well as coal for engines, should be obtainable; but in time of war we could not retain or obtain these supplies in neutral territory, and there is thus but one place in the Northern Pacific where we have the right to get a ton of coal or keep a pound of gunpowder—that part of Canada known as British Columbia, of which Vancouver's Island politically forms a part, and which happily furnishes an unlimited supply of coal, the best on the Pacific coast.

Esquimalt Naval Yard.

Vancouver's Island on the extreme west of Canada, like Nova Scotia on the far east, is indented with bays, many of which are first-rate harbours; but in establishing a naval depôt, it was of course essential to place it where supplies, such as fresh provisions for the crews, could be readily obtained, and in the then sparsely settled condition of British Columbia, it was not at all unnatural that a suitable harbour as close as possible to Victoria, the centre of population, and the principal market for the produce, not merely of Vancouver's Island, but of the Puget Sound districts of Oregon, should have been selected, and a glance at the map will show it not to be badly placed for the command of Puget Sound; possibly it would have been better situated if altogether outside the straits, as saving six hours in getting fairly to sea, but the navigation of the straits is easy, and vessels generally come up under sail to Royal Roads outside Esquimalt, where the naval yard is situate, well to the south-east part of the island.

The history of this yard affords an amusing instance of how we "drift" in our arrangements. When during the Crimean War the English and French squadrons united for the purpose of making the disastrous attack on Petropaulofski, the then Russian arsenal in the Pacific, our naval authorities obtained the use of a house on a point of land at the entrance of Esquimalt Harbour, and fitted it up as a hospital; from this beginning our naval yard has grown, and in a most unsuitable and exposed place, actually on the spit of land that divides the outside water, the Royal Roads, from the harbour, as if to encourage and invite hostile intentions; and vessels lying in the harbour, instead of in any way being able to cover the dockyard, and protect it with their guns, would have it between them and the assailants, and would actually have to fire over or through the dockyard, in order to assist in its defence.

A dry dock is in progress of construction close by the naval yard, but, at present rate of progress, it will hardly be available for use during the present century, so that the consideration of providing for its protection can hardly be considered a burning question. Esquimalt Bay is so landlocked that it makes a capital harbour, and will accommodate a very fair number of ships; it is situated about 4 miles by road from Victoria, and in fact forms the deep water harbour of the town, as Victoria Harbour is only to be entered by large sea-going ships at high tide, and the mail steamers which leave for distant ports, such as San Francisco, at a fixed hour, start from Esquimalt, where they are independent of tide.

Why Victoria, the capital, which aspires to be a commercial town of the first magnitude, was placed on the comparatively shallow and difficult harbour is a matter that can be best explained by the Hudson Bay Company and its officials; the former had a fort and a trading port there, and business clustered round this, until vested interests, hard to disturb, were created, and it became the seat of Government. For the actual purposes of the ships, Esquimalt in time of peace satisfies, I should think, all the necessary conditions; a good harbour and easy access to stores; with fresh supplies at a reasonable rate; but my duty required me to look upon it in a different light. I had to regard it as a position to be defended in case of war, and with such material as was supplied me, or which, on an emergency, I could improvise.

In accordance with some recommendations made, I believe, by the Colonial Defence Committee of 1878, some batteries were erected by Lieutenant-Colonel Irwin, R.A., who was sent out in that year by the Canadian Government for the purpose; these may be seen on the plan, and are well placed for the purpose of carrying out the instructions he received. In some of our earlier experiences in India, when our troops were sent to attack hill forts, the attack was delivered on the gate, which was found to be carefully fortified, and the attack failed; whilst it was afterwards discovered that the other defences of the fort were so dilapidated, that it would have been possible to have got in anywhere, except at the gate. Now this is pretty much the view I hold of the present defences of Victoria and Esquimalt; if an enemy's cruiser will obligingly attack directly in front, he will find guns mounted to bear on him, but if he will betake himself behind Clover Point or to Ross Bay he can keep out of the way of our guns and destroy Victoria; or, by landing a very moderate party of men, can enter the batteries from the rear, and either spike the guns or tumble them over the bank. I do not say this as criticizing Colonel Irwin's arrangements in any hostile spirit. He was sent out there with certain definite instructions, and a very limited command of money for the work of construction. He found but a small amount of material available, simply some of the small reserve of guns kept at the naval yard to meet the pressing wants of the squadron. He was authorized to raise a battery of Volunteer Militia Artillery, at first fifty men, afterwards increased to eighty-four; he had also to bear in mind that he was spending the money of the Canadian tax-

payer; it was necessary that he should, in appearance at least, take steps to protect the taxpayer's property. If his means did not enable him to block and guard every road by which an enemy could approach Victoria and Esquimalt, he showed good judgment in doing all in his power to guard that which was most easy of approach. An enemy coming to Vancouver's Island must necessarily come across the water, it was at any rate a point gained, that he should not be able to sail unopposed right into either of these harbours.

In 1879, a very able Officer, Colonel Lovell, R.E., was sent by the Imperial Government to report on the defences of British Columbia. His report has not been published, but the instructions he received were also communicated to Lieutenant-Colonel Strange, R.A., who accompanied him, and these and Colonel Strange's report appear in the Canadian Blue Book, and I will quote these instructions.

To report in detail on the following points:—

1. The means to be adopted for placing the harbours of Esquimalt and Victoria in an efficient state of defence by permanent works; the extent to which the temporary works may be made available being reported.

2. Whether the two harbours can be considered independently, or whether, on the other hand, the scheme of defence must necessarily embrace both, bearing in mind that Esquimalt as an Imperial station is of primary importance.

3. The garrison required to be permanently maintained, and the manner in which such garrison should be constituted, stating the extent to which assistance in this respect may be expected from local resources.

In a second letter of the same date Colonel Lovell is requested to visit Nanaimo, as its defence may become a matter of importance on account of its coal supplies. Also is told, that any views he "may form generally, on the measures to be taken for the defence of the Pacific coast of Her Majesty's dominions in the event of war, bearing in mind its distance from any established naval arsenal, and the difficulties which must, therefore, attend hostile operations directed against it," will be gladly received by the Secretary of State for War.

A very important alternative was therefore apparently not opened to him, the power of recommending that Esquimalt was practically indefensible with the means at command or likely to be furnished; and that another site equally advantageous as a naval yard, and with capacity for defence, might be substituted.

Colonel Strange very pointedly calls attention to the mistake in the last paragraph of the second War Office letter, as to our possessions on the Pacific coast being so distant from any established naval arsenal as to make hostile operations *against* them very difficult. He points out that the United States not merely have a large Government establishment at and near San Francisco, they also have, immediately available, the resources of that city of 350,000 people, a city, I would point out, whose industries are largely devoted to the provision of machinery for the great mining districts of California, Nevada, and now Arizona, and to the supply and refitting of the enormous com-

mercial shipping that enters the Golden Gate, consequently specially suited to equip a maritime expedition, whilst the overland railway will bring the almost unlimited supplies of men and material of the highly developed Eastern States, in from three to six days' travel, to strengthen an expedition which might be there fitted out. The United States' Government recognizes the importance of San Francisco as a possible base of operations, for although the squadron there is small, indeed but nominal, San Francisco is the military headquarters of the West, and large barracks and strong fortifications show that they recognize the necessity for preparing for eventualities.

I need not again refer to the power that Russia is developing, but only repeat and endorse what Colonel (now General) Strange, in his report, so emphatically points out, that "the difficulties of defence are under present conditions much greater than the facilities for attack, and that the bases of hostile operations are much nearer than is implied in the last paragraph of the letter" I have quoted.

So much for the possibility of the organization of a hostile expedition against Esquimalt. We now have to consider how far it is capable of defence. That the temporary defences erected by Lieut.-Colonel Irwin were not considered sufficient, is proved by the mission of Colonel Lovell, R.E., and later of Colonel Crossman, R.E., and the instructions given to the former. Colonel Lovell's report has not been made public, and I was unfortunate in missing Colonel Crossman, who finished his inspection and left Victoria the evening before I arrived there; I am therefore unable to quote their views, and will only express my own.

I have already pointed out that, in its present position, the naval yard at Esquimalt is very exposed, being but a few hundred yards in the rear of the battery on Brothers Island, the most advanced point on which a gun could be placed; so that any hostile cruiser lying off at such a distance as would expose it to but small risk of injury from the 9-ton gun at Brothers Island, could put shell into the naval yard and utterly destroy it; as it, at extreme ranges, would present a far larger mark than a single small vessel; or, in the event of a nearer approach, one gun could be held in check and its attention occupied, whilst other guns did the required mischief to the dock-yard. It follows clearly, and I think all authorities will support this, that even if Esquimalt were retained as the port, the buildings must be removed, and re-erected at the inner end of the bay. I mention this now, as the question of expense of rebuilding the establishment may cause an objection to my proposition, and this I maintain must in any case be incurred. I need hardly say that I am quite of the opinion, that if works of sufficient strength, and armed with the required guns, are erected on the sea front, no hostile squadron could force its way into the harbour, at least until the guns were overmastered and silenced, and to this contingency every fortress is liable; but even when the front door is made secure, there remains not merely one back door, but the general question of an approach by land from every or any point. The plan will show the weakness of the position. It is not that Esquimalt is vulnerable from one point only, for, if so,

steps might be taken to protect one weak place, but situate on a peninsula, surrounded by bays, it is approachable on all sides. An expedition, large or small, could land anywhere at from one to three hours' march from the dockyard. We know what our young naval Officers, Burgoyne and others, did on the Sea of Azof during the latter part of the Crimean War, how two or three daring men carried fire and destruction to the Russian stores on the road to the Crimea, and these lessons are open to imitation; the whole coast is open for the landing of a daring boat's crew; and for such a work of destruction there is no necessity for a permanent occupation. The dépôt produces nothing worth continuous retention, its stores would be of enormous value to our squadron, of comparatively small use to others; it is their destruction, not their appropriation, that an enemy would seek; but if the object were to seize and hold by a stronger force, from Sooke Inlet to the westward, all the way round the coast to Saanich on the north, are bays and beaches, where the flotilla could lie at anchor and an expedition be landed at ease. In the neighbourhood of Sooke the country is not very practicable, being heavily wooded, but troops could work their way through it, if time was not an object; from all other points the country is open and practicable everywhere. It has been suggested that, by abandoning Victoria and fortifying the portage or neck between the head of the north arm of Victoria and Esquimalt harbours, the Esquimalt defence would thereby be made safe; but all the population, all the wealth, and all the resources of Victoria, would at once be abandoned, and the low shore on both sides of Victoria Harbour, and its smooth water, would admit of a force crossing anywhere, even if boats were not obtainable, by rafting material, easily procurable from the buildings in the town, or from the woods which are scattered along the water's edge.

Any site can be fortified, and if not made impregnable, can at least be enabled to hold out for a certain length of time. Engineering skill, and we have, undoubtedly, as able engineers as are to be found in the world, will readily compass this, but it means money to construct and arm, and a strong garrison to be constantly kept up, both to maintain the works in peace time and to defend them during war; a garrison, too, which must here be retained at its war strength, as it is not possible to increase it at short notice from any other part of the Empire.

I am not in the secrets of the authorities, but the conclusion I came to was, that to provide properly for the defences of Esquimalt, would require such an outlay, both in permanent works and subsequent annual charge, that no British Government would listen to it, and that there was therefore little hope that Esquimalt could be made as secure as our solitary naval dépôt in those seas should be. The local forces are, of course, enrolled for the defence of Canada, and maintained out of Canadian pockets; and Canadian homes and property have the first right to their services; both public spirit and good policy would, however, lead to their services being at once given for the protection of the British dockyard, but they can only be looked on as auxiliaries; a reserve force to strengthen the garrison, not the

sole defence; and the total available strength that could be furnished is but small.

Taking the proportion of fighting men in a population as 1 in 7, an outside estimate, as I know from long experience, the 16,000 white people of British Columbia would not furnish much over 2,000 men to carry arms, but a portion of these are aliens owing other allegiance, and as the population is scattered over many hundred miles of country, not more than one-third of them could be concentrated at short notice for the defence of such forts as might be proposed; a number quite insufficient to man water lines, extending round Victoria and Esquimalt Harbours and the Isthmus forts; because, however small the attacking force might be, it would have its choice of the point of attack, and as it could be more expeditiously moved by water than the defenders could, with present means of communication, move by land, it could, by judicious feints and occupying the attention of defenders, and so keeping them scattered along the line, have the preponderance of numbers at the actual point of attack.

There is, of course, the alternative that the squadron, or a portion of it, should remain at Esquimalt and act as the garrison and defend its own base, but this hardly requires a second thought. There can be but small object in maintaining an expensive seagoing squadron if it has to remain in harbour to protect its stores; the ships would not serve the purpose for which they were sent to the Pacific Station, and if maintained at all, would be more usefully employed in the British Channel; barracks cost less than ships to maintain, and economy, with equal efficiency, establishes that the garrison must consist of a force on shore which can never be withdrawn on some will-of-the-wisp expedition, and will thus leave the naval commander perfectly free to use the whole of his ships on the high seas for the attack of the enemy's coast or the protection of our own.

Nanaimo Coal Supply.

But even supposing that Esquimalt were satisfactorily occupied and defended, the most important of our requirements would still be at an enemy's mercy. Nanaimo, to which Colonel Lovell's attention was directed as the source of our coal supply, would not be protected from hostile attack unless independent works were provided. An expedition launched against it from the Puget Sound ports would not have to pass Esquimalt, and, even if notice of appearance of the expedition were sent to the vessels stationed there, they would but arrive in time to witness the destruction consummated, not to prevent it. With the shipping piers, &c., at Nanaimo destroyed, our vessels would be dependent on sail power—a pleasing condition for our mercantile, as well as our militant, marine. Of course, coal could be stored in quantities under the guns at Esquimalt, but the supply could only be limited, considering risk of loss, certainty of deterioration, and enormous increase of expense; it is therefore in all respects desirable to maintain Nanaimo rather than Esquimalt as our coaling dépôt, where the supply would be cheaper and practically inex-

haustible. But it is also important to prevent an enemy not merely stopping *our* obtaining coal from Nanaimo, but obtaining possession and holding it as a source of supply for his own ships. A garrison shut up in Esquimalt would hardly guard against this, and the vessels there, as stated, could not readily prevent it. I may incidentally mention, that the managing owner of the Wellington Colliery at Nanaimo, *that* from which the largest portion of the coal is mined, Mr. A. Dunsmuir, is a most liberal and public-spirited Scotchman, and if his sympathies were enlisted, by giving him some official connection with the defensive organization, I believe that a very moderate outlay would put the coaling station in a position to resist any isolated attack.

Canadian Pacific Railway Terminus.

Next to the importance of protecting the coaling station, on which I have not dwelt at the length its importance deserves, because I conceive this is patent to all, comes the new question of protecting the terminus of the railway which in two years from the present time will be an accomplished fact; a railway which will no longer leave British Columbia an isolated province, with its communication with the rest of the Empire only through an alien territory or by a long and circuitous ocean voyage. In 1885 we are promised that the Canadian Pacific Railway will be open from end to end. In six days from Montreal, in thirteen days from Liverpool, we shall be able to reach the Pacific. I may be told this destroys my argument as to the necessity of maintaining a naval depôt on the coast, but to my mind it rather increases the importance of the station, as it puts us in a better case to take up the best defensive position, the offensive-defensive, to fit out and strike from there, to defend our coasts and our commerce by as much as possible carrying the war with all its disagreeables on to the enemy's coast and positions. In any case the railway terminus *must* be adequately protected; the large through trade that is certain to follow the completion of this route will bring an enormous mercantile marine into these waters, and it will be of prime necessity that there should be a position under our own guns where they can shelter, and whence they can work in concert with our men-of-war, who may be charged to protect them. A large mercantile harbour, such as Burrard Inlet, the proposed terminus of the railway, must be, if left without defences, can only be likened to a huge rat-trap into which our vessels would all be gathered, so as to fall the more readily into the hands of an enterprising enemy, and save him the trouble of hunting them down one by one on the high seas.

We thus, by retaining Esquimalt as our naval station, expose ourselves to one of the two alternatives, for by leaving it in its present open and unprotected state, it is certain to be destroyed at the outbreak of a war, or by undertaking a very heavy charge in permanent works and garrison, we put it in a comparatively defensible state, but we leave our coal and railway communications unguarded and exposed, or must again at a large expenditure provide for the protection of each of these. We thus fritter away our force in

attempting to guard three points, on each of which an enemy could practically concentrate his whole strength, and so destroy our position in detail.

It is from consideration of all this that I am led to recommend that our naval depôt at Esquimalt be abandoned, and that one be established at Burrard Inlet. We are thus enabled to concentrate our available means of defence, making *that* the centre of our position; it is placed immediately opposite to Nanaimo, and can thus much more readily render assistance to that point than could be given from Esquimalt. In fact, an expedition coming from the south against Nanaimo could be observed, and met on the Straits of Georgia by ships from Burrard Inlet, whilst, as already mentioned, vessels from Esquimalt could only arrive after the mischief was done. Any protecting works considered necessary at Nanaimo could for these reasons be on a smaller scale, as assistance could be obtained so much more quickly.

Future of Victoria.

It may be objected that it will be unwise to leave Victoria entirely exposed and undefended, that it would be bad policy to, as it were, abandon Victoria, with all its wealth and commercial interests, the more especially as it is the seat of the Government of the Province; that great irritation would be caused and bitter feelings aroused in this, the largest community and from which the public sentiment of the Province largely takes its tone. I am aware that prejudices will be aroused, and in such a loyal community and one so thoroughly British in sentiment as that of Victoria, I would be most unwilling to create any soreness, but I believe that what I recommend is for the true interest of the people of Victoria themselves.

A few enthusiasts believe that the goods in transit over the Canadian Pacific Railway will be transhipped at Victoria, and thus it will be actually the terminus of the ocean trade. I can see no grounds for this view; ocean steamers pass to Nanaimo now for coal, and Burrard Inlet was selected as the terminus of the Pacific Railway on the strength of evidence to which I shall presently allude, as the most suitable place for carrying on through traffic, on account of its accessibility for ocean-going steamers; hence I conclude that the traffic will centre at the harbour in which the terminus is placed, and no transhipment will take place.

Victoria will then depend mainly on the trade of the coast and of its own neighbourhood; a trade that will unquestionably largely increase as the Province fills up and the fisheries, mines, and milling interests are developed, and will make it a place of considerable importance, but it has in my opinion a brighter future before it beyond its commercial prospects. It has a charming and very equable climate, the thermometer not registering above 74° in the shade in August, and only two or three degrees of frost in January; these are the extremes of temperature usually experienced, and old settlers say they never saw snow there, until after the Colony joined the Canadian Dominion, and thus, they think, acquired Canadian weather.

The air is most invigorating, very pure, largely, it is said, owing to the presence of large quantities of snow on the Olympian Range, just across the Straits of San Juan de Fuca; these mountains show their northerly slopes to Victoria, they run up to over 8,000 feet in height, and the snow-line on this northerly exposure is about 4,000 feet above the sea-level, and the light and shadow caused by the early morning or late afternoon sun, when it gets well to the north, on the deep and sharply-cut valleys and successive ridges, present one of the most beautiful pictures nature has ever painted, and one does not wonder that H.R.H. the Princess Louise could hardly tear herself away from such a lovely scene.

The country in the neighbourhood of Victoria is park-like—scattered oaks and open glades of grass—the ground very broken, but accessible everywhere, quite different from the mainland, where the mountains are bold and often impassable; the woods are full of game, the rivers of fish, and the various channels that surround the island form a perfect paradise for a yachtsman.

Everything points to Victoria and its neighbourhood becoming, what I must style, for want of a better name, the playground of the Pacific coast.

The cold damp winds coming in off the Pacific drive the residents of San Francisco, far to the south as it is, out of town even in the month of July, to get *warm*, whilst in the interior of California the summer heat is great; the coast from the Golden Gate to the Columbia River is almost inaccessible. Oregon and Washington Territory are growing fast in wealth and population, but the seaports are unhealthy, and the interior is hot in summer, and cold in winter, and from both extremes the people of means try to escape. Victoria offers them all they ask; the society, largely fed from University graduates and retired army and navy men, is very pleasant, and all who visit it once long to return; the number of visitors increases yearly, and where business does not take men eastward, I believe that, for people of means, in the great territories west of the Rocky Mountains, Victoria will be the point for which holiday seekers will make; the Isle of Wight of the Pacific with the immense advantage of having a summer and winter season; the pleasure ground of a large and wealthy population, who work hard to acquire, for the purpose of spending liberally in the pursuit of enjoyment.

I do not think Victoria will become less English in consequence of this future, but it will be of less importance for its prosperity that it should retain the naval station at Esquimalt; in fact, I go further, and hold the opinion that it is better for its own interests that Victoria should be an open town, than be included within the scope of a line of defence containing the naval arsenal. As such it would of course be open to destruction by an enemy as a portion of the system of defence, but the tendency of modern warfare has been to leave uninjured, open and undefended towns, unless they can be looked upon as the sources of supply of contraband of war. Odessa was a case in point in the Black Sea in 1854; and in the Crimea, whilst we set ourselves to destroy the military port of Sevastopol, and all the

Government buildings, we did not even make a demonstration against Yalta, equally Government property, but recognized as not utilized for warlike purposes, and therefore looked on as exempt.

Undoubtedly prospective booty, such as the wealth of Victoria, would invite raids from marauders, who would assume the position of belligerents, even if not directly sanctioned by a hostile Government; against such, the inhabitants must be organized to protect themselves, and for this purpose a development of the present organization of the local forces would suffice. Artillery, not tied down to guns mounted in a fixed position, which can be taken in reverse and rendered useless, but what I recommended over and over again as the best defence for the outlying districts of Nova Scotia—guns of position, such as 40-pr. Armstrongs, which (unlike fixed garrison guns, instead of being constantly exposed to decay and destruction from weather, and so costing heavily annually for maintenance of batteries and platforms, as well as painting of carriages and lacquering guns) can be stored in a shed, and only brought out when required for drill or practice, or service, and which can be drawn by farm horses, or teams of oxen, to the point where an attack is actually threatened, and can be advanced or retired for continuous use, and supported by parties of infantry, whom they in their turn will strengthen, and enable to choose their position for attack and defence, whereas with stationary guns the supporting force must think rather of the guns than of any independent action it may desire. Such an equipment of the present force would render it better able to protect Victoria under the conditions I have named, and would not invite an attack on the grounds that it was a dépôt of warlike stores.

Navigation of the Straits of Haro.

It may be urged that the Straits of San Juan and Haro are difficult of navigation, and that a crippled vessel would find it difficult to reach Burrard Inlet through the archipelago which intervenes before the Gulf of Georgia is reached; undoubtedly it would be more convenient if these islands did not occupy so much of the channel, but we have to deal with the case as we find it.

The selection of Esquimalt as a naval station was made, and wisely made, when sails were the principal motive power of our men-of-war, and the time required for working under sail through these straits was a matter to be seriously considered, but with steam power the case is materially altered. In 1876 the Government of Canada addressed an official communication to the Admiralty, through their engineer, Mr. Sandford Fleming, requesting to be furnished with the fullest information as to the harbours on the coast of British Columbia and their approaches from the seaward; and Mr. Fleming, not getting from the charts and reports at first furnished such information as he desired, in order that the Government might come to some decision as to the terminus of the Pacific Railway, prepared a memorandum, and a series of twenty-eight questions; in the former he pointed out that, although the railway was to open up and develop the country, still, as no local traffic at present existed, it was important

to give due consideration to through trade, and to select such a terminus as would give the greatest facilities for competing successfully with foreign routes for ocean-borne traffic. This opened the door to the recommendation of any harbour between the 49th and 55th parallel.

The Admiralty, according to the official letter forwarded to the Colonial Office, obtained answers to this memorandum, and these questions, from the "naval Officers who, in their Lordships' opinion, were most likely to be able to give useful information on the subject," viz., Vice-Admiral Hon. A. A. Cochrane, Rear-Admiral C. H. Richards, Vice-Admiral Farquhar, Captain R. P. Cator, Captain W. Graham, Staff-Commander Pender, and Lieutenant W. Collins.

The greater portion of the questions related, first, to the distances from the coast of Asia to the several entrances to channels between the islands and the mainland, next to the distance from each channel to seven of the harbours of the mainland, selected as offering the greatest advantages as well as accessibility by land, also to the anchorages in and around those harbours; but the last two questions, which I give in full, convey the gist of the whole matter.

Q. 27. Mention any special advantages or disadvantages appertaining to any of the seven inlets herein alluded to, which have not been touched upon in the foregoing questions, and give replies thereto.

Q. 28. Having regard to naval and commercial considerations, mention the point on the coast which appears to you the most suitable for the railway terminus, and designate the other points to which reference has herein been made in the order of preference.

Admiral Cochrane considers "Burrard Inlet offers the greatest advantages, although he thinks, in the future, when the country is developed, the terminus will be transferred further north."

Admiral Richards says, in a nautical point of view, "Burrard Inlet is in every way preferable," and he "gives a preference to Fuca Straits over the other channels."

Admiral Farquhar says, "Burrard Inlet is at no great distance from a wide channel, has a deep clear entrance, possesses a splendid harbour, and a fair anchorage outside, and is almost immediately opposite Nanaimo, the great coal depôt, and, if practicable for the railway, he would give the preference to Burrard Inlet."

Captain Graham and Lieutenant Collins do not answer either of these questions.

Captain Cator considers Burrard Inlet as too near the frontier for a railway terminus, and the entrance through the Haro Straits as unsatisfactory, on account of the possession of the Island of San Juan by the United States, but a reference to Captain Cator's evidence shows that he is under the impression that a vessel going up our waters must pass within $2\frac{1}{2}$ miles of San Juan, a view which is not borne out by other professional evidence.

Staff-Commander Pender considers that Burrard Inlet, with its anchorages, is of the greatest value and preferable to all others as being also the most easy of access from the ocean, although the risk

of navigating large steamers against time is to him very great. "He also considers the southern approach to the mainland to be so well defined, charted, and lighted, as to be made present use of by any class of ships."

The preference being thus almost universally given to Burrard Inlet, for even Captain Cator's only objection was its proximity to the United States' boundary, we now examine the remainder of the questions only as bearing on the approach to Burrard Islet, and find that ocean-going *sailing* ships require to be towed about 70 miles from Race Rocks outside the entrance to the Straits of Haro, to the entrance of Burrard Inlet, or 90 miles to Port Moody: in other words, that steam power must be depended on by our vessels for this distance; for such a short distance, and so close to port, auxiliary power, in the shape of dockyard steamers, might certainly be provided in war time, to help crippled ships, or as there will certainly be an increased sailing trade on this route, dependence might reasonably be placed on the commercial community, who are sure to maintain tugs which can be hired or requisitioned.

The most important consideration must, however, be given to the opinions given, as answers in reply to Questions 7 and 8, as to whether, in the event of hostilities with the United States, the course of vessels would be so exposed as to render the approach to Burrard Inlet difficult or hazardous; and at what minimum distance they must pass San Juan or other points of United States' territory.

All agree that, if the Americans have command of the sea, the approach will be hazardous; that, of course, is undoubted; our squadron is there to maintain the command of the sea, not merely to pop in and out like a rabbit out of a burrow, but the larger question is, to my mind, whether, if *we* retain the command of the *sea*, *we* can pass in and out?

Captain Graham says that we must pass within about $4\frac{1}{2}$ miles of San Juan, Captain Cator, speaking from memory, says $2\frac{1}{2}$ miles, and that is true of the passage generally used, which, as Admiral Farquhar says, is commanded by the bluff on the northern end of San Juan, if armed with heavy guns; but there is a passage much nearer to our coast, which, as mentioned by Admiral Cochrane and Commander Pender, takes ships past San Juan at a distance of 5 nautical miles.

I never like to discuss the question of war between ourselves and the people of the United States; we are too much alike, come from the same stock, speak the same language, and are engaged in working out the same results; but there is another matter in connection with this San Juan question which should not be forgotten. The mere fact of a piece of territory belonging to another Power does not, in time of war, imply that that Power *must* retain possession of it. A battery of heavy guns at San Juan must remain *effective* to be a menace; it must be superior in metal to the ships, else it can surely be dealt with and silenced; it must be guarded by a force on land superior to any that can be sent ashore from the squadron; no naval commander would leave a battery on his flank and slink past it,

unless it were so much more powerful that he could not attack it with a reasonable prospect of success. He might not be able to retain possession, but he could perhaps hold it long enough to throw the guns over the bluff, rendering them incapable of further mischief.

If the land force for the protection of the battery were strong enough to prevent our landing and destroying it, in fact strong enough to hold it against any force that we could bring against it, this same land force would be strong enough to overpower us in our own territory, and it follows, not that it would be undesirable to move our base to Burrard Inlet, but that it would be madness to keep it at Esquimalt; where, indeed, we could not keep it, because the settled portion of Vancouver Island and all our supplies would be at once taken from us, and either destroyed or held.

In a comparatively impregnable position at Burrard Inlet, we should at least have our stores safe, our coal depôt guarded, and our railway terminus protected, until we obtained reinforcements; and our vessels, if they could not sail boldly past San Juan, could at least find their way in and out, with comparatively little risk, at a distance of 5 miles from the American guns.

It should also be borne in mind that our burrow has a back entrance, not one that a hostile cruiser, coming in a hurry and with every probability of having to leave in the same way, would care to use; it is difficult, and, when pressed for time, may be called dangerous, but our own ships, knowing the channel well and taking their time, could use it on an emergency, even if it is not all that could be desired. I mean they could enter or leave by the middle channel between Vancouver Island and Queen Charlotte Island, passing down through the middle channel between Vancouver Island and the mainland.

The Canadian Government, after considering all the evidence that could be obtained, decided to make Burrard Inlet the ocean terminus of their through railway, and where mail steamers running against time can navigate, it is but fair to believe that our men-of-war can pass.

In the map I have shown six-fathom soundings through the Haro Straits, and, intricate as the navigation may be, it seems perfectly practicable, although of course the water is deeper, and course more open in mid-channel. Assuming then that it is perfectly practicable for our ships to approach Burrard Inlet, we now come to the question, "What advantages it offers."

Burrard Inlet.

The enlargement of the Admiralty Chart shown gives an idea of the capacity of the harbour, which is nearly 20 miles in length; the entrance is narrow, a few hundred yards wide, making it perfectly landlocked; inside there is room for the whole navy of Great Britain; good anchorage at Port Hastings, where there is a large milling establishment, and large fish oil works; again good anchorage at Moodyville, a large steam mill (to be distinguished from Port Moody, the latter being named after Colonel Moody, R.E., the first Governor of British Columbia, the mill being called after one of the partners, an

American from Maine, who originally established it). On account of the enormous water area of the harbour and North Arm, at a full ebb and flow the tide runs with great speed through the narrows at the entrance, also through the second narrows, but not to the extent often represented. I have passed through both in a lightly engined steam launch against the full head of the tide, and certainly any full powered steamer could do so, or if it were necessary from any cause to wait till the tide slackens, there is magnificent anchorage in English Bay, immediately outside the entrance.

Immediately inside the second narrows on the north shore of the Inlet is a most eligible site (from a defensive point of view) for a naval yard. The anchorage is reported good in front; on its left flank, or eastern side, is the cliff-bound fiord, known as the North Arm, inaccessible to boats either to embark or to land; in rear is a range of mountains which may be considered quite impassable for any body of armed men; to the westward the cliffs rise up hundreds of feet sheer from the water on Howe Sound, making landing virtually impossible; and the country between Point Atkinson and the entrance to the Inlet is so rugged and wild that armed men, with the most ordinary equipment, could not make way through it; it is therefore only accessible from the front, and this must be by water either through the narrow entrance or across the Inlet.

The outer narrows are but a few hundred yards wide, commanded on the south by a high bluff, from which guns could bear both on vessels coming up from outside, and on any that might have run the gauntlet and be passing up the harbour. Two low points on the north side offer desirable positions for batteries to deal with vessels attempting to run close in under the south bluff. Long-range guns on Points Grey and Atkinson would, if deemed necessary, protect the outside anchorage, and form an additional obstacle to vessels coming in from seaward.

An enemy coming across the 49th parallel and desiring to reach Burrard Inlet, would first have to cross the Fraser River, and would be actually limited to that portion of it between the junction of the Pitt River and the delta of the Fraser; boats or canoes could, of course, be brought by teams from the boundary to any point on the Fraser, and an expedition could be embarked; but on the spit of land between the Fraser and the Pitt, transport for boats could not be obtained, and the undergrowth would almost bar the passage to an armed party: descending the Fraser and ascending the Pitt, the Pitt meadows, which are a deep swamp, would bar advance towards Port Moody. The railway to be carried across these meadows would be the only road by which the Inlet could be approached in that direction, and on such a narrow front a few men would hold out against a much larger force, or the railway here, which will probably be a viaduct, could be rendered impassable at this point. Below New Westminster the river separates into four arms, and if the first were passed, the boats could not be carried across the intervening islands, and even if the brush on the low islands were passed, the next arm would prove an impassable obstacle. There are

at present but two roads from the Fraser to the Inlet, and these both pass through New Westminster, which is therefore the key of the position, and the organized force of that city, supported by light guns, would make it very hot for an expedition coming down the Fraser to land at this point, and if the landing were effected, our troops could take up a series of defensive positions on the road to the Inlet, as the forest growth is too thick to allow of any flanking movement; whilst, even if successful in fighting their way to the water's edge, the enemy would still find the harbour between them and the dockyard, and be without any means of crossing.

My proposed naval dépôt will be but thirty hours by rail from the fertile plains and great food-producing districts of the Saskatchewan, with which it will of course be in direct telegraphic communication, and as these territories are being rapidly peopled, they would pour down, not merely supplies, but reinforcements of men to assist in repelling any attack in force, an aid that could not be furnished to Esquimalt if our garrison there were attacked, and we had temporarily lost the command of the sea during the absence of our squadron.

Our position would be materially strengthened by shortening the line of communication with our original base, England, and our intermediate base, Eastern Canada, and by establishing our main place of arms at the most vulnerable point, where everything must be transhipped if Esquimalt is to be retained.

I have endeavoured to show the advantages of my proposition; I have not sought to minimize the objections; I conceive it to be an Imperial question, but one in which Canada as an integral and increasingly important portion of the Empire is much interested, and, as an Imperial Officer, whose service has been largely with our Canadian comrades in arms, I have felt it was not out of place that I should bring forward this subject for serious consideration.

Captain CURTIS, R.N.: It seems to me that there are two points which are of importance in relation to this subject. The first is, that we should be able to blockade both inlets with our fleet; for unless we can do that, I do not think we should be able to hold our own in that neighbourhood; and the second point is, that I should like to know whether, if the line shown on the map be a neutral line, any nation at war with us but at peace with the United States would be able to come up within that line without our attacking them? I know some little about Burrard's Inlet. Mr. Pearce, the late Surveyor-General of North-West British Columbia, happens to have an oil factory there, though it unfortunately had to partially stop on account of the difficulty with regard to drying the fish-scrap for manure. They are obliged to empty a great part of the fish-scrap back again into the sea after extracting the oil. From what I know of the place I think that what General Laurie has said with respect to transferring the base of our naval position to Burrard's Inlet is of very great importance, and close in shore, I believe, there is any amount of water for our fleet. My friend has a pier running out there. He only has to run the net out and haul it in again, and he can catch any amount of fish. I may also say that there is coal at Burrard's Inlet. 200 miles of coal have been discovered on the Canadian Railway, in the Saskatchewan district up to the Rocky Mountains, and that is a very important point, because coal could come down that railway to Burrard's Inlet, and that would put Nanaimo out of the running altogether. The two points, however, which I principally wish to impress are, that we ought to be able to blockade both inlets with our fleet, and also I should

like to know whether the enemy could come up within this line, between the line as defined on the plan, and the American coast.¹

C. PROUNDES, F.R.G.S., &c.: There is an important point that has only been briefly alluded to in this paper which I desire to say just a few words upon, and that is "Our relations with China and Japan." The chart exhibited being on the Mercator scale, to others than those who are accustomed to use that scale, it naturally very much distorts the northern portion of the Pacific, and we do not get a fair estimate of the very short distance from the Russian territory to our own on the Pacific coast. From knowledge gained during long residence in China, and especially in Japan, I think our connection with this latter country should be looked to as a most vitally momentous matter. I know, also, that many are very much more in favour of the Chinese, and the idea prevails that in certain parts of China a very much better class of men than we have can be found to act as seamen and firemen. At the same time, I think, some bond of unity with Japan, if our authorities could see fit to enter into a treaty of offence and defence against the Russians, would be of immense advantage. I have had very varied and not inconsiderable experience of all classes of the Japanese, and I believe they would make splendid auxiliaries, or allies, both ashore and afloat. A recent paper in the *Nineteenth Century* sounded a note of warning with regard to the weakness of our army; and I had the honour of reading a paper, with regard to our seamen, &c., at the British Association last year. I think that such a treaty would be of very great advantage, especially when we look at the geographical and political position of that country with regard to our North American territory. The Japanese would be very much more valuable allies than is generally supposed, having ample docks, machinery, &c., at disposal. I saw some 9,000 of our Gallic neighbours across the water in "durance vile" under the walls of Minden in 1870-71, and from what I saw during the struggle between France and Germany I am of opinion that we could get an equally valuable contingent of allies from the Japanese, who would be quite capable of giving good account of such a class of troops, should we ever be in trouble. I merely throw that hint out as an illustration of my opinion with regard to the value of the Japanese afloat or on shore. I know for myself what discipline they can be brought under, judging from how easily I managed them, single-handed, when getting them off in our own and chartered ships for the Formosan expedition, and what they can endure in the field, and with regard to bravery, cool courage, and dash, and everything that is necessary in the face of an enemy. Then we have to consider, also, the fact that Japan is a nation of nearly 40,000,000 of people, who have at their disposal, at the present moment, very valuable resources that we ought not to allow the risk of falling into the hands of an enemy; they have most important machinery, several large and well appointed docks and arsenals, and appliances at their command, and are likely to have some of still more importance, so that if we will only protect them from the Russians the day may come when they will be very valuable to us. I think by such an alliance, offensive and defensive, with the Japanese we should find an important and very economical way of almost immediately providing a *very valuable base in the Pacific*, while something else is being done in our own territories. It is hoping to draw attention to these matters and to "strike a key-note of warning" that I have ventured to intrude on the meeting, and to point out as one of the most valuable considerations for immediate study, that in case we are brought into contact with the Russians, or any other Power, or combination of smaller Powers, it is to the Japanese, rather than to the Chinese, that I think we must look for practical and immediate assistance, or rather co-operation for mutual defence.

MR. BRYCE, M.P.: I may perhaps be permitted by the meeting to say a word or two, on the ground that I am one of the few here present who have visited the places treated of by General Laurie. About eighteen months ago I was at Victoria

¹ NOTE.—The capture of Kinburn, Kutch, and Yenekali confirms the views of Major-General Laurie, Kinburn, chiefly taken in rear, Kutch and Yenekali taken in rear, the allies landing in a bay to the southward. The garrison escaped capture by retreating into the interior:

and Esquimalt, and therefore I may perhaps contribute a little to the information of the meeting. May I be permitted first to say that I very much admire the lucidity and force with which General Laurie has stated his case, and so far as my own observations go, I willingly bear testimony to the practical correctness of the account he has given both of Victoria and of Esquimalt? I quite agree with his view that Victoria and all that part of our dominions is rather to be looked upon as the pleasure ground of the Pacific coast, than as a region of great commercial importance. Anyone who sails from Vancouver's Island, as far south as San Francisco, and still further down to Old California, and observes how wonderfully exposed and wild all that long line of coast is, a coast almost destitute of harbours, and swept by frequent storms, will be struck with the fact, that when this part of the world becomes filled by an industrious and wealthy population, who will wish and will be able to afford to enjoy also the pleasures of life, the region to which they will resort for summer enjoyment will be the further end of Vancouver's Island and the inlets which form part of or issue from Puget Sound. The whole of that coast displays one of the most beautiful pieces of scenery that the world possesses. There are islands of various heights and sizes, generally richly wooded, furnishing admirable sites for villas and watering places; and the great stores of natural wealth which exist in the State of Oregon and Washington Territory warrant the belief that in thirty or forty years there will probably be a vast population living within easy reach of the coast; so that we may well expect that the number of pleasure seekers in that part of the world will be very great. From its situation and climate Victoria will be a spot specially attractive to summer visitors generally, as well as to those yachtsmen to whom General Laurie has referred; and it may become the Brighton or Torquay of the Northern Pacific. As regards the military or commercial future of Victoria, considering the extreme difficulty of protecting Esquimalt Harbour and the town of Victoria, and looking to the shallowness of the water, it is clear that it never will become a place of great strength or of great trade. Perhaps it really would be for the benefit of Victoria that the naval station should be removed from Esquimalt, and Victoria be permitted to extend itself over the inlet which separates it from Esquimalt, so that Esquimalt Inlet should become the commercial harbour. It is much better fitted for the purpose than the present port of Victoria. I conceive in that way a better future will be opened commercially to Victoria than it can aspire to at present, and at the same time it would have the advantage of being an open town and not liable to bombardment in case of war. The question of what would happen in case of war with the United States is fortunately a question which may be regarded as purely theoretical because any Englishman who travels in the United States feels as certain as one can be of anything in the future, that hostilities between that country and ourselves are practically impossible; of course there are other Powers in the Pacific of which one cannot say so much. At the same time, I do not think we need feel any fear of such a contingency. Knowing something of the naval condition of these Powers, I feel perfectly certain that our navy could give a good account of them before they would reach this harbour. I have not seen Burrard's Inlet; but all that I have heard of it confirms the conclusion maintained in General Laurie's paper—that the best point for our naval stronghold would be that which is nearest to the terminus of the Canadian Pacific Railway.

Captain BEDFORD PIM, R.N.: Having spent several of the happiest days of my life in that neighbourhood, on board the old "Herald," I naturally take a very great interest in it now, and I take an interest in it not alone for that reason, but because I believe it is, strategically, of the very utmost importance to this country. I was very much struck with the concluding words of the gallant lecturer, in which he said that this question was a really Imperial one; and I must confess that I have never listened to any paper in this room more admirable than that of General Laurie. It is thoroughly well put together, and it breathes a good old-fashioned Tory principle from end to end, in a way such as I must confess has warmed my heart. I was very glad to find the gallant General has put his observations upon paper in such a strain as he has done. With regard to moving the strategical point from Esquimalt to Burrard's Inlet, I am hardly prepared to go with him there. I think that some of the ironclads that we have in our harbours, that are

notable to keep the sea, might very well be used at Esquimalt and Nanaimo; and also Burrard's Inlet if you like. I think that they will do all the work that is necessary to keep any one from landing. I quite agree that the position of the forts is simply absurd; we cannot call them forts at all. As the General pointed out, you will have to fire through the dockyard before you can touch an enemy approaching; that would be done away with if you had an ironclad there and used it for the purpose of defence, and also at Nanaimo. Burrard's Inlet seems to have admirable advantages for the terminus of the railway. I believe Sir Alexander Galt will tell us presently that the railway will be completed in 1885. I have a letter from the President of the Canadian Pacific Railway (who is going to show all sorts of hospitality to the British Association next year) in which he says that it will be, at all events, to the foot of the Rocky Mountains before that time. In relation to the transit itself through Canada, I may mention one point which the gallant General has not referred to, and that is this: that I think there will be a great deal more commerce go by way of that terminus than he has the least idea of. I hold in my hand a letter written to me so long ago as the year 1866, from the famous Commodore Maury, and he says if the line to China is continued on the great circle from San Francisco and back to Vancouver, you would take the winds with you both ways, and make extraordinarily rapid passages. Under those circumstances no doubt our communication with India and China will go by way of America instead of through the Suez Canal. It will be made very much quicker by simply having an outgoing route and an incoming route, because you carry favourable winds with you both ways. I remember taking special interest in this part of the world some years ago. I think it was in February, 1877, that I brought a question before the House of Commons with regard to eleven Russian vessels which were then lying in San Francisco Harbour, evidently sent there not for the purpose of attacking Turkish merchant ships or men-of-war, but to be ready, in the event of war being declared with us, to cut off our food supply. I dare say every lady and gentleman in this room knows that we get two-thirds of our food from abroad: and from San Francisco last year upwards of a million tons, not quarters, of grain came to this country. With light and active cruisers nothing could be easier than to cut that supply. Captain Semmes played havoc with the American merchant navy, and we all know it is very easy and simple to do the same with ours. We really have not the command of the sea at all unless we have fast and efficient cruisers ready to keep that command. Our ironclads, to my mind, are not worth much, and as to any cruiser that can convoy a number of merchant ships round Cape Horn, I do not know of one on the "Navy List" at the present moment. I think I have said sufficient to show that the paper of the gallant General is a most well-timed and useful one, and one that I am quite sure deserves the warmest thanks of this Institution. It is one really of Imperial interest. For my part, my only astonishment is that Canada sticks to us. I wonder that she does not throw us overboard at once; because if Vancouver and the terminus of the Canadian Pacific Railway were attacked by only one small, active, light-draught vessel, it would play havoc with those different settlements, and who would have to pay the piper? Of course the Canadians. They would lose prestige, and altogether it would be a very bad thing for them. I hope that this discussion will prove to be a note of warning which will wake up some of our authorities in order that they may put this part of our possessions into proper order, and the sooner it is done the better.

MR. FREDERICK YOUNG, Hon. Secretary, Royal Colonial Institute: Having been asked by the gallant reader of the paper to say a few words on this occasion, I have very great pleasure in doing so. I cannot of course approach this subject, which seems to me a professional one of great importance, from a professional point of view; but I may perhaps be permitted to make one or two remarks as a civilian. I consider it is a matter of great interest, that questions, such as I have had the pleasure from time to time of listening to in this room, on these and cognate subjects, should be discussed and ventilated here, because it enables us, the British public, to have our attention called to the fact, that we have very great interests outside the boundary of these islands, and beyond the "*silver streak*." I think it is of the highest possible importance that we should continually have our attention publicly drawn to the question, that we have great responsibilities, as well as great

and vast interests, all over the whole surface of the globe. We have had our attention drawn, in the very able paper read by the gallant General this afternoon, to a case in point. It strikes me that there are one or two important considerations to be borne in mind with regard to the best position for a harbour to protect our commerce in that hemisphere. In General Laurie's paper we have had our attention drawn, very properly as I consider, to the future. He predicts that we shall see an immense increase in our trade in the Northern Pacific as soon as the Canadian Pacific Railway is finished. We have also had our attention called to the history of the settlement of Esquimalt, which is a very remarkable one. It is an illustration of many of the things of this sort which happen in connection with the outlying parts of the British Empire. From very small beginnings, and for sometimes inadequate reasons, we fix on points of Imperial defence, as well as commercial settlements, in particular directions; and then, certain interests having been created, we keep developing them without having taken a sufficient and comprehensive grasp in the first instance, perhaps, of all which the future may afterwards bring forth. This is apparently the way in which the settlement at Esquimalt has been made. It certainly appears to me that very cogent arguments are brought forward in this paper to induce us to pause before we spend more money, which it is quite clear we must do if we continue to make Esquimalt the headquarters of our naval base of operations in that portion of the globe, in favour of transferring this base to Burrard's Inlet. No doubt the usual question stares us in the face of the cost of such transfer, but that question of costs is one of an Imperial character, ought to be incurred only in a way to produce the most valuable national results. The world, if it is not ruled by sentiment, is, at all events, very powerfully affected by it; and I am very glad to see that the gallant reader of the paper calls attention to the possible feeling which might be engendered among our fellow countrymen in Vancouver Island and Victoria if they thought that this fortified harbour and dockyard was to be transferred to the mainland and taken away from themselves. I think it is very important indeed that their feelings and sentiments should be thoroughly consulted, but at the same time I think the arguments that have been used in this paper ought to have considerable weight in reconciling them to any possible change which Imperial policy might dictate as desirable. Like my gallant friend on my left, Captain Bedford Pim, I cordially endorse the sentiments expressed in the last paragraph of this very able paper. I think the whole question is an Imperial one; and although I am aware that Captain Pim has a word in connection with politics, which I believe is not permitted in this room, I myself, while holding different political opinions to his own, hope I may be permitted to introduce a word, not of a party but of an Imperial character, and to say that I trust we shall approach all questions of this kind not from a Conservative or Liberal but from a thoroughly patriotic point of view. I will conclude by saying that I have had the greatest possible pleasure in listening to the very able and instructive paper which has been read to us this afternoon.

Mr. STEPHEN WILLIAMSON, M.P. : I am scarcely fitted to take part in this discussion, being unconnected with the special branch of knowledge that has been under discussion to-day, that is to say, connected with strategical operations. But I would, nevertheless, like to express the great pleasure and interest with which I have listened to the reading of General Laurie's paper. I know something of the Pacific coast, although not of the Archipelago before us, as I have not been so far north. I entirely agree, so far as I can understand it, in the necessity of the transference of our naval base from Esquimalt to Burrard's Inlet as against all our possible enemies except one. But the intricacies of that channel, and the contiguity of our territory to that of the United States, would make it, to my mind, an extremely hazardous speculation to say that we could hold Burrard's Inlet against the immense resources of that people, should we be ever unfortunately at war with them. I do not believe, as Professor Bryce said, that we have the remotest chance of ever being at war with the United States: and, therefore, as against all other possible enemies I do believe the transference from Esquimalt to Burrard's Inlet, if it can be done without a very great outlay of public money, would be a very good thing, and at any rate it is a question well worthy of being mooted and discussed. General Laurie has spoken of the new railway coming across to Burrard's Inlet, which we hope may be opened in two or three years' time. It must not be forgotten, however, that

besides the Central Pacific Railway to San Francisco there is also to be opened very soon a Northern Pacific Railway running into Puget Sound through the northern territory of the United States, and not very far separated, almost a competing line, with this one to Burrard's Inlet through Canada. The outlet in Puget Sound (which I am very sorry the map does not show), I think, runs in from Admiralty Strait, or near thereto. The resources that could be poured through that line from the United States into the Vancouver territory would be so enormous that any expenditure in Burrard's Inlet to make it an imperial and national affair worthy of consideration, that is to say with any possible contingency of war with the United States, would be money thrown away; for I am sure we could not hold it as against the United States. But I repeat that, looking at the extremely remote contingency of our ever being at war with our brethren in the United States, and to the much more likely contingency (although I hope it may be averted) of war with some other Powers, I should say that the transference from Esquimalt, which cannot be defended, to Burrard's Inlet would be well worthy of consideration.

The Hon. Sir ALEXANDER TILLOCK GALT, G.C.M.G.: I did not propose, Mr. Chairman, to appear here in any other capacity than that of a listener to the extremely able paper which we have heard from General Laurie, but as reference has been made to two or three other points by previous speakers, perhaps you will allow me to intrude for a few minutes. First, I may say, on behalf of Canada, I feel very much indebted to the General for the extremely able paper which he has read this afternoon. He has served in Canada for many years, and it is not by any means the first service he has rendered to us, and I trust it will not be the last. I will not for a moment presume to offer any opinion upon the strategic or military reasons set forth by General Laurie, but there is one thing which I think must be evident to us, namely, that the main question of protecting the terminus of the railway is the paramount one in the defence of that coast. If you lose the command of the Pacific Railway, the supply for your defensive operations on the Pacific coast is almost entirely gone. With the possession of the railway you have communication with Canada, and very speedily with England herself. I may just say one word with regard to the possibility of having to consider war with the United States. I quite agree with Professor Bryce in saying that the matter is one beyond all probability of risk. But this may be said, that if we should by any misfortune get into a war with the United States it is not in British Columbia that the attack is going to be made. What we have really to look at in this question is the defence of the naval power of England in the Northern Pacific Ocean. In Canada we are doing our very best, and will continue to do our best, to support the efforts of England to maintain the integrity of the Empire, and I cannot respond to the jocular invitation of my friend Captain Bedford Pim in saying that we ought to serve a notice to quit. On the contrary, I believe the interests of Canada are greatly promoted by her connection with this country, and instead of a desire to assume the feeble position we should necessarily be in as an independent country, at the mercy of the United States and every other great Power, I think it is much better for us to remain part of the Empire of Great Britain. I am quite sure that the discussion which has taken place must be gratifying to General Laurie, and I am equally certain that the views which he has given will be of very great service in the settlement of this question. The railway may or may not be finished quite as early as 1885, but it is quite clear it will be finished before the defensive works which are referred to are likely to be erected; therefore, the sooner the question is pressed upon Her Majesty's Government, and also the Government of Canada, and the sooner the two Governments look into the question of the defence of their mutual interests in the North Pacific, the better it will be; we are certainly much indebted to General Laurie for being the means of bringing the subject before the Government of this country.

Admiral Sir LEOPOLD M'CLINTOCK, F.R.S.: I think we can hardly overestimate the importance of the subject which General Laurie has brought before us; we know, and Sir Alexander Galt has also told us, the extreme importance of fortifying the Canadian Railway terminus on the Pacific, by means of which war material could be brought for our forces on that shore in about fourteen days, instead of going round by sea and occupying about four months in its passage. But what

I wish to bring prominently before you is, the absolute necessity of having our one coal depôt in the Pacific Ocean defended. We have but this one, and on it our fleet would be dependent for supplies, and also our trading steamers, in time of war. If we lose it we must relinquish our trade in the North Pacific; and if we lose our trade in that sea we lose just so much of our daily bread. I wish to emphasize the vital importance of fortifying our coal depôt out there, and of having our naval position, now at Esquimalt, capable of resisting an attack. We may at times temporarily lose the command of that sea, and if such an event should happen Esquimalt would be exposed to attack. I presume it is the intention of the Government, in the event of a war, at once to withdraw from Esquimalt; and I fully agree with General Laurie in the view that he takes of the great importance of having a fortified naval station at Burrard's Inlet.

General LAURIE: Mr. Chairman, Captain Curtis has expressed the opinion that the entrance to the straits is actually the key of the position. Unquestionably it is; but then, if the vessels are to go out there (*pointing*) to hold that, they must have a strong fortified base from which to work; and it is just that very point that I am trying to establish—that if the vessels go to the mouth of the straits, assuming that we were at war with an active enemy, and it is not likely we should be at war with anybody else, there is an opportunity for a hostile vessel to lie in neutral waters. If we were at war with the United States they have the power to come out from Puget Sound forts, and attack our naval base. If we were not at war with the United States, it is most probable that they would simply be neutrals, and their ports would afford harbours in which an enemy's vessel could lie in neutral waters, and whilst our vessels were out holding the so-called key of the position, Esquimalt would be at the mercy of that vessel. It is for that reason I want to put the dockyard where it would be safe, where it can be guarded by such forces as we are likely to be able to furnish to protect it. There is no doubt that in time of war, if the United States were neutral, we should have trouble. The strongly marked line shows the boundary between the United States and the British possessions; but I believe an enemy lying within three miles of their coast would be in so-called neutral waters, and there are plenty of harbours in which a vessel could lie and shelter till an opportunity offered to strike a blow. Captain Curtis referred to the fact that coal has been discovered at Burrard's Inlet. No doubt there is coal there, as the cove near Dashing's Mills is called Coal Harbour, but with reference to the coal being brought down from Saskatchewan, that might be very valuable as a last resource, but coal that is to be brought 600 or 800 miles would be very expensive by the time it reached the terminus, and as long as you can get coal at Nanaimo, three miles from a shipping point, it is much more advantageous than having to go over the Rocky Mountains for it, but of course it is a capital thing for Canada that we have that coal up there in those plains where wood is scarce.

Captain CURTIS: I spoke of coal with reference to the railway.

General LAURIE: I was speaking more with reference to the ship supply. With reference to Mr. Pfoundes' remark as to China and Japan, I would only say I do not desire that we should fight with any particular nation; I hope we may remain at peace with all the world, but at the same time the inference from our keeping up an army and navy is that we do expect at some time to have to use it; therefore we naturally look round and see who our probable and possible enemies may be—those who are likely to be brought into contact with us, whose interests are likely to come foul of our own, and therefore who we are likely to quarrel with. I hope we shall have no fight there, but I cannot help thinking that the Pacific will more than probably be the scene of the next great naval contest. That has been my opinion for years past, and hence my anxiety to bring this question into notice. With regard to the relative power of England in the Pacific, it is all very well to say that we have the command of the sea, but though we may have the largest number of vessels afloat, it does not follow that we have a superior number in the particular place where they are wanted, and our position was not so satisfactory a few years ago when we had to take a wooden frigate and try and make a Peruvian ironclad behave itself. I do not think that Admiral de Horsey would care to repeat that experiment more than he could help. Not only that, but the photographs I have seen hanging up in the various houses in Victoria of the "Shah" with her bows out of the water in order

that the shot holes might be filled up, did not give one the idea that we had the command of the sea and had it all our own way. With the enormous interests we have to protect, it seems almost impossible for us to maintain ironclads sufficient to deal with opponents wherever trouble may arise, and I must say the reference Captain Bedford Pim has made to the fact of a squadron of eleven Russian vessels lying in San Francisco at one time shows that numerically we had not a preponderance of power in the place where it might have been very important to us that we should have it.

Captain BEDFORD PIM: Over all the Pacific at that time we had seven ships.

General LAURIE: And some of them are perhaps not as first class as we should like!

Captain BEDFORD PIM: They averaged seven knots—the whole of them.

General LAURIE: With regard to the suggestion that we should send out some of our old ironclads to protect the Esquimalt Harbour, if they are not fit to keep the sea I do not know how they would get round Cape Horn.

Captain BEDFORD PIM: They would be nursed round.

General LAURIE: The enormous increase of commerce that may be expected when the railway is finished gives, to my mind, an additional reason why we should strengthen our squadron on that station. With regard to the cost of moving the yard to Burrard's Inlet, I fancy anybody looking at that yard would see that the expense attending its erection was not very great. Really the cost of the buildings is almost nominal, they are simply wooden sheds. Mr. Williamson thinks we could not hold Burrard's Inlet against the United States. Of course that raises the larger question which Sir Alexander Galt has put in another shape, whether we could hold Canada at all against the United States. Some of us think we could; at any rate, Canada has made up its mind to try, and the people most interested in the matter, the Canadians, have determined to throw in their lot with England: and if such an unfortunate occurrence as a war with the States should happen, the Canadians intend to keep the old Union Jack flying, and to protect it as long as they can. And I fancy what applies to other parts of British North America will apply to British Columbia, small as the population there is. It is quite certain the important fight would not be in British Columbia; but at the same time there would naturally be an effort made to destroy our naval stores there, and it seems desirable, to my mind, that they should be placed in the most defensive position, where they could best be protected, and if they can be placed where they can only be attacked on one side on a very small front, where they cannot be approached by the rear. We are reminded, on a somewhat larger scale, of Leonidas and his 300 Spartans, how they held the narrow-fronted pass of Thermopylæ against untold Persians. You must recollect the thing is to hold out while the ships are absent, to hold it temporarily, not permanently; and I believe that could be done if the garrison had the proposed advantages of defence. It is not settled yet where the Northern Pacific Railway is to strike Puget Sound. The fact of that Northern Pacific coming in behind Esquimalt, as it were, higher up the Sound, so that any expedition prepared at the terminus of the Northern Pacific would pass to the upper side of San Juan Island, and would pass direct to Nanaimo without being exposed to an attack from Esquimalt in passing, puts us at present in the false position that, even although we have the command of the sea, we still might have our coal depôt at Nanaimo burnt. That is why I am anxious we should establish ourselves at Burrard's Inlet, and there we should be able to attack any expedition in flank. Of course the coal is everything, as Sir Leopold M'Clintock pointed out. Sir Edward Selby Smyth, who formerly commanded the Militia in Canada and who visited this province, strongly recommended that a nucleus of regular troops, in the shape of a small body of marines, should be maintained at the naval station wherever it may be; but a small body of marines at Esquimalt would be simply placed there to be gobbled up by the first cruiser that came along. But placed at Burrard's Inlet they have a much better chance of holding their own. Captain Colomb has so lately lectured in this theatre on the subject of the employment of marines and the wonderful way in which their organization fits them for this very work—detached Colonial employ—that it almost seems as if the two subjects fitted in together. I am sorry he was unable to come here to-day, because he brought up that subject, mainly with the view of showing

their capacity for Colonial defence. I must thank all present for kindly attending to-day to hear this, my maiden effort in the shape of a paper on a technical subject, and for the kind way in which you have encouraged me to believe that my remarks have not been altogether thrown away.

The CHAIRMAN : It only remains for me now to offer, in your name, our very best thanks to the lecturer for the extremely able paper he has read to us this afternoon. He has called our attention to the fact that our naval establishments abroad require to be efficiently and adequately protected, and that in the North Pacific our naval station is no exception to that general rule. And I venture to think, though I speak with diffidence on the question, that he has shown very good and sound reason for the position that he has recommended for our naval establishment. Of course these matters are always open to consideration from various points of view, but I sincerely hope that this lecture will meet with its merited consideration from those who are responsible for the defence of the country.