The Influence of the Royal Engineers on the Development of British Columbia

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Ubique quo Fas et Gloria Ducunt

The motto of British Columbia is splendor sine occasu. Much of the credit for that splendor may be due to the work of the Royal Engineers in British Columbia. In an article on military colonization in Canada, Robert England commented that "one of the most striking examples of the influence of military methods and personnel is to be found in the history of British Columbia." The Royal Navy had a significant role in the development of British Columbia, but their presence was naturally restricted mainly to the coast. Barry Gough tells the story of the Royal Navy in British Columbia in his book, The Royal Navy and the Northwest Coast of North America, 1810-1914. However, the full story of the Royal Engineers in British Columbia and their meaning for this province is yet to be told.

It is impossible to do justice to the Royal Engineers in an essay, but an attempt will be made to give some indication of the significance of the various groups that came and to explain the unique relationship between British Columbia and the corps, in particular the Columbia Detachment. Discussing their mission, *The Emigrant Soldiers' Gazette* said:

For such a body [Lytton] turned to the Corps of Royal Engineers, where the call for volunteers was speedily responded to, and the *Times* shortly afterwards, speaking of the corps with reference to the present expedition, said in a leading article on the subject, "Whenever Her Majesty's Government want a body of skilful, intelligent, and industrious mechanics to perform any task requiring peculiar judgment, energy, and accuracy, such as the arrangement of a Great Exhibition, the execution of an accurate National Survey, and so on, or even the construction of houses, roads and bridges, in a new colony, they have only to turn to the Corps of Royal Engineers, and they find all the material they want."²

¹ Robert England, "Disbanded and discharged soldiers in Canada prior to 1914," Canadian Historical Review, v. 27, no. 1 (March 1946), p. 12.

² The Emigrant Soldiers' Gazette and Cape Horn Chronicle, no. 3 (November 20,

An elite corps, whose history can be traced from William the Conqueror, the Royal Engineers were the brains as well as the brawn of the British army, as may be seen from the chart illustrating the "Development of the Corps of Royal Engineers,"* although they did not come under the War Department until 1855 when the Ordnance Department was abolished. An officer corps until 1856 when the Royal Sappers and Miners were amalgamated with the Royal Engineers, with the men to be known as sappers of the Royal Engineers, the corps continued to be in charge of engineering and military stores, as well as a great variety of other tasks.³

The corps demanded intelligence and accomplishment rather than money and patronage, and it is unusual to find a commission in the Royal Engineers purchased, the normal entrance being graduation from the Royal Military Academy. So capable were they in so many fields that the Royal Engineers found themselves working in civilian areas as well as in military. Major-General Porter, in his official history, says:

The Corps of Royal Engineers differs from every other branch of Her Majesty's Service, inasmuch as it is called on to perform not only its duties in connection with military operations, but also many varieties of scientific work of a purely civil nature. There is scarcely a Department of Government in which members of the Corps are not to be found holding high office, purely on account of their scientific attainments. The motto which it bears, "Ubique," is as true in its civil as it is in its military work.⁴

On four separate occasions the services of the Royal Engineers were called upon in British Columbia. The first occasion predates the colonial period and concerned the Oregon Boundary Dispute. In the spring of 1845 British-American relations concerning the Oregon situation had reached such a pitch that when Sir George Simpson presented his memorandum on March 29, as a result of a request by the Foreign Office for information on American settlers in Oregon from Sir John Pelly, Governor of the Hudson's Bay Company, the British government decided to take some action. Sir Robert Peel and Lord Aberdeen conferred with Simpson on April 2, and the following day Aberdeen issued orders for Governor-General Lord Metcalfe to have Sir Richard Jackson, com-

^{1858),} p. [1] See also Lillian Cope, "Colonel Moody and the Royal Engineers in British Columbia" (Vancouver, University of British Columbia, unpublished M.A. thesis, 1940), p. 18.

^{*} Table I, Development of the Corps of Royal Engineers.

³ Whitworth Porter, *History of the Corps of Royal Engineers* (Chatham, Institute of Royal Engineers, 1951), v. 1, p. 148.

⁴ Porter, v. 1, p. 1.

mander of the forces in Canada, select two military officers "who should proceed as private travellers to the Oregon Territory, and examine the important parts of the country, in order to obtain as accurate a knowledge of it as may be requisite for the future and efficient prosecution of military operations in it, should such operations become necessary."5 According to Sir Henry James Warre, there were many applicants for the expedition, but eventually he and Lieut. Mervin Vavasour of the Royal Engineers were selected.6 Lieut. Warre was aide-de-camp to his uncle, Sir Richard Jackson, and was a few years older than Vavasour, who had been in Canada since September 1841, working mainly on the canals in Ontario. They were to follow Simpson's instructions, and were conducted by him to Red River, where they arrived June 7, having left Montreal May 5. Simpson gave them and Ogden, his own officer, written instructions before leaving Fort Garry, June 16. They reached Fort Vancouver on August 25, 1845, and left for Montreal on March 25, 1846. Warre says of their instructions: "The officers so employed would find one or more of Her Majesty's Ships with the Commanders of which they were to communicate." Warre and Vavasour visited the Willamette Valley and the mouth of the Columbia before meeting Lieut. William Peel and Capt. H. W. Parke, R.M., and returning with them and James Douglas and J. W. Sangster of the Hudson's Bay Company up Puget Sound to H.M.S. America anchored in Port Discovery. Peel, the son of the Prime Minister, had been sent by Hon. Capt. John Gordon of the America, brother of Lord Aberdeen, to report on the country. Warre and Vavasour spent two days with Peel and Gordon before going on to Fort Victoria on September 27, the America then sailing for Hawaii. Gordon sent Peel via Central America to London where he arrived at the Admiralty, February 10, 1846, with several reports which were forwarded to the Foreign Office the same day. The reports⁸ included Peel's report to Gordon, September 27, 1845; Peel's report to Pakenham, January 2, 1846; Gordon's report to the Commander-in-Chief, Pacific, Rear

⁵ Lord Aberdeen to Lord Stanley, April 3, 1845. F.O. 5/457 America, "Expeditions of Lieuts. Warre & Vavasour to the Oregon Territory." See "Documents relative to Warre and Vavasour's military reconnaissance in Oregon, 1845-6," edited by Joseph Schafer, Oregon Historical Quarterly, v. 10, no. 1 (March 1909), p. 17.

⁶ Henry James Warre, "Travel and sport in North America, 1839-1846," typescript, p. 52. Public Archives of Canada, M.G. 24 F71.

⁷ Warre, p. 52.

⁸ P.R.O. F.O. 5/459. See Barry M. Gough, *The Royal Navy and the Northwest Coast of North America 1810-1914* (Vancouver, University of British Columbia Press, 1971), pp. 72-73; also his "H.M.S. America on the North Pacific Coast," *Oregon Historical Quarterly*, v. 52, no. 4 (December 1969), pp. 302-303.

TABLE I

DEVELOPMENT OF THE CORPS OF ROYAL ENGINEERS — 1661

FORMATION OF BRITISH REGULAR ARMY

OFFICERS

King's Engineers

Employed from Norman times on King's fortifications and works

1608

Engineer officers raised for permanent duty with ordnance trains for wars against France and the War of Spanish Succession, 1701-1713

26 May 1716

ROYAL ARTILLERY AND CORPS OF ENGINEERS constituted on separate establishments

25 April 1787

CORPS OF ENGINEERS given ROYAL title, becoming CORPS OF ROYAL ENGINEERS

SOLDIERS

Skilled men enrolled for ordnance trains, raised for specific campaigns and disbanded when no longer required

6 March 1772

Formation of SOLDIER ARTIFICERS at Gibraltar served through Great Siege, 1779-1788

10 October 1787

Formation of CORPS OF ROYAL MILITARY ARTIFICERS for work on defences at home and in defended ports of rapidly growing empire

June 1797

The Soldier Artificers at Gibraltar incorporated with the Corps of Royal Military Artificers

1812-1813

Name changed to ROYAL SAPPERS AND MINERS towards the close of the Peninsular War, 1808-1814, in view of the changing combat role of the military engineer

17 October 1856

CORPS OF ROYAL SAPPERS AND MINERS incorporated into the CORPS OF ROYAL ENGINEERS at the end of the Crimean War, 1854-1856

April 1862

British officers and NCOs of the Honourable East Indian Company Engineers amalgamated with the CORPS OF ROYAL ENGINEERS after the suppression of the Indian Mutiny, 1857-1858

PROGENY OF THE CORPS

Submarine Mining From 1871-1905 thence to the Royal Navv From 1866-1910 thence progressively to the Royal Army Service Corps Military Mechanical Transport From 1871-1912 thence to the Royal Flying Corps Military Flying Royal Engineers responsible for early development and operational use of the tank, Tanks and when first used in mass at Battle of Cambrai. November 1917, they were commanded by a Royal Engineers officer Military Signalling From 1856-1920 thence to the Royal Corps of Signals

Searchlights

Works Service

From 1880 to 1938 thence progressively to the Royal Artillery

From the earliest days the Engineers were responsible for fortifications and works services i.e. military accommodation. During the Napoleonic Wars, 1808-1815, the Royal Engineers were responsible for works services for the Royal Artillery, the Royal Engineers and other Corps administered by the Board of Ordnance and for defences. The responsibility for the works services of other arms was vested in a civilian organization under a barrack master-general.

In 1882 the Royal Engineers once more assumed full responsibility for works services at home and overseas.

In 1904 the Royal Engineers remained responsible for works services overseas, but a Civil Barrack Construction Dept. became responsible for works services at home. In 1917 the Royal Engineers once more assumed full responsibility for works services at home and overseas.

In 1959 the responsibility for peacetime works services throughout the world passed to a civilian works organization, the Royal Engineers remaining responsible

for works services in war and in areas where the civilian organization cannot operate in peacetime.

Transport Operating and From 1882-1965 thence to the Royal Corps of Transport, formed 15 July 1965. Civilian engineering aspects remain with the Royal Engineers. Movement Control Services

(From chart in Corps Museum, Institute of Royal Engineers, Brompton Barracks, Chatham, England, September 1973.)

Admiral Sir George Seymour, October 22, 1845; and Dr. John McLoughlin's report to Gordon, September 15, 1845. With the exception of McLoughlin's report, which would be the Hudson's Bay Company's view, all the reports are dated after the discussions with Warre and Vavasour in Port Discovery. As Rich says, "the naval and the military officers worked together," and were obviously on very good terms.

Although Peel and Gordon give no credit to Warre and Vavasour, their discussion must have had some influence, and their conclusions are similar. Leslie M. Scott places more emphasis on Peel's oral report than his written one, equating it with Warre and Vavasour's report, and suggests that Peel's testimony contributed to the sudden reversal of British diplomacy in accepting the 49th parallel as the boundary. Joseph Schafer implies that Warre and Vavasour's views influenced Peel's report, and that "we have good reason to believe that the attitude of Great Britain in the final stage of the negotiations was not unaffected by them."

Although Warre and Vavasour's own reports on Oregon arrived in London¹² too late to have a direct effect on the Oregon Treaty, which was signed June 15, 1846, their views must have affected Peel's and Gordon's, and so indirectly influenced the decision which settled on the 49th parallel as our boundary, but preserving Vancouver Island intact in British territory. Except for the publication of Warre's Sketches in North America and the Oregon Territory after his return to England in 1846, little was known of this expedition for the next sixty years, probably because of its secret nature. Aside from the settlement of the boundary, the only long-term effects must have been the increased awareness in the British government of the British territory in the Pacific Northwest, and perhaps Douglas' later attitude toward the Royal Engineers. Douglas was at Fort Vancouver during Warre and Vavasour's visit, and accompanied them to Fort Victoria, and according to Rich, "the fur-traders

⁹ E. E. Rich, The History of the Hudson's Bay Company 1670-1870, Volume II: 1763-1870 (London, Hudson's Bay Record Society, 1959, v. 22), p. 727.

Leslie M. Scott, ed., "Report of Lieutenant Peel on Oregon in 1845-46," Oregon Historical Quarterly, v. 29, no. 1 (March 1928), p. 51.

¹¹ Schafer, p. 13.

Warre and Vavasour's report to Lord Metcalfe from Fort Vancouver, November 1, 1845, was not forwarded to Addington until July 18, 1846. W.O. 1/552 "Report of Lieuts. Warre & Vavasour," pp. 438-441. Warre and Vavasour arrived in Montreal July 20, and Warre was in London by August 15 to give their final report. See Henry J. Warre, Sketches in North America and the Oregon Territory (Barre, Mass., Imprint Society, 1970), p. 8.

formed a low estimate of their character and abilities, as of their naval brother officers."¹³ However, Warre and Vavasour were travelling in the guise of tourists, and Warre, in particular, was an avid sportsman. McLoughlin was not told of their real purpose, and since there was some suspicion that they were spying on his activities, he took strong exception to their report on the company's relations with the American settlers. He retired from the company's service in bitterness.¹⁴

The second occasion on which the Royal Engineers came to British Columbia was a "second act" of the Oregon boundary "drama": the actual survey of the international boundary in British Columbia, 1858-1862. Although the Oregon Treaty had been signed June 15, 1846, it was not until August 11, 1856, that Congress authorized the appointment of a commission to carry out the provisions of Article 1. Archibald Campbell was appointed commissioner, and Major J. G. Parke the astronomer for the American Northwest Boundary Commission. The British divided their North American Boundary Commission between land and water survey parties. The first British commissioner was Capt. James Charles Prevost of H.M.S. Satellite, who arrived in Victoria in June 1857, just before the American commission on the Active. The second British commissioner, Capt. G. H. Richards, arrived in November 1857, having been delayed by mechanical problems with the Plumper. The American party began the land survey at Point Roberts, while the British were surveying the waters. The British land commission arrived July 12, 1858, and was composed mainly of Royal Engineers. The chief commissioner was Capt. John Summerfield Hawkins, R.E., and the other officers were Capt. Charles John Darrah, R.E., astronomer; Capt. Robert Wolsely Haig, R.A., senior astronomer; Lieut. Charles William Wilson, R.E., secretary, transport officer and commander of the Royal Engineers detachment of 56 non-commissioned officers and sappers, specially chosen for the work; Dr. David Lyall, R.N., in medicinal charge; Dr. John Keast Lord, naturalist; and Dr. Hilary Bauerman, geologist. In 1860 they were joined by Lieut. Samuel Anderson, R.E., who became secretary of the commission after its return to England.

The British land commission had their first meeting with the Americans at Semiahmoo Bay on August 13, 1858, and differences came to

¹³ Rich, p. 727.

¹⁴ Herman A. Leader, "McLoughlin's answer to Warre Report," Oregon Historical Quarterly, v. 33, no. 3 (September 1932), pp. 214-229; also The Letters of John McLoughlin from Fort Vancouver to the Governor and Committee, Third Series, 1844-46, edited by E. E. Rich (London, Hudson's Bay Record Society, 1944, v. 7), pp. lv, 285-298.

light immediately. Hawkins' patience and determination to follow his orders to co-operate with the Americans, plus the fact that the Americans were always a season ahead in surveying, prevented the differences between Hawkins and Campbell from interfering with the survey. Hawkins' problem was not unique, as friction developed again during the prairie portion of the survey, between Campbell and the then British commissioner Capt. Donald R. Cameron.¹⁵

Hawkins believed that his instructions were to survey and mark the boundary in such a way that there could be no possibility of future dispute, and in this situation it meant considerable work and time in cutting a vista through the thick forests, and numerous permanent iron markers, and some arrangement to maintain the markers and cuts. Campbell thought the lengthy cutting and the iron markers too expensive, and wanted to limit them to the established points, refusing to refer the matter to his government. A more successful meeting at Harney Depot, Fort Colvile, in November 1860, which "formed a marked contrast to the meeting in April 1859,"16 resulted in the agreement to mark the boundary west of the Cascades with iron monuments (supplied by the British), including a stone obelisk on the western terminus, and with stone beacons along the remainder. The Americans agreed to extend their cuts along the boundary, but most of the cutting was done by the British, with about one-third of the boundary cut altogether. Local magnetic conditions resulted in a number of the lines cut not meeting. After much concern a solution was found, which caused many problems to arise later that Hawkins had hoped to prevent. When settlers arrived they found in some places two or three boundary cuts, and additional markers which the American crews were to have removed. The British records disappeared until 1898, when they were found by accident in the Royal Observatory, Greenwich, by the observant Canadian chief astronomer Dr. Otto Klotz.17 Marcus Baker published as much as he could find of the American commission in 1900. The reports and maps were not completed until 1869, when the final agreement was signed in Washington on May 7, finally terminating the work of the two commis-

¹⁵ Charles W. Wilson, *Mapping the Frontier*, edited by George F. G. Stanley (Toronto, Macmillan, 1970), p. 11.

¹⁶ Lieut.-Col. Hawkins to the Sec. of State, Colville, March 28, 1861. F.O. 5/811 America 1858-63. In Otto Klotz, Certain Correspondence of the Foreign Office.... (Ottawa, 1899), pt. 3, p. 50. "Colville" sometimes appears as "Colvile," which is the correct spelling of the family name.

¹⁷ Otto Klotz, "The history of the forty-ninth parallel survey west of the Rocky Mountain," Geographical Review, v. 3, no. 5 (May 1917), p. 384.

sions. The American report was not published then due to cost and the financial situation caused by the Civil War, although a limited edition of the seven-sheet map of the land boundary was produced. For some reason the British report was not published either, although some photozincographed copies of the maps were produced prior to the signing in May 1869, and corrected copies were to be reproduced. At least five mounted and bound sets of the maps were planned (one each for the Foreign Office, the Colonial Office, the Topographical Office of the War Department, the British Columbia government and the United States Department of State), and an atlas, as planned by Hawkins, was delivered in Washington on June 23, 1871, with the imprint "Photozincographed at the ordnance survey office, Southampton, under the superintendence of Capt. Parsons, R.E., F.R.A.S.; Col. Sir Henry James, R.E., F.R.S., etc., director, 1869."18 (Capt. Parsons had been in British Columbia with the Columbia Detachment.) Wilson was by this time a captain, and was director of the Topographic Office, under Col. James, and Hawkins suggested Wilson as the logical person to make the required corrections to the maps.

The British land boundary commission consisted of 63 men, which increased to about 125 with the hired men, such as packers and guides. The five American commissioners and their men had four companies of infantry as escort to protect them from the Indians. The British commission seems to have been popular wherever they went. The Indians at Colvile were very sorry to see them leave, and in many instances during the survey the Engineers were aided by Indians. The commission members joined in with the society in Victoria and in Forts Vancouver and Colvile, and contributed with their presence and their balls.

The boundary commission worked hard and well in their four years here, in spite of "the disorganization prevailing in every branch of business or industry" and "the *very* high prices ruling here, for every description of article or of labour" due to the gold rush. If we may speculate for a moment, if Campbell had been less suspicious and more co-operative in following Hawkins' wise suggestions for cutting and marking the

¹⁸ Marcus Baker, Survey of the Northwestern Boundary of the United States (Washington, 1900), p. 25.

¹⁹ Herman J. Deutsch, Surveying the 49th Parallel, 1858-61 (Tacoma, Washington State Historical Society, 1962), p. 5. Also axemen, who struck for higher wages in June 1859, probably British Columbia's first strike. See Wilson, p. 11.

²⁰ Mapping the Frontier, p. 112.

²¹ Hawkins to Sec. of State for Foreign Affairs, Esquimalt, March 28, 1859, in Certain Correspondence, pt. 3, p. 12.

TABLE II

ARRIVAL OF THE COLUMBIA DETACHMENT OF ROYAL ENGINEERS IN BRITISH COLUMBIA

Group I	Group II	Group III	Group IV
Capt. Parsons & 20 men (chiefly surveyors) left Southampton Sept. 2, 1858, on <i>LaPlata</i> ; came <i>via</i> Panama; arrived Oct. 29, 1858.	Capt. Grant & 12 men (chiefly carpenters) left Southampton Sept. 17, 1858, on <i>Arato</i> ;* came <i>via</i> Panama; arrived Nov. 8, 1858.	Capt. Luard & 121 men, 31 women & 34 children left Gravesend Oct. 10, 1858, on <i>Thames City</i> ; came around Cape Horn; arrived April 12, 1859.	Sgt. Rylatt & 4 men, 6 women & 4 children left London Docks Jan. 3, 1859, on <i>Euphrates</i> ; came around Cape Horn with stores; arrived June 27, 1859.
Breakenridge, Arch. T.	Alexander, Walter	12, 1039.	
Brown, Jonathan	Bonson, Lewis F.		Rylatt, R. M., and wife
Colston, Robert	Bruce, Henry		Bowden, Corp. Wm., R. A.,
Conroy, James	Dawson, Samuel		and wife
Duffy, James	Edwards, Wm. "Black Bill"		Deasy, Spr Daniel, and wife
Ellard, James	Kennedy, James		Hall, Spr James, and wife
Goskirk, Robert	Maynard, Joseph		Hall, Corp. Wm., wife and
Kennedy, David	Manstrie, William		3 children
Lomax, Thomas	Allen, Frederick*		Keary, Mrs. James, and son
Leech, Peter John	Bowden, George*		
McColl, William	Byers, William*		
Maclure, John	Dobbs, George*		
McMillan, Murdock	Dransfield, Henry*		
Meade, John	Eade, Charles*		
Robertson, Alex. S.	Johnson, Samuel*		
Shannon, James	Thurgate, Frederick*		
Turnbull, James	(* uncertain if with this		
Armstrong, Robert	group)		

Col. and Mrs. Moody and 4 children left Liverpool Oct. 30, 1858, on Asia; came via Panama; arrived Dec. 25, 1858.

^{*} Name given by Cope, p. 21; not in Times or B.C. Papers.

boundary, the boundary problem could have been solved in 1862, or at least in 1869 when the report was signed. The Engineers arrived back in England on July 14, 1862, but the duties of the commission were not completed until June 7, 1869, and it was another two years before the corrected maps were deposited in Washington, 25 years after the Oregon Treaty. The final report, however, did not come until 1937, 91 years after the treaty!

Following the publication of the British and American papers in 1899 and 1900, a new survey was carried out by Canadian and American crews between 1901 and 1907, and "few corrections were found necessary, so carefully had the work been done by the original surveyors."²² Lines were cleared and markers restored, but permanent patrols to maintain the line did not begin until 1925. A treaty signed at Washington, April 11, 1908, provided for the appointment of special boundary commissions by Canada and the United States. A joint report was issued in 1921, and another in 1937 containing most of the relevant data on the boundary line.

The third and largest group of Royal Engineers to come to British Columbia, the Columbia Detachment, began arriving about three months after the Engineers of the boundary commission. As a large majority of the men elected to remain in British Columbia when the detachment disbanded in 1863, it may safely be said that the Columbia Detachment had the greatest impact on the province of the various groups of Royal Engineers. They arrived in four groups,* October 29 and November 8, 1858, and April 12 and June 27, 1859, with their commander, Col. Moody, arriving on Christmas Day, 1858. Writing in his diary in Victoria on November 14, 1858, Lieut. Wilson says:

Some of the Engineers for British Columbia have arrived,

and on December 30 he adds:

All the officials for British Columbia have come out here, nearly all Engineer officers; when the Thames City arrives we shall have quite a gathering of the corps; 10 Engineers meeting in this part of the world will be a novelty.²³

Much has been written about the work of this Columbia Detachment. In the words of Don Thomson, speaking of their surveying:

In the face of such conditions the record of solid accomplishments made

²² Mapping the Frontier, p. 18.

^{*} See Table II, Arrival of the Columbia Detachment....

²³ Mapping the Frontier, pp. 40, 42.

by the Royal Engineers on the West Coast commends admiration, if not reverence.²⁴

In 1858 the gold rush brought James Douglas, governor of Vancouver Island and chief factor for the Hudson's Bay Company lands on the mainland, many problems, among them the maintenance of law and order, and of defence. When Douglas overstepped his authority in an attempt to handle the situation on the mainland, the Secretary of State for the Colonies offered him a commission as governor of the mainland colony of British Columbia, on condition that Douglas sever all connection with the Hudson's Bay Company and its sudsidiaries. Although the Royal Navy and the Hudson's Bay Company vessels could assist on the coast, Douglas realized they were of little help in the interior, and on August 19, 1858, he wrote to the Colonial Office requesting assistance, "even a single company of infantry."25 However, the Right Honourable Sir Edward Bulwer Lytton had anticipated not only this need, but many other needs of a new colony, and decided to experiment in solving many problems "with one blow." On July 30 he notified Douglas that he was sending a company of Royal Engineers with an officer, two or three subalterns and 150 men,26 and the next day he followed with another letter explaining the duties of these Engineers:

It will devolve upon them to survey those parts of the country which may be considered most suitable for settlement, to mark out allotments of land for public purposes, to suggest a site for the seat of government, to point out where roads should be made, and to render you such assistance as may be in their power, on the distinct understanding, however, that this force is to be maintained at the Imperial cost for only a limited period, and that, if required afterwards, the Colony will have to defray the expense thereof. I have to add that I am of the opinion that it will be reasonable and proper that the expense of the survey of all allotments of land to private individuals should be included in the price which the purchaser will have to pay for his property.

I shall endeavour to secure, if possible, the services of an officer in command of the Engineers who will be capable of reporting on the value of the mineral resources. This force is sent for scientific and practical purposes, and not solely for military objects. As little display as possible should, therefore, be made of it. Its mere appearance, if prominently obtruded, might serve

²⁴ Don W. Thomson, Men and Meridians, v. 1 (Ottawa, 1966), p. 282.

²⁵ James Douglas to Lord Stanley, Victoria, August 19, 1858, Despatch no. 34, in Papers Relative to the Affairs of British Columbia, Part I (London, 1859), p. 27. Hereafter cited as B.C. Papers.

²⁶ Rt. Hon. Sir E. B. Lytton to Gov. Douglas, July 30, 1858, Despatch no. 5 in B.C. Papers, Pt. 1, p. 44.

to irritate, rather than appease, the mixed population which should be collected in British Columbia. It should be remembered that your real strength lies in the conviction of the emigrants, and their interests are identical with those of the government, which should be carried on in harmony with and by means of the people of the country.²⁷

In a confidential letter to Douglas on October 16, 1858, Lytton explains why he selected the Royal Engineers:

With regard to your demand for a military force, it is gratifying to me to learn, from your statement that "the affairs of government might be carried on smoothly with even a single company of infantry," that I had anticipated and indeed exceeded your requirements by directions given at the earliest moment for sending to the colony a party of 150 Royal Engineers. The superior discipline and intelligence of this force, which afford grounds for expecting that they will be far less likely than ordinary soldiers of the line to yield to the temptation to desertion offered by the gold fields, and their capacity at once to provide for themselves in a country without habitation, appear to me to render them especially suited for this duty; whilst by their services as pioneers in the work of civilization, in opening up the resources of the country, by the construction of roads and bridges, in laying the foundations of a future city or seaport, and in carrying out the numerous engineering works which in the earlier stages of colonization are so essential to the progress and welfare of the community, they will probably not only be preserved from the idleness which may corrupt the discipline of ordinary soldiers, but establish themselves in the popular good-will of the emigrants by the civil benefits it will be in the regular nature of their occupation to confer.28

Lord Lytton had a vision of a great nation, and wisely selected the best men from the best group of men to fulfill all the immediate needs, and to build a solid foundation for the colony and future province. Unfortunately he underestimated the problems and overestimated the work that even the Royal Engineers could accomplish in the time they were allowed. In 1861 Hawkins wrote that "the travelling and provisioning of both men and animals have, throughout the expedition, been the greatest drawbacks to progress!" Warre and Vavasour foresaw the problems Hawkins faced. Everyone complained of the difficult terrain, the high prices and the disorganization, and always there was a lack of money for the necessary improvements to alleviate the situation. Thomson attributes

²⁷ Lytton to Douglas, July 31, 1858, Despatch no. 6 in B.C. Papers, pt. I, p. 45.

²⁸ Lytton to Douglas, October 16, 1858, Despatch no. 30 in B.C. Papers, pt. I, p. 69.

²⁹ Hawkins to Sec. of State Colville, April 12, 1861, in Certain Correspondence, pt. 3, p. 55.

most of the friction between Douglas and Moody to the "well-nigh insoluble fiscal problems." 30

Money may have been the root of the problem, for as Lytton told Douglas:

Her Majesty's Government expect that British Columbia shall be self-supporting, and that the first charge upon the land sales must be that of defraying all the expenses which this Engineer party shall occasion. Any expenditure which the British Treasury shall have incurred on this account will have to be reimbursed by the Colony as soon as its circumstances permit, and for which I have now to instruct you to make suitable provision.³¹

However, there were many other differences as well, and, unlike Hawkins and Campbell, Douglas and Moody could not avoid one another. Douglas had grown up in the Hudson's Bay Company service and was used to being the autocratic ruler, the benevolent despot, and his kingdom was Vancouver Island and New Caledonia, regardless of name or political condition. He knew his country and did his best for it, and to a large extent, he was right. Moody, on the other hand, was a highly trained soldier and an experienced leader and governor (of the Falkland Islands, 1841-1849), with a monumental task before him and instructions from a visionary with no real conception of the local situation. Douglas was pleased at first with the appointment of the Royal Engineers and Col. Moody, and as long as he thought Moody a lieutenant-governor, all was well.32 After Lytton clarified the situation in a letter to Douglas on March 21, 1859, the attitude of the governor towards his subordinate steadily deteriorated.33 Douglas appears to have had good reason, in light of the despatch from Lytton, quoted above, as he explains in his confidential report on the characters and qualifications of the public servants sent to the Colonial Office early in 1863:

The attainments, high moral worth and gentlemanly qualities of Colonel Moody are familiarly known to his friends. I am in duty bound however to remark that his management as a public administrator in this Colony has not been satisfactory to me. I have in fact found it necessary to exercise the utmost vigilance over his public acts and, after having narrowly escaped being involved in a ruinous contract for the survey of the public lands, which he had entered into with Mr. Joseph Trutch, a civilian surveyor, and from the

³⁰ Thomson, v. 1, p. 282.

³¹ Lytton to Douglas, September 2, 1858, Despatch no. 8, B.C. Papers, pt. I, p. 56.

³² Douglas to Lytton, November 4, 1858, Despatch no. 15, B.C. Papers, pt. II, p. 21.

³³ Cope, p. 51, referring to the tone of the Douglas-Moody Correspondence, Provincial Archives of British Columbia.

utter complication of the land system by a deviation from the spirit if not from the letter of the "Pre-emption Act," I found it requisite to issue the most precise instructions for his guidance in matters of finance as well as of general administration, though previously induced by his position in the public service to allow him a wide discretion.³⁴

Unfortunately, Moody had great difficulty matching his small band of men and very limited finances with the vast amount of work needing to be done all at once. Moody retired January 25, 1866, at the age of 53, after three years at Chatham.

Douglas' request for soldiers was, as we have seen, based on his need for support in defence and the maintenance of law and order. Soon after the arrival of the boundary commission in July 1858, Douglas called on the Engineers to quell a riot in Victoria, and in August 1858, Prevost sent Hawkins and 15 sappers along with Lieut. Jones, R.M., and 20 marines as a bodyguard for the governor during Douglas' tour of the mining camps. In January 1859, Engineers were again called upon, to quell a supposed rebellion in the "Ned McGowan War," when Moody sent Capt. Grant and 25 sappers with marines and sailors to Yale, accompanied by Judge Begbie. In these cases the soldiers were there more as policemen. What might be considered a military action took place during the "Pig War," or San Juan Boundary dispute, in August 1859, which involved Lieut. Lempriere and 14 Royal Engineers, who joined 48 Royal Marines on the Plumper, accompanied by Moody, the Colonel-in-Chief of the land forces in British Columbia and Vancouver Island, and with the Royal Navy ships under Rear-Admiral Baynes they faced the Americans in Griffin Bay. A semi-military function was performed in November 1858, when Grant led an honour guard of Royal Engineers at the installation of the colonial government at New Fort Langley.

The major task of the Columbia Detachment, and the one for which they are best known, was the one which caused the greatest expense and disagreement — the job of surveying. Lytton emphasized in instructions both to Douglas and to Moody the need for townsites to be laid out and land surveyed and sold, to pay for surveying and for the Royal Engineers' expenses, ³⁵ and to bring in more settlers and begin to develop the country. Douglas wanted roads surveyed and built to give access to the interior

³⁴ Douglas to Newcastle, February 18, 1863, C.O. 60, "British Columbia original correspondence, 1858-71," p. 146 (Microfilm reel 12).

Lytton to Douglas, August 14, 1858, Despatch no. 9; Merivale to Moody, August 23, 1858, Enclosure 5 in Despatch no. 16; Lytton to Douglas, September 2, 1858; and Lytton to Moody, October 29, 1858, Enclosure in Despatch no. 33, November 1, 1858, in B.C. Papers, pt. I, pp. 49, 55, 73-76.

immediately and meet the needs of both miners and colonial officials by improving transportation and communication. Being on the spot, Douglas could not help placing priority on such pressing problems as how to get to Cariboo and back. Besides being Commanding Royal Engineer, and holding a dormant commission as lieutenant-governor, Moody was also Commissioner of Lands and Works. The Royal Engineers' work as surveyors and engineers began as soon as they arrived, with the construction of their own camp and the survey of a site for the new capital or Queensborough, which name was soon changed to New Westminster.

The year of 1859 saw the townsites of Yale, Hope and Douglas surveyed; the construction of an observatory at the camp, beginning the first official meteorological observations in British Columbia; the survey and making of a trail from New Westminster to Burrard Inlet (North Road); the exploration of Lempriere of the route from Hope to Lytton via the Coquihalla and the completion of the mule road to Boston Bar; and the survey and construction of a road from Douglas to Lillooet. The new Pre-emption Act of January 4, 1860, kept the survey department busy surveying lands applied for by settlers. In the 1860 season Grant completed the Douglas-Lillooet road and cleared the channel at the mouth of Harrison River; McColl located the trail built later the same year by Edgar Dewdney, a civilian, from Hope to the Similkameen and Cann built the difficult section around the mountain on the first part of the new trail from Yale to Spuzzum; the townsites of Lytton and Lillooet were laid out and reconnaissance surveys were made of the Sumas-Chilliwack country by Parsons, and of the Pemberton-Lillooet area for an alternate road, by Duffy and Breakenridge, and for a trail to tidewater. The Douglas-Lillooet road was improved by Bridgeman in 1861, in honour of which he was dubbed "the conqueror of Gibraltar" (a steep hill along the road). The same season, Grant built 25 miles of the Hope-Similkameen wagon road, with parties under Bonson, W. Hall and McMurphy, and Yale to Lytton was surveyed and specifications drawn up for a road.

In 1862 the famous Cariboo wagon road was begun, and although much was contracted for — to be inspected by the Royal Engineers, Grant with parties of Engineers under W. Hall and Rogerson did all the work themselves on the six miles through rock north of Yale. A possible alternate route to the interior was sought with Palmer's survey of the Bentinck Arm route. The corps' final year in British Columbia, 1863, was a very busy one. The Cariboo Road from Clinton to Alexandria was located and the contract let. Grant, who had charge of the whole Cariboo Road,

supervised the building of a 63-mile trail between Quesnelmouth and Barkerville *via* the Cottonwood. Palmer, in an address to the Royal Geographical Society on March 14, 1864, spoke of "400 miles of excellent waggon-roads... from Yale... to Cariboo." Palmer himself built the first nine miles of the road east from Cook's Ferry (Spences Bridge). Dr. Cheadle, returning from the Cariboo with Lord Milton on November 21, 1863, comments:

Part of the road last made by the Engineers (when L. Palmer was anxious to get away to be married) was a narrow strip of loose sand, built up at the edge by loose stones which had partly given way; an awful place.³⁷

On the completion of the Cariboo Road in October 1863, it was "opened" by the Royal Engineers marching around the bluff at Yale, with their band playing. From the rock of the canyon to the sand of the dry belt the Engineers had numerous construction problems, but today's version of the Cariboo wagon road, though improved with modern technology, still remains a monument to the skill of the Royal Engineers. J. W. Trutch, a civilian, Moody's successor in Lands and Works, built the Alexandra Suspension Bridge at the location selected by McColl in 1861, which Palmer passed as satisfactory in September. A party under Lance-Corp. George Turner surveyed the original Lots 184, 185, 186 and 187, now a part of Vancouver, and made a complete traverse of the shoreline from Hastings townsite to False Creek. The suburban lots adjoining New Westminster were surveyed in the Spring, and on April 20 the city council named Moody Square in commemoration of the founder of the city.

On July 8, 1863, the order to return home was read on parade. The Imperial government had arranged that Engineers wishing to stay in the colony would receive a land grant, and some 130 men stayed, some in government service, others in civilian jobs. Bouglas, despite all his complaints about the Royal Engineers, wrote to Rear Admiral John Kingcome on September 15, 1863, that the disbanding of the Royal Engineers left British Columbia and Vancouver Island "deprived of their sole military force and altogether dependent for protection on the naval

³⁶ H. S. Palmer, "The geography of British Columbia and the condition of the Cariboo gold district," Royal Geographical Society *Proceedings*, March 14, 1864, p. 86. See also F. W. Howay, *The Work of the Royal Engineers in British Columbia*, 1858 to 1863 (Victoria, 1910), p. 9.

Walter B. Cheadle, Cheadle's Journal of Trip Across Canada, 1862-1863 (Edmonton, Hurtig, 1971), p. 264. Lt. Palmer married Mary Jane Pearson, daughter of Archdeacon Wright, at New Westminster, 7 October 1863.

³⁸ Howay, p. 11.

TABLE III

ROYAL ENGINEERS RETURNING TO ENGLAND, NOVEMBER 1863

ваввасе, Richard, Sapper

BYERS, William, Lance Corporal*

CANN, George, Acting Sergeant Major, and Mrs. Cann

CONROY, James, Lance Corporal

frost, Joseph, Sapper

GRANT, John Marshall (1822?-1902), Captain, Mrs. Grant and 3 children

HAWKINS, William, Sergeant JAFFREY, John, Sapper

LEMPRIERE, Arthur Reid, Lieutenant**

LUARD, Henry Reynolds (1829-1870), Captain, and Mrs. Luard

MAYNARD, Isaac G. (1837-1911), Sapper***

MOODY, Richard Clement (1813-1887), Colonel, Mrs. Moody and 7 children OSMENT, David S., Acting Quartermaster Sergeant, Mrs. Osment and 5 children

PALMER, Henry Spencer (1838-1893), Lieutenant, and Mrs. Palmer

PARSONS, Robert Mann (d. 1897), Captain

PERKINS, Thomas, Sapper

ROBINSON, William, Sapper, Mrs. Robinson and 2 children

ROGERSON, William, Sergeant, and Mrs. Rogerson

SEDDALL, John Vernon, Staff Assistant Surgeon

SINNETT, Charles, 2d Corporal

THURGATE, Frederick, Sapper

TRIBUTE, James, Sapper

The above names not marked with an asterisk are included in Col. Moody's "Nominal Roll of Royal Engineers proceeding to England" sent to Capt. Hardinge, R.N., H.M.S. Cameleon, 4 Nov. '63. Two names on Moody's "Roll," Sergt. Lindsay and Corp. and Mrs. McKenney, did not return to England, and some others may have remained as well

- * Wolfenden's list shows Byers living in England in 1907.
- ** Lieut. Lempriere was an officer, and obviously returned to England and continued his career.
- *** Maynard's obituary in the Provincial Archives implies that he returned to England in 1863.

force stationed there." Ocl. Moody and his officers were guests of honour at a dinner in New Westminster on November 6, at which Col. Moody said, in responding to the toast:

We have simply striven our best to do our duty. This is what a soldier has always before him. It is his highest ambition to do his duty well....

³⁹ Admiralty Correspondence, v. 3, Provincial Archives of British Columbia; quoted by Gough, *The Royal Navy*, p. 207.

It was an experiment, gentlemen, a novelty mingling thus military and civil duties. How far it has met what was sought for by the Government is not for me to say. I ever, as was natural, and as was my duty, kept the military part foremost in my mind, and it is with feelings of extreme satisfaction I can reflect on that part of our service in British Columbia. You have been witnesses throughout of our discipline, and at the same time how we—soldiers—have borne ourselves in our social relations with you. Some anxiety was felt on the probable result of this part of the experiment. I had no fear. I had full confidence from the beginning in the class of men I have had the honour to command. I knew what they were; I knew how well they would act, and in this I have not been mistaken....⁴⁰

Of the 165 Royal Engineers, 32 wives and 38 children who came with the detachment, 22 officers and men, 8 wives and 17 children left in November 1863.* The *British Columbian* of November 16, 1863, describes a very moving scene as the Royal Enginers departed, their band playing such tunes as "Auld Lang Syne" and "Home Sweet Home," and the crowds on shore and sailors in port cheered and tearfully waved farewell.

Col. Moody had good reason to be proud of his corps and the work they accomplished in British Columbia. Judge Howay says:

Taking stock of the work of the Engineers up to the end of 1863, we find that all the important explorations in the colony were performed by them; the whole peninsula between Burrard Inlet and Fraser River was surveyed by them; all the surveys of towns and country lands were made by them; all the main roads were laid out by them; some of these, including portions of the Cariboo Road, the Hope-Similkameen Road, the Douglas-Lillooet Road, and the North Road to Burrard Inlet, were built by them; practically all the maps of the colony and of sections of it were made from their surveys, prepared in their drafting office, lithographed and published by them at their camp; they formed, in 1862, the first building society in the colony; they designed the first churches (Holy Trinity Church and St. Mary's Church, New Westminster) and the first school-house in the colony; they designed the first coat-of-arms and the first postage-stamp in the colony; they established the first observatory, and to them we owe the first systematic meteorological observations in the colony, covering a period of three years; they formed the Lands and Works Department, the Government Printing Office, and printed the first British Columbia Gazette; they aided in the maintenance of law and order; and their commanding officer was the first Chief Commissioner of Lands and Works, as well as the first Lieutenant-Governor.41

⁴⁰ "The Dinner to Col. Moody and the Officers of the Royal Engineers," British Columbian, November 7, 1863, p. 2.

^{*} Table III, Royal Engineers returning to England, November 1863.

⁴¹ Howay, pp. 9-10.

In addition, Capt. William Driscoll Gosset, another Royal Engineer, came as colonial treasurer and postmaster for British Columbia, arriving in December 1858, with Col. Moody and his family. He relinquished the job of postmaster in August 1860, but served as treasurer of Vancouver Island from August 1859, to July 1860, with no additional pay. He left on sick leave in September 1862. Douglas had serious difficulties with Gosset and wrote in his confidential report on him:

Treasurer. Age about 40. Apparently of weak constitution and does not enjoy good health.

Is a Captain in the Royal Engineers on seconded list. Appointed by Secretary of State to be Treasurer of British Columbia in October, 1858. Arrived in the colony in December, 1858. Went home on sick leave in September, 1862. My experience of Captain Gosset has not been happy. Except as a mere Treasury Clerk he has been of no use to me. As a financial officer he was valueless. I have invariably found him defective in judgement. His temper is capricious, and I cannot recall a single instance of any useful suggestion emanating from him. I could never rely on his cordial co-operation, where combined action was necessary, and I am persuaded that he encouraged disaffection and wilfully misrepresented my government through the Public Press, both in this country and in Europe. In short I believe him to be politically faithless and unprincipled.⁴²

The British Columbian of August 30, 1862, had high praise for him, however, as being "second only to Colonel Moody." Gosset was responsible for the Assay Office and the Colonial Mint, which was ready for operation May 31, 1862, built by Royal Engineers. Gosset, despite Douglas' orders, struck off a number of specimen \$10 and \$20 pieces, some of which were displayed at the Imperial Exhibition in London. The Assay Office operated from August 1860, to January 1873, under F. G. Claudet. The proposal to mint the gold pieces in 1862 nearly precipitated a strike.

The contributions of the Royal Engineers can be divided very loosely between their official and unofficial functions, or their work as engineers and ordnance and their daily lives. As surveyors and engineers they sur-

⁴² Douglas to Newcastle, February 18, 1863, C.O. 60, "British Columbia original correspondence, 1858-71," p. 151, Microfilm reel 12. See also Robie L. Reid, The Assay Office and the Proposed Mint at New Westminster (Victoria, 1926), pp. 95-6.

⁴³ "Departure of our Treasurer," British Columbian, August 30, 1862, p. 2. Gosset's name occasionally appears as "Gossett," as in this newspaper article.

^{44 &}quot;The Royal Mint," British Columbian, May 31, 1862, p. 2.

⁴⁵ Reid, pp. 61, 30, 57-58. See also B.C. Colonial Secretary's Office, "Selections from Departmental letters of B.C. 1859 to 1871," typescript, Special Collections Division, Library, University of British Columbia.

veyed lands, set up two of British Columbia's nine land survey systems (the independently surveyed lots, and the block and range system, found in part of New Westminster district in the lower Fraser Valley) and ran our first meridian, the Coast Meridian, in 1859;46 compiled and published maps, using the new system of photography as well as lithography; set aside a number of military reserves; and generally helped develop the pattern of settlement. "The Moody contingent fully lived up to the high surveying and mapping traditions established by their regimental predecessors,"47 and "laid the foundations for the future systematic mapping of British Columbia."48 Among the buildings the Royal Engineers left were their camp at the present Sapperton, named in their honour, including Moody's home which was used as Government House, a church, theatre, social club, school and observatory. Some of the men who remained continued to occupy their homes in the old camp. One of the large stores buildings on the waterfront became one of the first salmon canneries on the Fraser River, operated by Capt. Edward Stamp, 1870-71.49 A number of the other churches in the Fraser Valley were built by the Engineers as well.

The social or cultural heritage overlaps with their more official duties. One of the most obvious of their contributions descends from the Royal Engineers Printing Establishment. It is appropriate that the Columbia Detachment used a small hand Columbian Press. On it they printed forms, reports and the Government Gazette, and when the corps disbanded, Corp. Richard Wolfenden remained in charge, and, with a few other Engineers, formed the Government Printing Bureau and Queen's Printer. The printing and lithographic presses were to have come with the corps, or soon after, but the lithographic press did not come into operation until the Spring of 1861, with Capt. Parsons in charge and Sapper William Oldham the lithographer. At least 29 maps, plans and charts are known to have been printed on this press for local distribution, the most up-to-date maps available. Prior to this, at least as early as

⁴⁶ J. W. Trutch, hired by Col. Moody in 1859 to assist the Engineers with surveying, began the block and range system, and surveyed the coast meridian under contract. See W. N. Draper, "Pioneer surveys and surveyors in the Fraser Valley," *British Columbia Historical Quarterly*, v. 5, no. 3 (July 1941), pp. 215, 219, and G. S. Andrews, Sir Joseph William Trutch (Victoria, 1972), pp. 4-6.

⁴⁷ Thomson, v. 1, p. 282.

⁴⁸ Thomson, v. 1, p. 287.

⁴⁹ E. Stamp to F. C. Claudet, May 29, 1871; E. Stamp to B. W. Pearse, June 6, 1871; F. C. Claudet to B. W. Pearse, June 30, 1871, in Colonial Records, Provincial Archives of British Columbia.

November 1859, photography was used to reduce and reproduce maps and plans. Sapper J. B. Launders became chief draughtsman for the Department of Lands and Works, and the maps, press and land records remained with the department. Though the lithographic press has disappeared, and the work of printing maps is now carried on by the Queen's Printer, the present Surveys and Mapping Division of the Lands Branch could be considered a direct successor to the establishment at the R. E. camp, New Westminster.

"Socially, the corps was the centre of the social functions in New Westminster during the winter."50 In this they played a similar role to the Royal Navy in Victoria, in which the boundary commission shared for a couple of seasons. They built a theatre in which they presented plays of various kinds, and a social club where they held dances and banquets. As has been mentioned, they built their own church, as well as a number of others from New Westminster to Yale, and provided a large community of "established church" people, which probably played an important part in stabilizing the colony. As their motto says, ubique quo fas. They built and maintained the first school in the colony, though the government starved it for funds, and in 1862 they designed and built the first public school in New Westminster. "To their energy we owe in a great measure the existence of the first hospital in British Columbia the Royal Columbian Hospital at New Westminster."51 The corps library was left to the citizens of New Westminster. The books, which were selected by Lytton himself in 1858, and towards which the men had contributed £200 of their own money, were left for the Engineers remaining in British Columbia and formed the nucleus of what became the New Westminster Public Library. The Public Library and Reading Room was opened August 15, 1865, in the former mint and assay office building. The introduction of a large group of married women and children was another stabilizing influence and helped set the tone of the society. The number of these families who remained must have provided a strong nucleus of an established society.

As we have seen, the Engineers helped maintain law and order. As Gough has pointed out, Douglas would have been virtually powerless without the various means at his disposal to enforce the authority of the Crown, including the Royal Engineers.⁵² The assay office helped in its

⁵⁰ M. S. McGivern, The Royal Engineers in British Columbia (Chilliwack, RCSME, Camp Chilliwack, 1957) p. [38].

⁵¹ Howay, p. 10.

⁵² Gough, The Royal Navy, p. 149.

TABLE IV

ROYAL ENGINEERS WHO DIED OR DESERTED according to Appendix VIII of Lillian Cope's thesis.

Dead

ARMSTRONG, Robert, Sapper
BAKER, John S., 2d Corporal*
CHRISTIE, William, 2nd Corporal
DIGBY, James, Corporal
DUFFY, James, Sapper¹
ELLIOTT, James H., Sapper
GOSKIRK, Robert, Sapper
JONES, Thomas, Sapper
LAYMAN, Samuel, Sapper
LAYMAN, Samuel, Sapper
LIDDELL, Robert, Lance Corporal
LOMAX, Thomas, Sapper
MANSTRIE, William, Sapper
ROE, Edward H., Sapper
SANDERS, James, Sapper
SHANNON, John, Sapper

Deserted

ALMAN, Daniel, Sapper DOBBS, George, Sapper³ DURHAM, Charles, Sapper GILLIS, James, Sapper KENNEDY, David, Sapper⁴ MOULD, Charles A., Sapper MUNROE, Andrew, Corporal⁵ RODGERS, George, Sapper

- ¹ "The list shows that James Duffy was dead at the time the military grants were issued." (Laing, p. 144.)
- ² Drowned at Harrison Rapids. (Memo from Bruce, R.E. file, Howay Papers.)
- ³ Deserted at San Francisco from Grant's detachment. (Memo from Bruce, R.E. file, Howay Papers.)
- ⁴ Deserted at Sapperton from Parson's detachment. (Memo from Bonson, R.E. file, Howay Papers.)
- ⁵ Deserted from Camp Sapperton. (Memo from Bruce, R.E. file, Howay Papers.)
- * F. J. Hatch, "The British Columbia Police, 1858-1871" (M.A. 1955, UBC), Appendix "A" p. i. See Table VIII, Royal Engineers Remaining in British Columbia in 1863.

own way, too, as the accuracy and fidelity of its work acted as a check upon private melters and assayers.⁵³ The Mint, unfortunately, never developed beyond the original samples. At their observatory a systematic meteorological record was maintained. Previously, some of the Hudson's Bay officers entered observations in their diaries or fort journals, but it was rather haphazard. Today meteorological records are maintained by the atmospheric environmental service of the dominion government.

Today we hear much about town planning, "green belts," ecology, and so on. The townsites laid out by the Royal Engineers are a tribute to town planning, exhibiting regular streets crossing at right angles, incor-

^{53 &}quot;The Royal Mint of British Columbia," British Columbian, May 17, 1862, p. 2.

porating squares, parks, church and school reserves, and contrast sharply with the haphazard arrangement of many of the streets in Victoria. This pattern was maintained as later townsites were surveyed by the provincial government surveys branch. Standards for surveying, as well as for surveyors, had been set by the Engineers. Moody established a number of military reserves, the remains of which are evident even today. The two most obvious ones are Stanley Park and the University Endowment Lands, the last vestiges of "green belt" in the Vancouver area.

Only about fifteen men returned to England with the officers. Of the remainder, the majority stayed in British Columbia. Some left after a few years; others have not been traced. One man, Sapper William Manstrie, who came with Capt. Grant's group, was drowned at Harrison Rapids. Miss Cope lists thirteen others who died, presumably before November 1863, and eight who deserted.⁵⁴ Three desertions are confirmed by Sergeant Bonson and Sapper Bruce, but no information has been found concerning the other deaths and desertions.* Two Sappers who had been stranded following an assignment in South Africa⁵⁵ joined Moody's command, and one, William Deas, operated the Columbia Hotel in New Westminster with Sapper Samuel Dawson for a short time after the detachment disbanded. Of the 130 or more Royal Engineers who remained in British Columbia in 1863, including at least two from the boundary survey detachment, Corporals John Jane and W. H. Rowling, about ninety-five have been identified and a number traced to the second or third generation. Although a military grant of 150 acres was available, not all who stayed took up their grant, preferring land elsewhere, or settling in towns. Most stayed in the lower mainland and were pioneer settlers in New Westminster and communities in the Fraser Valley. A number moved to Victoria with the government. Several ventured to the gold fields before settling down. A few moved to the interior, including Samuel Archer at Lightning Creek and Lytton; John Jane at Savona; James Normansell in the Kootenay; George Sainsbury at Dease Creek, and James Wood at Big Bar. Although most farmed at some period, many had other occupations, including about 17 as policemen.

The ex-Engineers seem to have been active and well-respected in their communities.** None appear to have gone into provincial politics

⁵⁴ Cope, Appendix 8, pp. 258-261.

⁵⁵ Bruce memo, Royal Engineers file, Howay Papers, Special Collections Division, UBC Library.

^{*} Table IV, Royal Engineers who died or deserted.

^{**} Table VIII, Royal Engineers Remaining in British Columbia in 1863.

(although E. K. DeBeck, grandson of James Keary, was Clerk of the House), but a number of families are represented on the local scene. Lewis F. Bonson was a New Westminster city councillor in 1887. Philip Jackman was reeve of Langley, 1895-1897. James Keary's son, William H. Keary, was mayor of New Westminster for eight years (1902-1909). John McKenney was a founding councillor of Maple Ridge in 1874, and reeve in 1879. John Murray, Jr., seems to have been on Burnaby Council for several years (1914-1918, 1924-1925). W. H. Rowling served on the Richmond Council, and his son-in-law, Peter Byrne, was a reeve of Burnaby, 1906-1910. The surveyor, George Turner, founder of the Public Land Surveyors Association in 1890, served on the New Westminster City Council also.

The former Engineers continued to serve their new homeland as surveyors, road contractors, carpenters, masons, miners, blacksmiths, tailors, bakers, merchants, hotel and saloon keepers, policemen, printers and in other occupations. William Haynes continued as a music teacher and bandmaster in Victoria for many years and conducted the band which met the first Canadian Pacific transcontinental train at Port Moody, 4 July 1886. He had a large family, as did John Cox, whose more than one hundred descendants placed a plaque on Victoria's causeway in 1962 in memory of the Tynemouth, on which John's bride arrived. John C. White, John Maclure and Peter J. Leech worked for the Collins Overland Telegraph, the first as artist and draughtsman, the others as surveyors. After the Atlantic cable cut short the overland telegraph project, Maclure operated a telegraph office in his Matsqui home, and all his children became telegraphers, including his son Samuel, who is recognized as one of the finest architects in British Columbia history. Samuel's brothers founded the fire clay businesses at Clayburn and Kilgard.

The words quoted earlier, written by Lord Lytton, author of *The Last Days of Pompeii*, to Governor Douglas on October 16, 1858, almost summarize the relationship between the "red coats" and the citizens of British Columbia. It would appear that, with the notable exceptions of the governor and the Victoria press, the majority of the citizens, including the Indians, in the two colonies liked and respected the Royal Engineers. Quietly they went about their business of "civilizing" the rough terrain of the new colony, while their very presence supported the governor and his law enforcers in civilizing the rough populace of the gold rush era. The presence of the Royal Engineers in the mainland colony of British Columbia during its crucial formative years combined a conservative British discipline and industry with the independent pioneer "get-ahead"

spirit of the settlers from a multitude of places, but predominantly Yankees and "Canadians". The result was a persistent "quiet rebellion" against the domination of first the governor, and later the government in Victoria, where a conservative economic heritage from the Hudson's Bay Company combined with a British colonial society strongly influenced by the presence of the Royal Navy. The people in the lower mainland, so many of whom were accustomed to representative government, felt, and were so encouraged by the local press, that British Columbia was ready for a more democratic form of government almost from the outset, and that Douglas and his clique in Victoria were unnecessarily delaying moves towards responsible self-government in British Columbia. Lytton, in his despatch to Douglas, dated July 31, 1858, told him:

You will keep steadily in view that it is the desire of this country that Representative Institutions and self-government should prevail in British Columbia, when, by the growth of a fixed population, materials for those Institutions shall be known to exist; and that to that object you must, from the commencement, aim and shape all your policy.⁵⁶

and in the despatch of August 14, 1958, he continued in the same vein:

You will be empowered both to govern and to legislate of your own authority; but you will distinctly understand that this is as a temporary measure only. It is the anxious wish of Her Majesty's Government that popular institutions, without which they are convinced peace and order cannot long prevail, should be established with as little delay as practicable; and until an Assembly can be organized (which may be whenever a permanent population, however small, is established on the soil), I think, as I have already stated in a former Despatch, that your best course will probably be to form some kind of temporary council, calling in this manner to your aid such persons as the miners themselves may place confidence in.⁵⁷

A feeling of resentment towards the source of this alleged ill-treatment grew on the mainland, and the transfer of the capital to Victoria after union of the colonies simply added insult to injury. This feeling was to some extent transferred to Ottawa and "the East" after Confederation, and was aggravated by the long delays in building the railway which Moody had predicted in 1859 would come to the head of Burrard Inlet (Port Moody) and terminate at New Westminster, and which the Canadian government had promised British Columbia in 1871, but did not produce until 1886. There is in British Columbia today a complex pattern of resentment which may be a legacy of the colonial and early Con-

⁵⁶ Lytton to Douglas, July 31, 1858, Despatch no. 6, B.C. Papers, pt. I, p. 45.

⁵⁷ Lytton to Douglas, August 14, 1858, Despatch no. 8, B.C. Papers, pt. I, p. 48.

federation period. More than metropolitan-rural, or federal-provincial rivalries, the resentment is rather a feeling of being treated as a colony, and a profound sense of distance, almost isolation. This resentment exists within the province with the north resenting the south; the interior, the lower mainland; the lower mainland, Victoria; and the entire province, the east and the federal government; all kept in check with the inherited British sense of law and order and common sense.

The cavalier attitude of the British and Canadian governments, which fosters British Columbia's resentment, is quite evident in the final chapter of the Royal Engineers in British Columbia. Unlike Capt. McGivern, we will not "leave untouched the work of a later detachment of Royal Engineers in Victoria — a detachment which was later absorbed into the Corps of Royal Canadian Engineers upon the formation of the present corps." Little has been written about this detachment, although it left us our one military fortress, now a national historic site, Fort Rodd and Belmont batteries, built in the 1890's.

After the Columbia Detachment disbanded in 1863 British Columbia had to rely on the Royal Navy for her defence, along with small voluntary militia groups. One of the first militia units was the New Westminster Volunteer Rifles, formed November 1863, composed largely of ex-Royal Engineers. In Victoria the Voltigeurs had been formed in 1860, but they disbanded in March 1864. The Vancouver Island Rifle Volunteers began in July 1861. In 1864 came the Victoria Rifle Corps, to which most of the Royal Engineers in Victoria belonged. In June 1866, two new companies were formed in New Westminster: the Home Guards and the Seymour Artillery Company. The latter included a number of ex-Royal Engineers. By 1871 British Columbia military defence depended on three declining militia companies: the Victoria and New Westminster Rifles, and the Seymour Artillery Company. On October 16, 1871, British Columbia became Canada's Military District No. 11. January 1872 saw the first of many futile recommendations to improve the defensive powers of Canada's west coast.⁵⁹ The defence problems of 1871-1906 are a long story involving numerous recommendations, largely ignored, local apathy, and "buck-passing" between the Canadian and British governments. Roy's article tells the story up to 1885, while Long-

⁵⁸ McGivern, p. [49].

⁵⁹ Executive Council recommendations, in response to the "Fenian scare," 1871. R. H. Roy, "The early militia and defence of British Columbia, 1871-1885," *British Columbia Historical Quarterly*, v. 18, nos. 1-2 (January-April 1954), p. 5.

staff and MacKinnon cover the whole period, the former from the local viewpoint, the latter from the national and international.

There were a few Royal Engineers here for short periods between 1871 and 1893. The first was Col. J. W. Lovell, then stationed at Halifax, who represented Great Britain in a joint military survey of British Columbia in 1879. He made a thorough inspection of southeastern Vancouver Island and lower mainland defences, centering on Esquimalt, and his recommendations, if carried out, would have made Esquimalt the Halifax of the Pacific. The Canadian representative on the 1879 survey, Senior Inspector of Artillery, Lieut.-Col. T. B. Strange, R.A., made similar recommendations, and also suggested military colonization in the Fraser Delta. 60 On July 29th, 1886, Lieut.-Col. E. D. C. O'Brien, R.E., arrived at Esquimalt with a group of non-commissioned officers (surveyors from 18th Company, Royal Engineers, stationed at Halifax) to survey the land and select sites for the permanent forts. In December 1886, Lieut. J. I. Lang arrived from Halifax to continue the survey. Lang's map of the greater Victoria area was completed in six sheets in 1888, on the scale of six inches to the mile. According to Longstaff, the six sheets "were soon published in England and were for many years the finest maps of any part of B.C."61

TABLE V

OFFICERS OF THE CORPS OF ROYAL ENGINEERS, ESQUIMALT, 1893-1906

Officer Commanding

Muirhead, H. H. 1893-1898 Grant, A. 1899-1903 Bland, H. 1904-1906

48th (Submarine Miners) Co.

Bowdler, R. W. B. 1900-1904 Blandy, L. F. 1901-1904 Hood, F. G. 1902-1906 Brady, D. 1904-1906 Yates, A. St. J. 1904-1906 July 1905, became 48th (Fortress) Co.

June 1906, returned to England

Gordon, H. W. 1894-1897 *Elliott, G. C. E. 1897-1903

44th (Fortress) Co.

*Elliott, G. C. E. 1900-1903 French, P. H. 1900-1905 Bunbury, C. G. V. 1903-1906

August 1903, became 2/44th (Fortress) Co.

April 1906, returned to England.

¹⁸th (Fortress) Co.

⁶⁰ England, p. 14.

⁶¹ F. V. Longstaff, Esquimalt Naval Base, a history of its work and its defences (Victoria, 1941), p. 46.

In 1883 the Militia Act was passed by the Canadian government, and the British Columbia Provisional Regiment of Garrison Artillery was established, with Esquimalt named "C" Battery. Due to recruiting problems, "C" Battery was not formed until 1887, when men were drawn from "A" (Quebec) and "B" (Kingston) Batteries. "C" Battery arrived in Victoria on November 11, 1887, having travelled via CPR from Quebec, to be greeted by a militia guard of 125 officers and men under Lieut.-Col. R. Wolfenden (Corp. Wolfenden of the Columbia Detachment). High wages on the coast combined with the small population made it impossible to recruit enough men locally for defence requirements. Recruits had to be brought from the east, and with the high rate of desertion and little re-enlistment, costs were enormous. In 1893 "C" Battery was withdrawn to become a company of garrison artillery at Quebec. At the same time, agreement was reached between Canada and Great Britain under which Canada would contribute towards the cost of maintaining a detachment of Royal Marine Artillery or Royal Engineers at Esquimalt. In August, 1893, Major H. H. Muirhead, R.E., arrived from England, and in May 1894, Lieut. H. W. Gordon, nephew of Gen. C. G. "Chinese" Gordon, arrived with a detachment of twenty Sappers from 18th (Fortress) Company from Halifax, to demolish the old earthand-wood batteries and build the new concrete-and-earth forts. The agreement was revised in 1899 and continued until 1905, with Canada's contribution set at half the annual cost of the Imperial Garrison of 320 officers and men, and half the prime charges for barrack accommodation.62 In January 1900, the 48th (Submarine Miners) Company arrived, followed in May by half the 44th (Fortress) Company, who were in charge of the lights in the forts. The 11/2 Royal Engineer companies (which in 1902 totalled 116 men) served under several officers,* commanded by Major⁶³ H. H. Muirhead, 1893-1898, Major Alexander Grant, 1899-1903, and Major E. H. Bland, 1903-July 1906, when the works and stores were handed over to Dominion officers. The 44th Company left in April 1906, and the 48th in June. In July 1905, the 48th Company had become a fortress company when submarine mining was

⁶² Canada, Dept. of National Defence, Historical Section (General Staff), "Notes of Military District No. 11," compiled by F. C. 3.10.1930, p. 23.

⁶³ The Officer Commanding Royal Engineers in Esquimalt appears to have received the temporary local rank of Lieutenant-Colonel.

⁶⁴ A. J. Kerry and W. A. McDill, The history of the Corps of Royal Canadian Engineers, Volume I, 1749-1939 (Ottawa, Military Engineers Association of Canada, 1962), p. 54.

^{*} Table V, Officers of the Corps of Royal Engineers, Esquimalt, 1893-1906.

transferred to the Royal Navy.** At that time there were three officers, two supernumeraries and fifty-five miners in the company. The Royal Engineers were part of the Imperial Garrison of 350 officers, non-commissioned officers and men representing six corps. Some remained in Canada and transferred to the Dominion service, including thirty-one non-commissioned officers and sappers who joined the 3rd Fortress Company, Royal Canadian Engineers.

The official birth date of the "Canadian Engineers Corps" as a "permanent corps" is July 1, 1903, and the following year, on February 1, 1904, it was renamed the Royal Canadian Engineers, adopting the Royal Engineers' motto, with the addition of "Canadian" and the substitution of maple for laurel leaves. On July 1, 1905, the Canadian government agreed to take over responsibility for Halifax and Esquimalt. As qualified men were not immediately available in Canada, it was arranged for some Royal Engineers personnel to be taken over as well, the officers on loan, but other ranks transferred directly into the Royal Canadian Engineers. Those at Esquimalt were named 3rd Fortress Company R.C.E., but continued to be called a detachment until 1909.64 In 1910, the year the Royal Canadian Navy was born with the Niobe and the Rainbow, Canada took over the naval station at Esquimalt as well. The Royal Canadian Engineers appear to have maintained close ties with the Royal Engineers, frequently borrowing instructors, and today a Royal Engineers' exchange officer is stationed at Canadian Forces Base, Chilliwack, long the home of the Royal Canadian Engineers in British Columbia, and the location of the Army Survey Establishment, an echo of the old Columbia Detachment of the Royal Engineers.

The work of this last group of Royal Engineers is more difficult to assess, mixed as it was with other military and naval groups, and continued by the Royal Canadian Engineers. They surveyed the Victoria area, built Work Point Barracks and the batteries at Fort Rodd and at other sites now demolished. The local militia seems to have replaced the Royal Engineers and the Royal Navy in the Victoria social scene. The first mention of the Royal Engineers is at Judge Begbie's funeral, June 14, 1894. Command of the Imperial troops seems to have varied between the commanders of the Royal Engineers and the Royal Marine Artillery, whichever was more senior, but all were under the command of the general officer commanding at Halifax, including the British

^{**} See Table I.

⁶⁵ Longstaff, p. 143.

Columbia Militia. MacKinnon notes the disagreement between the British and Canadian military and civilian authorities over this anomaly, and tells of a junior officer in the Colonial Office who, noticing that the War Office filed Esquimalt correspondence under Nova Scotia, commented: "The W. O. seem to be under the impression that Esquimalt is in Nova Scotia."66

The attitudes of the British and Canadian governments from 1871 to 1910, displayed by the long series of reports and negotiations, and the reluctance of either government to admit responsibility for British Columbia's defence in terms of men or money, typify another aspect of the resentment spoken of earlier. It appears that the financial possibilities of the newly completed CPR in 1886, and the vulnerability of its Pacific terminus, awakened both governments to their responsibilities, which they agreed at last to share for a limited period, with Britain withdrawing her army in 1906 and her navy in 1910. However, the military base was firmly established, and the character and traditions of the parent British companies linger in their Canadian equivalents.

In addition to the many material contributions towards building solid foundations of civilization in an infant colony, the Royal Engineers provided a nucleus of a society bearing the characteristics of the "best" of British soldiery, which in turn influenced, and was influenced by, the fluid frontier society in which it found itself. Since the British group was the largest and most cohesive group, and as a significant portion of it remained in the colony, its characteristics predominated.

⁶⁶ C. S. MacKinnon, "Imperial fortresses in Canada: Halifax and Esquimalt, 1871-1906," (University of Toronto, Unpublished Ph.D. thesis, 1965), p. 310.

OFFICERS OF THE CORPS OF ROYAL ENGINEERS SERVING IN BRITISH COLUMBIA, 1845-1910*

ANDERSON, Samuel, 1839-1881	Lieut. 21 Dec. 1858; Capt. 3 Aug. 1872; Major 13 Sept. 1879. C.M.G.	Arrived 1860 as surveyor with British North American Land Boundary Commission, became Secretary on return to England, until completion. Chief astronomer for prairie boundary survey 1872-1875. Died at Bonnyrigg, Co. Edinburgh, 11 Sept. 1881.
BLAND, Edward Humphrey, 1866-	Lieut. 9 Dec. 1884; Capt. 17 Jan. 1894; Major 18 Dec. 1902; LieutCol.	Major Bland became Officer Commanding Royal Engineers, in charge of the Imperial Troops at Esquimalt, 1 Dec. 1903. Saw War Service, Afghanistan (Miranzai 1891. Isazai 1892), World War I (BrigGen., Chief Engineer IX Corps; Gallipoli, Canal Zone, 1916).
DARRAH, Charles John, 18?- 1871	2d Lieut. 14 Aug. 1854; Lieut. 14 Aug. 1854; 2d Capt. 28 Nov. 1859; Capt. 12 March 1867. Army Major 15 Aug. 1868.	Astronomer with British North American Boundary Commission, 1858-1862. War Service, Crimea, 1855, Abyssinia, 1868. Died at Kirkee, Bombay, 21 June 1871.

GOSSET, William Driscoll, 1822?-1899

2d Lieut. 20 June 1840; Lieut. 27 May 1843; Capt. 11 Nov. 1850; Capt. 13 Jan. 1855; Lieut.-Col. 3 Aug. 1863; Col. 3 Aug. 1872. Army: Major 9 Nov. 1862; Col. 3 Aug. 1868; Maj.-Gen. 24 Sept. 1873. Retired, full pay, 24 Sept. 1873. F.R.S.E.

Arrived 25 Dec. 1858, as Treasurer and Postmaster for the Colony of British Columbia, the latter until Aug. 1860; served as Treasurer for Vancouver Island from Aug. 1859, to July 1860; left on sick leave Sept. 1862. Died at London, 1 May 1899, age 77.

GRANT, Alexander, 1861-19— Lieut. 30 J

Lieut. 30 July 1879; Capt. 21 June 1889; Major 26 May 1898.

Special duty, Jan. 1899-Nov. 1903, as Lieut.-Col., commanding Imperial Troops, Work Point Barracks, Esquimalt; commanding M. Company, Chatham, 1 Dec. 1903.

GRANT, John Marshall, 1822?-1902

2d Lieut. 1 Jan. 1842; Lieut. 18 March 1845; 2d Capt. 17 Dec. 1853; Capt. 21 May 1855; Lieut.-Col. 7 Jan. 1865; Col. 23 May 1873. Army: Col. 7 Jan. 1870. Half-pay 31 Dec. 1881; retired 22 April 1882.

Senior officer with Columbia Detachment, in charge of second group, arriving Nov. 8, 1858; "genius in construction." Died at Bournemouth, 1 April 1902.

HAWKINS, John Summerfield, 1812-1895 2d Lieut. 12 Dec. 1834; Lieut. 10 Jan. 1837; 2d Capt. 1 April 1846; Capt. 1 April 1852; Lieut. Col. 12 Aug. 1858; Col. 1 March 1868; Col. Com. 28 July 1884. Army: Major 14 June 1858; Col. 12 Aug. 1863; Maj.-Gen. 6 March 1868; Lieut.-Gen. 1 Oct. 1877; Gen. 1 July 1881, retired. K.C.M.G.

Chief Commissioner of the British North American Boundary Commission, 1858-1869, with rank of Capt., promoted to Col. 1868. Here 1858-1862. Died at Malvern, 10 Jan. 1895.

LEMPRIERE, Arthur Reid

2d Lieut. 21 Dec. 1853; Lieut. 20 June 1854; 2d Capt. 20 June 1859; Capt. 3 Aug. 1866; Major 5 July 1872; Lieut.-Col. 1 Oct. 1877. Army: Col. 1 Oct. 1881; Maj.-Gen. 1 Oct. 1882. Retired 1 Oct. 1882.

Arrived at Esquimalt 12 April 1859 on Thames City, with main body of Columbia Detachment; attached to Grant's service.

LOVELL, John Williamson, 1823?-1880

2d Lieut. 19 June 1841; Lieut. 16 Aug. 1844; 2d Capt. 6 Dec. 1851; Capt. 1 April 1855; Lieut.-Col. 5 Jan. 1864; Col. 3 Aug. 1872. Army: Major 12 Dec. 1854; Lieut.-Col. 15 Dec. 1861; Col. 5 Jan. 1869.

While stationed at Halifax, sent as British representative on a joint military survey of the defences of British Columbia in 1879. Saw war service in Crimea, 1854-5. Died at Halifax, N.S., 24 April 1880.

	Sept. 1885; Col. 31 Dec. 1891. Army: Col. 22 Sept. 1889. Retired 7 April 1898.	malt area; 1891-1898 C.R.E., S.E. District, Dover.
PALMER, Henry Spencer, 1838-1893	Lieut. 20 Dec. 1856; 2d Capt. 4 March 1866; Major 11 Dec. 1873; Brevet- LieutCol. 1 July 1881; LieutCol. 1 Oct. 1882; Brevet-Col. 1 July 1885; MajGen. 1 Oct. 1887. Retired 1 Oct.	Arrived 12 April 1859 on <i>Thames City</i> ; surveyed Bentinck Arm and other routes. Survey of Sinai 1868-69; transit of Venus 1874-75. Japanese water & harbour works, 1882, 1885-1893. Died at Tokyo, 10 March 1893.

2d Lieut. 1 Oct. 1847; Lieut. 24 Nov.

1851; 2d Capt. 14 June 1856; Capt. 1

2d Lieut. 5 Nov. 1830; Lieut. 25 June

1835; 2d Capt. 6 March 1844; Capt. 19

Aug. 1847; Lieut.-Col. 13 Jan. 1855;

Col. 5 Dec. 1863. Army: Col. 28 April

1858; Maj.-Gen. 25 Jan. 1866. Retired

Lieut. 2 Aug. 1871; Capt. 2 Aug. 1883;

Major 17 Dec. 1889; Lieut.-Col. 4 April

1897; Col. 4 April 1901. Retired 4 April

MUIRHEAD, Herbert Hugh, 1850-1904

LUARD, Henry Reynolds,

MOODY, Richard Clement,

1829-1870

1813-1887

o'BRIEN, Edmund Lieut. 1 Oct. 1858; Capt. 3 Aug. 1872;

April 1862.

full pay 25 Jan. 1866.

1902, Brevet-Col.

Donough Collins Major 13 Sept. 1879; Lieut Col. 22 Arrived 12 April 1859, in charge of main body of Columbia Detachment, on Thames City; a Captain "especially adapted for the strictly military part of the work." Died at Athlone, 26 Feb. 1870.

Governor, Falkland Is. 1841-1849. Autumn 1858, appointed Chief Commissioner of Lands and Works, British Columbia, and given command of Columbia Detachment of Royal Engineers, plus a dormant commission as Lieutenant-Governor; arrived 25 Dec. 1858, with wife and four children; left Nov. 1863, three more children. Died at Bournemouth, 31 March 1887.

Sept. 1893-Dec. 1898. H. H. Muirhead was Officer Commanding Imperial Troops at Work Point Barracks, Esquimalt. Jan. 1899 until retirement, Commanding Royal Engineers South Wales Sub-District. Died 4 March 1904.

Commanding Royal Engineer, Canada, Halifax, c. 1886-1888; 1887 sent to survey EsquiPARSONS, Robert Mann, 18 -1897

2d Lieut. 1 Oct. 1847; Lieut. 21 Sept. 1850; 2d Capt. 23 Feb. 1856; Capt. 1 April 1862; Major 5 July 1872; Lieut.-Col. 8 March 1873. Army: Col. 8 March 1878; Maj.-Gen. 29 Oct. 1879. Retired 29 Oct. 1879. F.R.S.

vavasour, Mervin, 1821?-1866

2d Lieut. 19 March 1839; Lieut. 23 Feb. 1842; 2d Capt. 11 July 1849. Halfpay 22 April 1853.

wilson, Charles William, 1836-1905

Lieut. 24 Sept. 1855; 2d Capt. 20 June 1864; Capt. 5 July 1872; Major 23 May 1873; Lieut.-Col. 31 Dec. 1881. Army: Lieut.-Col. 19 April 1879; Col. 19 April 1883; Maj.-Gen. 15 Feb. 1894. Retired 14 March 1894. K.C.B., K.C.M.G., F.R.S.

Arrived 29 Oct. 1858, in charge of first part of Columbia Detachment; "expert knowledge of survey;" in charge of lithographic press in British Columbia 1861-1863. Superintendent of Ordnance Survey Office, Southampton, 1869. Died at Greenwich, 20 May 1897.

Lieut. serving in Canada 1841-1846; on military reconnaissance expedition to Oregon Territory with Lieut. H. J. Warre, 14th Foot, 1845-1846. Died at Niagara Cottage, Henleyon-Thames, 27 March 1866.

Secretary and Transport Officer, British North American Land Boundary Commission 1858-1862, and in charge of Royal Engineers detachment. Director, Topographic Office, London, 1870-1876. War Service, Egypt 1882, Soudan 1884-5. Died at Tunbridge Wells, 25 Oct. 1905.

Biographies for the following appear: GOSSET—R. L. Reid, The assay office and the proposed mint at New Westminster (Archives of British Columbia, Memoir no. VII, Victoria, 1926), pp. 92-96, illus.; GRANT—"Colonel J. M. Grant, Royal Engineers," Royal Engineers Journal, v. 32, no. 378 (May 1, 1902), pp. 86-87; HAWKINS—"General Sir John Summerfield Hawkins, K.C.M.G.," Royal Engineers Journal, v. 25, no. 292 (March 1, 1895), pp. 56-58; MOODY—Royal Engineers Journal, v. 17, Dictionary of National Biography, v. 13, pp. 779-780; PALMER—Royal Engineers Journal, v. 23 (May 1, 1893), pp. 110-112, Dictionary of National Biography, v. 13, pp. 128-132; VAVASOUR—to appear in Dictionary of Canadian Biography, v. 9; WILSON—Dictionary of National Biography, suppl. 1901-11, pp. 687-689, C. M. Watson, The history of the Corps of Royal Engineers, v. 3, pp. 366-369.

^{*} Junior officers after 1863 have not been included. Most of the information in the second column is from T. W. J. Conolly's Roll of Officers of the Corps of Royal Engineers from 1660 to 1898 (Chatham, 1898).

TABLE VII

COMPLETE LIST OF THE

COLUMBIA DETACHMENT OF ROYAL ENGINEERS

Who Served in British Columbia—1858-1863.

--:o:-

OFFICERS:

Colonel	RICHARD CLEMENT MOODY, Commanding
Captain	JOHN MARSHALL GRANT
Do	ROBERT MANN PARSONS
Do	HENRY REYNOLDS LUARD
LIEUTENANT	ARTHUR REID LEMPRIERE†
Do	HENRY SPENCER PALMER
STAFF-Assistant Surgeon	JOHN VERNON SEDDALL

NON-COMMISSIONED OFFICERS AND MEN:

Acting Sergeant-Major Cann, George Acting QrMaster Sergt. Osment, David S SERGEANTS Bridgeman, Richard *Bonson, Lewis F Hawkins, William Lindsay, James (R.A.) McColl, William McMurphy, John Morey, Jonathan Rogerson, William Rylatt, Robert M Smith, John (15th Hussars) CORPORALS Howse, Alfred R *Wolfenden, Richard Bowden, William Howell, Robert Jane, John Munroe, Andrew McKenney, John Normansell, James Whitmore, Henry (15th Hussars) Woodcock, John SECOND CORPORALS Paleo Labo	LANCE CORPORALS †Byers, William Conroy, James Liddell, Robert Murray, John McGowen, John McGowen, John Noble, John Smith, Henry William Soar, Henry Thistleton, James *Turner, George BUGLERS *Butler, Robert Harris, Daniel HOSPITAL ORDERLY Hazel, Henry W. (M.S.) SAPPERS Alexander, James Alexander, Walter Allen, Frederick Alman, Daniel *Archer, Samuel *Argyle, Thomas Armstrong, Robert Armstrong, Robert Armstrong, Thomas Babbage, Richard Barnes, John Benney, Henry J Bowden, George Breakenridge,
SECOND CORPORALS Baker, John Christie, William Ede, Charles Green, George Hand, George Harvey, William Leech, Peter J Sinnett, Charles White, John C	Breakenridge, Archibald T Brown, Jonathan *Bruce, Henry Colston, Robert Cooper, James *Cox, John Craft, Philip Croft, Edward *Cummins, Allan

Davis, Joseph Dawson, Samuel Deas, William Deasy, Daniel Delaney, Charles
Digby, Charles
Dickson, James
Dobbs, George
Dodd, Edward
Dorothy, Thomas
Dransfield, Henry Duffy, James
Durham, Charles
Eaton, George
Edwards, William (1st)
Edwards, William (2nd)
Ellard, James
Elliott, James H
Flux, James H
Foster, John
Franklin, William A Frost, Joseph Gilchrist, Thomas Gillis, James Goskirk, Robert Goskirk, Robert
Haig, Andrew
Hall, James
*Hall, Matthew
Hawkins, Alben
*Haynes, William
Hayward, William
Hughes, Lewis M
Hume, Robert
*Jackman, Philip
Jaffrey, John
Johnson, Samuel Johnson, Samuel Jones, Thomas Keary, James Kennedy, David Kennedy, James

SAPPERS

Launders, James B
Layman, Samuel
Linn, John
Lomax, Thomas
Maclure, John
Manstrie, William
†Maynard, Isaac G
Maynard, Joseph
Mills, Thomas W
Mould, Charles A
*Musselwhite, John
McMillan, Murdock
McMorran, John
Newton, George
Oldham, William
Patterson, William
Pearson, Edward

Perkins, Thomas
Price, Thomas
Pride, Charles
Purser, George
Reid, Thomas
Richards, Daniel
Robertson, Alexander S
Robertson, William
Rodgers, George
Roe, Edward H
Rowebottom, George
Sainsbury, George
Sanders, James
Scales, John
Shannon, James
Shannon, John

Smith, Alexander
Smith, John
Stevens, Robert
Sturtridge, Richard W
Thurgate, Frederick
Townsend, Edward
Tribute, James
Turnbull, James
Wakely, Samuel
Walsh, James
Walsh, Thomas
West, Christopher
Wilkinson, William
Williams, George
Wood, James
Yates, Henry

Richard Wolfenden, Addenda to The Emigrant Soldiers' Gazette and Cape Horn Chronicle (Victoria, King's Printer, 1907).

Those marked * are still residing in British Columbia, at this date, 7th November 1907.

'are residing in Great Britain.

TABLE VIII

ROYAL ENGINEERS REMAINING IN BRITISH COLUMBIA IN 1863

- ALEXANDER, James, Sapper: appears to have died or left B.C. before Nov., 1907.*

 ALEXANDER, Walter, Sapper: received Crown Grant, March 25, 1872, for Lot 98, Group 2, New Westminster District (150-acre military grant).
- ALLEN, Frederick, Sapper: appears to have died or left B.C. before Nov., 1907.
- ARCHER, Samuel, Sapper: received Crown Grant, March 27, 1893, for Section 27, Block 5 North, Range 6 West, New Westminster District, 160 acres (150-acre military grant). Miner at Lightning Creek 1876-77, Granite Creek 1893, Lytton 1900-1907. Shoemaker, New Westminster 1908-1909?
- ARGYLE, Thomas (d. 1919), Sapper: received Crown Grant, May 6, 1871, for Sections 19, Range 4 West, and 24, Range 5 West, Block 4 North, New Westminster District, 155 acres. Gunsmith and general smith, New Westminster, 1867-1888 chief light keeper, Race Rocks Lighthouse, 1888-c. 1915 farmer, Rocky Point, near Victoria. Mrs. Argyle, nee Tufts, died 1925, survived by 2 sons, 3 daughters, 21 grandchildren, 17 great-grandchildren.
- ARMSTRONG, Thomas, Sapper: Pre-empted 2 parcels of land in New Westminster District later granted to F. G. Claudet. Appears to have died or left B.C. before Nov., 1907.
- BAKER, John S., (d. 1862), 2d Corporal: appointed Chief Constable at Rock Creek, July, 1861, on recommendation of A. C. Elliott; died February, 1862?
- BARNES, John, Sapper: received Crown Grant, Dec. 17, 1867, for Sections 15-16, Block 5 North, Range 5 West, New Westminster District, 151 acres. Farmer, Matsqui, 1876-1893.
- * "Complete list of the Columbia Detachment of Royal Engineers," Wolfenden's Addenda to The Emigrant Soldiers' Gazette and Cape Horn Chronicle (Victoria, 1907).

BENNEY, Henry J., Sapper: a surveyor, seems to have died or left B.C. before Nov., 1907.

- BONSON, Lewis Francis (1831-1917), Sergeant: received Crown Grant, April 29, 1870, for Lot 47, Group 2, New Westminster District. Apprenticed joiner and wheelwright; Crimean veteran. Builder and contractor; 1871 bought London Arms, New Westminster; 1875-1880 provincial road superintendent; 1892-1905 farmed at Keatsey. Died New Westminster 1917, military funeral. Married Jemima Urquhart, Scotland, 1858; 6 children.
- BOWDEN, George, Sapper: appears to have died or left B.C. before Nov., 1907.
- BOWDEN, William, Corporal, R.A.: † received Crown Grant, Nov. 30, 1870, for Lot 55, Group 2, New Westminster District, 150 acres. Police, Victoria, 1868-1877. Daughter married Magistrate George Jay; son Edmund, Seattle, 1909.
- BREAKENRIDGE, Archibald T., Sapper: surveyor, appears to have died or left B.C. before Nov., 1907.
- BRIDGEMAN, Richard, Sergeant: 1863-64 operated Hick's Hotel, New Westminster, with A. Smith, R.E. Son died, daughter born on Thames City, 1858.
- BROWN, Jonathan, Sapper: received Crown Grant for Section 21, Block 5 North, Range 7 West, New Westminster District, 160 acres pre-empted March 3, 1869 (military grant 150 acres). In 1863-64 J. H. Brown and J. Ellard, former Royal Engineers, operated Pioneer Saloon's billiard saloon.
- BRUCE, Henry (1832-1910), Sapper: received Crown Grant, April 29, 1870, for Lot 49, Group 2, New Westminster District, 150 acres. Veteran of Crimean War. Had a photographic business in London, but came as and remained a carpenter in New Westminster.
- BUTLER, Robert (1842-1917), Bugler: received Lot 202, Group 1, New Westminster District, as military grant, 150 acres, March 14, 1870. Worked in Government Printing Office in New Westminster and Victoria until within a month of his death. Active in New Westminster and Victoria Rifle Corps. Of his large family, he was survived by 2 sons, 4 daughters, 16 grandchildren, 3 great-grandchildren.
- CARLYLE, Thomas: not on Wolfenden's list, but listed by Cope (Appendix 8, p. 258) as having received Crown Grant for Sections 19 and 24, Ranges 5 and 4 West, Block 4 North, New Westminster District.
- COLSTON, Robert, Sapper: received Crown Grant, Nov. 30, 1870, for Lot 61A, Group 2, New Westminster District, 150-acre military grant. May have farmed there or on Mayne Island. In 1887 R. C. Colston was a moulder at Albion Iron Works, Victoria, and Robert C. was a farmer, Mayne Island. Son, Robert Christie Colston, lived 60 years on Pender Island, dying at Victoria 1953, aged 92, survived by several nephews and a niece.
- COOPER, James, Sapper: a butcher, appears to have died or left B.C. by Nov., 1907.
- COX, John (1837-1926), Sapper: received Crown Grant, Feb. 10, 1871, for Lot 224, Group 1, New Westminster District, 150-acre military grant. Married Minnie Gillan of London in New Westminster, 1863. Appointed constable August, 1867, in Cariboo after "Grouse Creek War," resigned June, 1868. Worked as a gardener and a bridge and road-construction contractor; took part in Sooke and Klondike gold rushes. Of 11 children, Cox was survived by 5 daughters, 4 sons, 15 grandchildren and 9 great-grandchildren.
- CRAFT, Philip, Sapper: step-father of Emily Herring, first teacher at school, R.E. Camp, Sapperton, 1860. According to Cope, applied for Section 254, Group 1, New Westminster District.
- † Royal Artillery, attached to Columbia Department Royal Engineers.

- CROFT, Edward, Sapper: received Crown Grant, March 5, 1861, for Lot 10, Group 1, 53 acres near Hope. Appears to have died or left B.C. before Nov., 1907.
- CUMMINGS, Allan (d. 1911), Sapper: received Crown Grant, March 14, 1870, for Lot 43, Group 2, New Westminster District, 150-acre military grant. A blacksmith in New Westminster 1876-77; assistant steward Royal Columbian Hospital, 1900-1907. Survived by daughter, 6 grandchildren. Was trumpeter with Seymour Artillery Company.
- DAVIS, Joseph, Sapper: received military grant, Sept. 18, 1874, Lot 219, New Westminster District. 1863-64 operated The Franklin House, a boarding house and restaurant in New Westminster, with John Musselwhite. May have been the photographer in New Westminster 1876-1880.
- DAWSON, Samuel, Sapper: operated Columbia Hotel, New Westminster, 1863-64, with William Deas.
- DEAS, William, Sapper: joined detachment from Cape Colony. 1863-64 operated Columbia Hotel, New Westminster, with Samuel Dawson, April-November 1865, constable, Fort Shepherd.
- DEASY, Daniel (d. 1877-79?) Sapper: received Crown Grant, May 13, 1868, Lot 3, Group 3, New Westminster District, 150-acre military grant, given to St. Mary's Mission. Government messenger, New Westminster and Victoria, later caretaker, government buildings, Victoria. Survived by 3 sons, 2 daughters. Son, Thomas (1857-1935), had varied career, including Indian agent, Masset. Wrote about Indians.
- DELANEY, Charles, Sapper: received military grant, Dec. 1870, Lot 263, Group 1, New Westminster District; Crown Grant, May 25, 1871 to Phoebe Campbell. Charles Delaney, blacksmith, married Phoebe Sutton York, daughter of Thomas York, miner, at the Church of St. John the Divine, Yale, 1866.
- DICKSON, James, Sapper: received military grant Sept. 18, 1874, Lot 256, New Westminster District (site of Ioco).
- DIGBY, Charles (1842-190?), Sapper: received Crown Grant, Feb. 10, 1871, for Lot 223, Group 1, New Westminster District, 150-acre military grant. A bricklayer, also worked on road construction (had contract 1873-74 for trail to False Creek Bridge, with Philip Jackman), before becoming steward at Royal Columbian Hospital, New Westminster. Survived by 2 sons and 3 daughters.
- DODD, Edward, Sapper: appears to have died or left B.C. before Nov. 1907.
- DOROTHY, Thomas, Sapper: appears to have died or left B.C. before Nov. 1907.
- DRANSFIELD, Henry, Sapper: appears to have died or left B.C. before Nov. 1907.
- EDE, Charles, 2d Corporal: appears to have died or left B.C. before Nov. 1907.
- EATON, George, Sapper: received Crown Grant, Dec. 18, 1869, for Section 27, Block 5 North, Range 7 West, New Westminster District, 160 acres (150-acre military grant). 1866 temporary constable Richfield; 1869 recording officer Cariboo. Lumberman, Jervis Inlet, 1877-1880?
- EDWARDS, William H., Sapper: #1, received Crown Grant (date uncertain) for Lot 255, Group 1, New Westminster District, 150-acre military grant. C. July 1862 appointed constable Alexandria District; constable and guard at New Westminster 1865-1877? His daughter Emily Jane married C. H. DeBeck in 1879. Received formal discharge from Royal Engineers, November 1866; 16 yrs, 5 mos.
- EDWARDS, William, Sapper: #2, received Crown Grant, Feb. 20, 1872, for Lot 265, Group 1, New Westminster District, 150-acre military grant. "Black Bill" came with Grant's group of carpenters and apparently became a housepainter and decorator in New Westminster and was a bricklayer in 1880. W. Edwards and D. J. Smith were employed maintaining the False Creek trail in 1873.

ELLARD, James, Sapper: pre-empted land in 1860 with Duffy and Turnbull, but does not appear to have received a Crown Grant. A New Westminster businessman, began 1863 by leasing the Pioneer billiard saloon with J. H. Brown. A grocer in 1868; James Ellard & Co.'s London House appears to be a department store by 1887, though James himself appears to have died. By 1909 the Ellard Block housed other firms. Had at least one son and daughter.

- FLUX, James, Sapper: received Crown Grant, March 7, 1865, for Section 20, Block 5 North, Range 6 West, New Westminster District, 144-acre military grant. Listed as a "servant," 1876-1880, and a bartender, 1887, in New Westminster.
- FOSTER, John, Sapper: received Crown Grant, Oct. 14, 1872, for Lot 267, Group 1, New Westminster District, 150-acre military grant. A teamster at Sapperton and New Westminster, 1876-1880.
- FRANKLIN, William Anthony, Sapper: a printer in the Government Printing Office, New Westminster and Victoria until 1876, an expressman, 1877, and from at least 1887 until his death (between Nov. 1900 and Nov. 1907) a "landing waiter customs." On shooting team, New Westminster Rifle Corps, 1865.
- GILCHRIST, Thomas, Sapper: received Crown Grant, Dec. 7, 1861, for Lot 32, Group 1, New Westminster District, with William Haynes, 160 acres, but apparently left the colony before receiving a military grant. Son born on Thames City.
- GREEN, George, 2d Corporal: received Crown Grant, March 25, 1872, for Lot 97, Group 2, New Westminster District, 150-acre military grant. August 1867-Jan. 1869; Dec. 1869-1877? constable and gaoler, Richfield. Netman, Ladner's Landing 1887?
- HAIG, Andrew, Sapper: appears to have died or left B.C. before Nov. 1907.
- HALL, James, Sapper: a stonemason in New Westminster, 1876-1880.
- HALL, Matthew (1826?-19—), Sapper: received Crown Grant, April 14, 1876, for Lot 38, Group 1, New Westminster District, 40 acres; August 2, 1884, for Lot 82, Group 2, New Westminster District, 180 acres. A Crimean War veteran, Hall was on his Sumas farm in 1914, aged 88. A stonemason and farmer at Sumas, 1876. Had at least 4 children.
- HALL, William (d. 1913), Corporal: received Crown Grant, March 14, 1870, for Lot 41, Group 2, New Westminster District, 150-acre military grant. Toll gate keeper Cariboo Road, Yale; 1866 moved to South Sumas until death. Had at least 3 sons, 2 daughters; Son, Euphrates Thomas, born on Euphrates in 1859.
- HAND, George, 2d Corporal: received Crown Grant, March 14, 1870, for Lot 40, Group 2, New Westminster District, 150-acre military grant. Took over blacksmithing business of W. Blackie, New Westminster, with John Woodcock, 1863. August 1866, officer at jail, New Westminster. Battery sergeant, Seymour Artillery Company, 1866.
- HARRIS, Daniel, Bugler: appears to have died or left B.C. before Nov. 1907.
- HARVEY, William, 2d Corporal: received Crown Grant, Feb. 10, 1871, for Lot 64, Group 2, New Westminster District, 150 acres. Baker, New Westminster, 1863-1865 Government Pioneer Bakery, 1865-1880 Old Cottage Bakery. Refreshment steward, New Westminster Fire Dept. Son John married Esther Ellard, 1876.
- HAWKINS, Alben (1838-1903), Sapper: received Crown Grant, April 29, 1870, for Lot 45, Group 2, New Westminster District, 150 acres. A carpenter and bricklayer, in partnership with R.M. Rylatt until took up farming at Matsqui Prairie, 1874. 1870 laid foundations of Hastings Mill. Founder of Mt. Lehman, former reeve of Matsqui; at least 3 children, son Alfred named freeman of Mt. Lehman, March 1974.

- HAYNES, William (1835-1920), Sapper: received Crown Grant, Nov. 30, 1870, for Lot 57, Group 2, New Westminster District, 150-acre military grant. Gardener and bandmaster; laid out Government House grounds Sapperton, and worked as gardener in New Westminster before moving to Victoria 1864. Bandmaster, Victoria Volunteer Rifles, 5th Regiment and other groups until 1895, continued as music teacher. Conducted band with Yosemite excursion party which met first CPR transcontinental passenger train, Port Moody, 1886. Of 11 children, 3 daughters and 5 sons survived father. Widow died 1931.
- HAYWARD, William, Sapper: appears to have died or left B.C. before Nov. 1907.
- HAZEL, Henry W. "Matilda," Hospital Orderly, M.S.:* appears to have died or left B.C. before Nov. 1907.
- HOWELL, Robert, Corporal: received Crown Grant, Sept. 7, 1861, of Lot 16, Group 2, New Westminster District, 100 acres, at auction with James Duffy; Nov. 30, 1870, of Lot 61, Group 2, New Westminster District, 150-acre military grant. Listed as a labourer, New Westminster, 1876-1880.
- HOWSE, Alfred Richard (d. 1908), Corporal: received Crown Grants, Dec. 7, 1861, for Lot 22, Group 1, 160 acres; April 6, 1867, for Lot 37, Group 2, 150-acre military grant; May 6, 1871 for Section 26, Block 6 North, Range 1 East, 160 acres; Sept. 17, 1877 for Section 23, Block 6 North, Range 1 East, 160 acres; all New Westminster District. Howse abandoned other claims, including the site of University of British Columbia, pre-empted 1860. A surveyor, Howse was in New Westminster for several years, then went to Esquimalt (1876-1880), finally settling in the Vancouver area. On B.C. cricket team, 1865. Theatrical manager for Royal Engineers, and for the New Westminster Dramatic Club, 1866.
- HOWSE, Samuel C., Royal Engineer? with Boundary Commission; March 1865-April 30, 1866, constable at New Westminster.
- HUGHES, Lewis Morgan, Sapper: received Crown Grant, March 4, 1868, for Section 22, Block 5 North, Range 6 West, New Westminster District, 150-acre military grant. A tailor in Victoria, 1876.
- HUME, Robert, Sapper: received Crown Grant, Dec. 7, 1861, for Lot 34, Group 1, New Westminster District, with George Green, 260 acres (100 for Hume) Central Park; Dec. 7, 1871, Lot 91, Group 2, New Westminster District, 150-acre military grant. Listed as in New Westminster District, 1877 and 1880, when described as a miner.
- JACKMAN, Philip (1835-1927), Sapper: received Crown Grant, Feb. 20, 1872, for Lot 266, Group 1, New Westminster District, 150-acre military grant. Cariboo, 1864; constable New Westminster 9 years; CPR survey; fishery guardian Fraser River 14 years; farmer; store Aldergrove. 1895-1897 reeve, Langley. Survived by 3 of his 6 children; last survivor of R.E.
- JANE, John (1833-1907), Corporal: received Crown Grant, March 24, 1874, for Lot 118, Group 2, New Westminster District, 154 acres (150-acre military grant). Surveyor with Boundary Commission. Worked under Walter Moberley in the Selkirks; surveyed roads, ranches, mining properties throughout the Interior. 1865, constable at Derby; May 1865, constable Fort Shepherd; 1866-1867 chief constable and postmaster Fort Shepherd. 1880, opened general store Savona; 1893, appointed Justice of the Peace. Married Miss H. McNeill, daughter of Capt. Wm. McNeill, H.B.C., of Victoria; died Kamloops, 1907, widow remarried in Victoria.
- JOHNSON, Samuel, Sapper: appears to have died or left B.C. before Nov. 1907.
- * Medical Service, attached to Columbia Detachment.

KEARY, James (1826?-1871), Sapper: Military grant of 150 acres, Lot 4, Group 3, New Westminster District, was Crown granted to St. Mary's Mission, Aug. 3, 1874. A stonemason, Keary died in New Westminster, Dec., 1871, as the result of an accident, leaving his wife and 3 children. His son, William Holland Keary, a printer, was mayor of New Westminster 8 years, manager of the Royal Agricultural and Industrial Society of New Westminster, and hon. secretary of the General Hospital for 30 years. His daughter married G. W. DeBeck, father of Edward K. DeBeck, for many years Clerk of the House.

- KENNEDY, James, Sapper: may have been a mechanic in New Westminster, or a blacksmith in New Westminster District, 1876-1880.
- LAUNDERS, James Benjamin (d. 1878), Sapper: received Crown Grant, March 14, 1870, for Lot 203, Group 1, New Westminster District, 150-acre military grant. Engraver and draughtsman with Lands & Works Department, New Westminster and Victoria, 1865-1872, drew Map of British Columbia ("Trutch Map") of 1871. Still in Victoria, 1876, but died in Nanaimo, March 1878.
- LEECH, Peter John (d. 1899), 2d Corporal: received Crown Grant, March 5, 1861, for Section 2, Block 5 North, Range 2 West, New Westminster District, 70 acres, with James Normansell; Nov. 30, 1870, for Lot 58, Group 2, New Westminster District, 150 acres. Surveyor and explorer, with Collins Western Union Overland Telegraph, and Hudson's Bay Company; Victoria City engineer. Crimean War veteran. Discovered gold at Leechtown. Survived by daughter in Victoria.
- LINDSAY, Charles, R.A.: listed by Cope, Appendix 8, p. 260 appears to be James.
- LINDSAY, James R. (d. 1890), Sergeant, R.A.:* received Crown Grants, August 5, 1864, for Section 30, Block 5 North, Range 2 West, 160 acres; August 30, 1871, for Sections 35-36, Block 6 North, Range 1 East, 160 acres each, with J. McKenney; August 14, 1875, for Lot 275, Group 1, 150-acre military grant; all in New Westminster District. Prior to August 1867, constable at New Westminster; August 1867-1868, 1869-1871, constable in Cariboo; 1871-? chief constable, Provincial Police, Richfield; 1887, registrar county court, Richfield. Died February 1890. Brother-inlaw, J. McKenney.
- LINN, John (1822-1876), Sapper: received Crown Grant, July 14, 1862, for Lot 39, Group 1, New Westminster District, 40 acres; February 10, 1871, for Lot 204, Group 1, New Westminster District, 150-acre military grant, on Lynn Creek. Operated a small milk ranch. In New Westminster Rifles and Seymour Artillery. Survived by wife and 2 sons, one born on Thames City, November 1858.
- McCOLL, William (1819-1865), Sergeant: received Crown Grants, Oct. 5, 1859, purchase Block 4 North, Range 7 West, Sections 3 & 10 (106 & 160 acres), New Westminster District; Jan. 19, 1861, Lots 12 & 13, Group 1, Hope, 29 acres; April 6, 1867 for Lot 38, Group 2, New Westminster District, 150-acre military grant to widow, Ann McColl; Feb. 7, 1883 for Lot 126, Group 1, New Westminster District, 160 acres for William McColl, Jr., pre-empted by father, 1862. In partnership with George Turner as land surveyors, New Westminster, in 1863. Toll collector, Alexandra Bridge, until death, June 1865, at Yale, leaving wife and 6 children. Widow married George Turner, 1869. William Jr. married Susan, daughter of John Maclure.
- McGOWEN, John, Lance Corporal: appears to have died or left B.C. before Nov. 1907.
- McKENNEY, John (1830?-1897), Corporal: received Crown Grant, Nov. 13, 1870 for Lot 262, Group 1, New Westminster District, 150-acre military grant; August 30, 1871 for Sections 35 & 36, Block 6 North, Range 1 East, 160 acres each (see Lindsay). Farmed at Maple Ridge until his death in 1897, aged 67. A founding councillor of Maple Ridge municipality in 1874, reeve in 1879, municipal treasurer 1887.
- * Royal Artillery attached to Royal Engineers, Columbia Detachment.

- MACLURE, John (1831-1907), Sapper: received Crown Grant, April 29, 1870 for Lot 44, Group 2, New Westminster District, 150-acre military grant; Feb. 13, 1884 for Lots 208 & 209, Group 2, New Westminster District, 161 & 97 acres. Surveyor with Collins Overland Telegraph. Partner with James Turnbull in New Westminster as surveyors and civil engineers, and worked with Trutch on CPR survey. Set up telegraph office in Matsqui home. Continued surveying and farming until death. Best known of 5 children was son Samuel, artist and architect. Sons J. C. and F. S. Maclure founded fireclay and brick companies at Clayburn and Kilgard. Daughter Susan married William McColl Jr.
- McMILLAN, Murdock, Sapper: received Crown Grant, Sept. 9, 1861 for Lot 15, Group 1, New Westminster District, 100 acres; Lot 42, Group 2, New Westminster District (Cope, p. 258). Farmer, near Fort Langley.
- McMORRAN, John, Sapper: appears to have died or left B.C. before Nov. 1907.
- McMURPHY, John (1813?-1901), Sergeant: received Crown Grant, Jan. 15, 1872 for Lot 222, Group 1, New Westminster District, 150-acre military grant. Veteran of Crimean War, came as road builder, and surveyor. Operated Loch Lomond Roadhouse in Cariboo before entering government service as a clerk, later deputy sheriff, and other positions. One of founders of St. Andrew's Society, New Westminster, 1862; secretary of Hyack Fire Co., New Westminster Fire Dept., 1877. Survived by wife, 5 children; daughter Jessie, wife of William Turnbull, unveiled R.E. cenotaph, Sapperton, Nov. 1927.
- MAYNARD, Joseph, Sapper: received military grant 150 acres, Lot 252, Group 1, New Westminster District. Carpenter in New Westminster, 1876-1880; 2d Lieut., Hyack Fire Co., New Westminster Fire Dept., 1877.
- MEADE, John, Lance Corporal: pre-empted Lot 183, New Westminster District, 160 acres, Feb. 8, 1861. later granted to Hailstone, Brighouse and Morton, now west end of Vancouver. Appears to have died or left B.C. before Nov. 1907.
- MILLS, Thomas W., Sapper: received Crown Grant, March 4, 1869? for Section 34, Block 5 North, Range 6 West, New Westminster District, 160 acres (150-acre military grant). Carpenter in Victoria, 1877.
- MOREY, Jonathan, (1824?-1884), Sergeant: received Crown Grant, Feb. 10, 1871 for Lot 65, Group 2, New Westminster District, 150 acres. Constable, New Westminster, 1863-1884. Hall steward, Hyack Fire Co., New Westminster Fire Dept.; Sergeant, New Westminster Volunteer Rifle Corps, No. 1, 1863; one of first officers, Oddfellows Lodge, 1871. Survived by wife and 5 children. A daughter born Thames City, 1859. Son Henry Morey, a stationer and bookseller in New Westminster many years, Co. established 1886.
- MURRAY, John (d. 1905), Lance Corporal: received military grant Nov. 30, 1870, Lot 201, Group 1, New Westminster District, 150 acres. Shoemaker in New Westminster until 1882 when moved to grant, which he subdivided, forming Port Moody. Secretary of Fire Company, 1861; St. Andrew's Society committee, 1862; Sergeant, Seymour Artillery Co., 1866. Survived by 3 sons and 3 daughters. Son John an alderman, Port Moody, at incorporation 1913; councillor? Burnaby, 1914-1918, 1924-1925. Son Hugh born 1859 Thames City.
- MUSSELWHITE, John, Sapper: received Crown grant, March 17, 1871, for Lot 52, Group 2, New Westminster District, 150-acre military grant; Feb. 11, 1889, Lot 353 Group 2, New Westminster District, 161 acres, 1863-1864 operated The Franklin House, New Westminster, with Joseph Davis. Settled on Sumas Prairie (Yale-Sumas Mt. Roads), area once known as Musselwhite Corner. Customs officer, 1887-1893. Died in Poor Man's Home, Kamloops.
- NEWTON, George, Sapper: 1867 constable in Victoria; 1869 took up land on North Arm; partner in London Arms, New Westminster, until marriage, late 1870s to daughter of Michel Lacroix, when settled at Hatzic as farmer. First wife died on Thames City, 1859.

NOBLE, John, Lance Corporal: appears to have died or left B.C. before Nov. 1907.

- NORMANSELL, James (d. 1884), Corporal: received Crown Grant, March 5, 1861, for Section 2, Block 5 North, Range 2 West, New Westminster District, 70 acres purchased with P. J. Leech; Nov. 4, 1864, Section 1, Block 5 North, Range 1 East, New Westminster District, 160 acres purchased. March 1865, appointed constable, Wild Horse Creek; June, 1865, made Chief Constable, Kootenay, still serving there 1871. Labourer, Glenora Landing, 1880? Sergeant, New Westminster Volunteer Rifle Corps, 1863-1864. Died Oct. 1884, Royal Hospital.
- OLDHAM, William, Sapper: Lithographer, Royal Engineers printing establishment; wanted to purchase lithographic press and stones when Detachment left, 1863.
- PATTERSON, William, Sapper: a William Patterson was a shoemaker in Victoria, 1876, Nanaimo, 1877.
- PEARSON, Edward, Sapper: an Edward Pearson was a hardware merchant at Barker-ville 1876-1877, teamster Yale, 1880. Ed. H. Pearson was bookkeeper, New Westminster, 1887.
- PRICE, Thomas, Sapper: received Crown grant, Nov. 30, 1870, for Lot 56, Group 2, New Westminster District, 150 acres. 1863 opened a clothing and tailoring shop in New Westminster, where he was in 1868. 1876-1880 he was a tailor in Victoria. His daughter was born on Thames City, 1859.
- PRIDE, Charles, Sapper: Cope, p. 261 lists him as insane; Gosnell, in a list of R.E. in B.C. in 1896 includes "Chas. Pride, insane asylum, New Westminster" (Province, Dec. 26, 1911, p. 17).
- PURSER, George, Sapper: received Crown grant, Dec. 7, 1871, for Lot 92, Group 2, New Westminster District, 150-acre military grant. Farmer, Fulford Harbour, Saltspring Island, 1876-1880.
- REID, Thomas Pearson (1841-), Sapper: according to Cope, p. 261, his preemption was transferred to W. H. Rowling. Sinnett's poem "Huthlicaut's Weddin'," Emigrant Soldiers' Gazette, No. 16 (March 12, 1859) describes Reid as a tailor. Thomas Pearson Reed was a special constable at New Westminster, May 1860; 1860-1861, chief constable Douglas; 1862, Lillooet.
- RICHARDS, Daniel, Sapper: 1864-1865 partner with L. F. Bonson as carpenter and cabinet maker, built St. Mary's Church, Sapperton, consecrated May 1, 1865.
- ROBERTSON, Alexander S., Sapper: appears to have died or left B.C. before Nov. 1907.
- ROBERTSON, Robert, Sapper: received Crown grant, August 7, 1884, for Lot 433, Group 1, New Westminster District, 153 acres. 1876-1887, farmer Whonnock.
- ROWEBOTTOM, George, Sapper: Lot 60, Group 2, New Westminster District was Crown granted, Nov. 30, 1870 (150 acres) to Mary A. Rowebottom as heir to her deceased brother. Son George William born Sapperton 1864, died 1935. Widow died 1946, Victoria.
- ROWLING, William Henry (1826-1905), Corporal: received Crown grants Nov. 29, 1888 for Lot 330, Group 1, 154 acres; March 29, 1871, for Lot 258, Group 1, 150-acre military grant purchased from widow of Thomas Reid; and other Lots, New Westminster District, giving 2½ miles of river frontage. Corporal of commissary, Boundary Survey, transferred to Columbia Detachment. 1863-1869, operated The Retreat saloon, New Westminster; 1868, moved to farm, first settlers in South Vancouver; councillor for Richmond in early years. Daughter Priscilla married Peter Byrne, one of first councillors for Burnaby, and mayor 1901-1910. Sons operated logging firm.
- RYLATT, Robert M., Sergeant: received military grant of Lot 253, Group 1, New Westminster District, Barnston Island, 150 acres. Partner with Alben Hawkins as masons and bricklayers; 1874, laid foundations of Hastings Mill. 1868, elected to managing committee of New Westminster library.

- SAINSBURY, George, Sapper: a miner in Cassiar, 1876-1900. Died between Nov. 1900, and Nov. 1907.
- SCALES, John (d. 1906), Sapper: received Crown Grant, Dec. 16, 1891, for lots 303 and 304, Group 1, New Westminster District, 150 and 110 acres. First settler in Vancouver, June 1869; by 1880 in Nanaimo as a stonecutter. Son John Henry honoured in Vancouver on 60th wedding anniversary, 1945.
- SHANNON, James, Sapper: pre-empted a couple of Lots, New Westminster District, but left B.C. before 1877.
- SMITH, Alexander, Sapper: received Crown grant Feb. 10, 1871, for Lot 63, Group 2, New Westminster District, 150-acre military grant. 1863-1864, operated Hick's Hotel, New Westminster, with Richard Bridgeman. 1876-1880, an Alexander Smith was a blacksmith in Kamloops.
- SMITH, Henry William (d. 1870), Lance Corporal: received Crown grant, April 29, 1870 for Lot 46, Group 2, New Westminster District, 150 acres. 1863-1870, operated a drugstore in New Westminster. 1866-1870, on Board of Health.
- SMITH, John, Sapper: labourer, Victoria, 1876-1880; 1887 steward, Union Club, Victoria.
- SMITH, John, Sergeant, 15th Hussars: * received Crown Grant, Sept. 8, 1871, for Lot 93, Group 2, Military Grant. 1863 grocer? with Murray, New Westminster. 1867-1880, government messenger, Victoria; 1887, messenger, Dominion Savings Bank, Victoria.
- SOAR, Henry, Lance Corporal: received Crown grant for Lot 1, Group 1, Coast District, date uncertain (Cope, p. 258). Saddler, Victoria, 1876-1887. In band, arrival of first train, 1886 (see Haynes). Secretary, Deluge Engine Co. No. 1, Victoria Fire Dept., 1877.
- STEVENS, Robert, Sapper; received Crown grant, Sept. 27, 1872, for Lot 115, Group 1. Osoyoos Dept. (Cope, p. 261). Millman, Burrard Inlet, 1876-1880?
- STURTRIDGE, Richard W., Sapper: appears to have died or left B.C. before Nov. 1907.
- THISTLETON, James, Lance Corporal: received Crown grant, August 30, 1871, for Lot 80, Group 2, New Westminster District, 195 acres (150-acre military grant). 1863? opened a tanning and leather-cutting business at Sapperton. 1876-1880, messenger, Victoria. 1877-1887, Mrs. E. Thistleton dressmaker, milliner, Victoria.
- TOWNSEND, Edward, Sapper: pre-empted Lot 94, Group 1, New Westminster District, 80 of 165 acres, Feb. 7, 1871, Granted to Washington Grimmer, 1879. 1877, Mrs. Townsend a milliner in New Westminster.
- TURNBULL, James, Sapper: pre-empted Lot 16, Group 2, New Westminster District, March 23, 1860, with Ellard and Duffy, later granted to Howell. 1863, opened office with James Turnbull as surveyors and civil engineers in New Westminster. 1876-1908, carpenter, New Westminster; 1909, retired. 1880, built Richmond town hall. His son William married Jessie McMurphy, and George Henry married Janet Mary Harvey.
- TURNER, George (1836-1919), Lance Corporal: received Crown grants, March 5, 1861, for Section 1, Block 5 North, Range 2 West, purchase; April 29, 1870, for Lot 48, Group 2, 150-acre military grant; Feb. 10, 1871, Lot 96, Group 1, 160 acres; Oct. 30, 1878, Lot 202, Group 2, 162 acres; all New Westminster District. Surveyor, 1855-1858, R.E. with ordnance survey; 1863, partner with William McColl in land surveying office; on CPR survey, dominion and provincial government surveys of roads, townsites; 1869-1871, operated London Arms, New Westminster; 1880s, partner in Woods, Turner & Gamble; 1890, founder of Public Land
- * attached to Royal Engineers, Columbia Detachment.

Surveyors Association. Member Seymour Artillery Co.; New Westminster city council; charter member IOOF; Ancient Order of United Workmen. 1869, married Ann, widow of William McColl; survived by son, 2 daughters, 6 step-children.

- WAKELY, Samuel, Sapper: appears to have died or left B.C. before Nov. 1907.
- WALSH, James, Sapper: a farmer and clerk in Victoria, 1880-1887.
- WALSH, Thomas, Sapper: received Crown grant, Dec. 7, 1871 for Section 18, Block 4 North, Range 6 West, purchase. Tailor in New Westminster, 1868-1887. Sons (one born 1859 on Thames City) carried on Walsh & Sons, tailors, 1908-09.
- WEST, Christopher, Sapper: received Crown grant, Nov. 30, 1870, for Lot 59 Group 2, New Westminster District, 150-acre military grant. 1877, Merchants Exchange Saloon, Victoria.
- WHITE, John C. (1835?-1907), 2d Corporal: artist and architect, did scenes for Theatre Royal, Thames City and Sapperton; artist and draughtsman, Collins Western Union Overland Telegraph, 1866; architect for Government House addition, New Westminster, 1864, and St. Mary's Church, 1865. Draughtsman, Lands and Works Dept., 1864. Died 1907 at home of granddaughter, Mrs. T. J. Deasy, Berkeley, age 72; survived by 4 sons and 2 daughters.
- WHITMORE, Henry, Corporal, 15th Hussars:* appears to have died or left B.C. before Nov. 1907.
- WILKINSON, William, Sapper: appears to have died or left B.C. before Nov. 1907.
- WILLIAMS, George, Sapper: received Crown grant, Nov. 30, 1870 for Lot 54, Group 2, New Westminster District, 150-acre military grant. Printer, Government Printing Office, 1876-1877; 1887, deputy collector of inland revenue, Victoria.
- WOLFENDEN, Richard (1836-1911), Corporal: received Crown Grant, April 6, 1867 for Lot 39 Group 2, New Westminster District, 150-acre military grant. In charge of Royal Engineers printing press; 1863-1911, superintendent, Government Printing Office, New Westminster and Victoria. 1864-1868, New Westminster Volunteer Rifles; 1868-1874, Victoria Rifle Corps; 1874-1886, B.C. Brigade Garrison Artillery (later 5th Regiment), retired as Lieut.-Col. Had 9 children by first wife, Kate Cooley (d. 1878), 3 by second wife, Félicité Bayley. Youngest daughter, Madge, retired as Assistant Provincial Archivist, 1953.
- WOOD, James, Sapper: pre-empted 160 acres near Big Bar Creek, Lillooet District, July 29, 1865, and applied for several more lots in the same area, but most were Crown-granted later to Eliza Jane Carson. He was farming at Big Bar, 1876-1887.
- WOODCOCK, John, Corporal: 1863, took over blacksmithing business, with George Hand, formerly operated by W. Blackie in New Westminster.
- YATES, Henry, Sapper: received military grant of 150 acres, April 10, 1873, and purchased additional 12 acres for Lot 2, Group 5, Yale-Lytton District (Lot 243 Group 1, Kamloops District, resurveyed), land known as Harper's Camp.

This information has been gathered from a number of different sources, including newspapers, directories, voters lists and theses.

A bibliography about the Royal Engineers in British Columbia may be lengthy, but for the most part the information is repetitious and fragmentary. Documentary material relating to the Oregon dispute was copied in London by Joseph Schafer and later published in the *Oregon Historical Quarterly*, with those documents concerning Warre and Vavasour, edited

^{*} attached to Royal Engineers, Columbia Detachment.

by Schafer, appearing in March 1909, under the title, "Documents relative to Warre and Vavasour's military reconnaissance in Oregon, 1845-6," and those relating to Peel, edited by Leslie M. Scott, in March 1928, as "Report of Lieutenant Peel on Oregon in 1845-46." The long-lost documents of the British Boundary Commission found at Greenwich by Canadian Chief Astronomer Otto Klotz were published in 1899 by the Canadian government as Parts 3 and 4 of Certain Correspondence of the Foreign Office and of the Hudson's Bay Company. The best source of information for the American Boundary Commission was published in 1900 by Marcus Baker as U.S. Geological Survey Bulletin 174, Survey of the Northwestern Boundary of the United States. A good assessment of the boundary survey, edited by Herman J. Deutsch, is Surveying the 49th Parallel, 1858-61: United States-Canada Boundary in the Pacific Northwest, a Washington Historical Society pamphlet published in 1962. The report of the International Boundary Commission on the . . . Gulf of Georgia to Northwesternmost Point of Lake of the Woods, published in Ottawa and Washington in 1937, summarizes the history of the boundary survey and includes the treaties and technical information, as well as being the final report on this section of the Canada-United States boundary. The best published documentary material relating to the Columbia Detachment is to be found in the British Columbia Papers, 1859-1862. Most histories of the detachment are based on Judge Howay's The Work of the Royal Engineers in British Columbia, 1858 to 1863, published in 1910. The Emigrant Soldiers' Gazette and Cape Horn Chronicle, the newspaper edited by Corporal C. Sinnett, R.E., assisted by Lieut. H. S. Palmer, R.E., during the voyage of the main body of the detachment on board the Thames City in 1859, was published by the King's Printer in 1907, with an addendum by Lieut.-Colonel R. Wolfenden, one of the best known of the Engineers who remained in British Columbia. Frances Herring's In the Pathless West with Soldiers, Pioneers, Miners, and Savages, published in London in 1904, is a somewhat fictionalized account of the Columbia Detachment's journey to British Columbia and its work here. The most in-depth study is the unpublished 1940 M.A. thesis by Lillian Cope, "Colonel Moody and the Royal Engineers in British Columbia," which includes a fairly comprehensive critical bibliography. John Gibbard's "Early history of the Fraser Valley, 1808-1885," another University of British Columbia M.A. thesis, written in 1937, has an excellent chapter on the work of the Royal Engineers, plus further information about Engineers who remained in the valley as pioneer settlers. The last group of Royal Engineeers in British Columbia, although the most recent, is the

least known. Reginald H. Roy, in his article "The early militia and defence of British Columbia, 1871-1885," published in British Columbia Historical Quarterly, v. 18, nos. 1-2 (January-April 1954), gives a good account of the events leading up to the return of the Royal Engineers. An unpublished military history of British Columbia from discovery to 1930, "Notes of Military District No. 11," compiled for the Historical Section (General Staff) of the Department of National Defence, although short and undocumented, does give some information about the Royal Engineers. Volume I of The History of the Corps of Royal Canadian Engineers, the official history compiled by A. J. Kerry and W. A. McDill and published by the Military Engineers Association of Canada in 1962, is rather disappointing in its treatment of this period in British Columbia. Major F. V. Longstaff's Esquimalt Naval Base: a history of its Work and its Defences (Victoria, 1941), although the emphasis is on the naval, gives a history of the military establishment at Esquimalt and includes a chronology. C. S. MacKinnon, in his Ph.D. thesis, "Imperial fortresses in Canada: Halifax and Esquimalt, 1871-1906," (University of Toronto, 1965) gives a detailed, documented account of the complicated political and military struggles to defend the Pacific coast in his chapter, "The Esquimalt problem." Both Barry Gough, in The Royal Navy, and D. M. Schurman, in his article, "Esquimalt: defence problem, 1865-1887," in the British Columbia Historical Quarterly, v. 19, nos. 1-2 (January-April 1955), look at the defence of Esquimalt from the naval point of view, with Schurman concentrating on the Admiralty's problem of protecting the coaling-station, and interdepartmental rivalry.

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