

MONDAY, MARCH 13TH, 1882.

W. BENNETT,—*Continued*:

Mr. Galbraith—Who provided the pumping machinery for the dock? *Ans.*—The Government.

Mr. Galbraith—When was it landed on the dock site and stored? *Ans.*—The first shipment was landed on the 23rd November, 1876, and the remainder on the 24th February, 1877.

Mr. Galbraith—Have you had it overhauled; and, if so, when was this first done, and how often has it been done since? *Ans.*—I had the machinery thoroughly cleaned immediately on its being landed, and it has been kept constantly in good order since by the Engineer in charge of the auxiliary pump.

Mr. Galbraith—Have you had it checked by the invoices; and, if so, have you found it correct? *Ans.*—Yes. The only thing which was reported to me as missing was a few short bolts.

Mr. Galbraith—When did you first check it? *Ans.*—On its arrival.

Mr. Galbraith—If you considered it your duty to check it—viz., the machinery—with the invoices and see that it was in order and complete for the dock, why did you not take a similar precaution with the cement? *Ans.*—Because I was present when the machinery arrived and saw the invoices, whereas the greater portion of the cement was here before I arrived, and I did not know how much had been ordered or how much was in stock.

Mr. Galbraith—Did you ever enquire as to the amount ordered? *Ans.*—I did not.

Mr. Galbraith—Was it not your duty as Resident Engineer to find out the exact quantity ordered? *Ans.*—I did not consider it to be so.

Mr. Galbraith—For what reason? *Ans.*—Because I never thought one way or the other about the matter, the order being given before my arrival.

Mr. Galbraith—Was it not your duty to see that everything was ready and complete for the construction of the dock? *Ans.*—I thought everything was ready.

Mr. Galbraith—If you wish to build a large dock, such as the present, on your own account, and had the machinery and all the cement supposed to be necessary given to you gratis, would you not, as a matter of ordinary prudence, check off the cement and machinery with your specifications, bills of quantities, and invoices, to see if they (the cement and machinery) would be sufficient, before you incurred any risk, so as ascertain what the work would cost you? *Ans.*—I most probably should do so.

Mr. Galbraith—Where are the estimates of the Chief Engineers which Mr. Vernon acknowledges the receipt of in his letter dated 21st July, 1877, which appears in Sessional Papers of 1878, page 559? *Ans.* I was not aware Mr. Vernon had ever received an estimate of the cost of the dock. I never heard of the receipt of it, and do not think there was one.

Mr. Galbraith—Do you not know that the dock correspondence to the Provincial Secretary was in the portfolio in the Land Office? *Ans.*—I am aware that there was some correspondence in the portfolio, but I never went through all the letters.

Mr. Galbraith—Had you not free access to the letters and papers in the portfolio? *Ans.*—Yes.

Mr. Galbraith—Have you not had leisure time during your six years here to carefully go over all the dock correspondence? *Ans.*—I have, no doubt, had plenty of time.

Mr. Galbraith—Can you give any reason why you did not carefully go through all the dock correspondence? *Ans.*—There was no reason for my doing so, as I had nothing definite to find out, excepting on one occasion, when Mr. Walkem asked me to hunt up a letter with reference to the midship section of one of H.M. ships of war.

Mr. Galbraith—Was not the first set of dock specifications or conditions sent out by Kinipple & Morris revised and settled by Mr. Vernon? *Ans.*—The original draft was sent out when Mr. Vernon was Chief Commissioner. I remember some slight alterations were made and the draft was returned to Kinipple & Morris. The letter enclosing the draft reads as follows:—

“LANDS AND WORKS DEPARTMENT,  
“Victoria, B.C., 18th March, 1876.

“Messrs. Kinipple & Morris,  
“3, Westminster Chambers, London, S. W.

“ESQUIMALT DOCK.

“GENTLEMEN,—I have the honour to inform you that I have this day returned the conditions for the carrying out of the main dock works. I have made a few alterations in pencil on pages Nos. 7, 10, 11, 12, 15, 17, 24, 25, 65, and 66.

“I have, &c., (Signed) FORBES G. VERNON, C.C.L. & W.”

Mr. Galbraith—Why did you not go over the specifications when you made out the estimate for Mr. Wilson? *Ans.*—Because I thought the question of the supply of pumps and cement was settled.

Mr. Galbraith—Has not Mr. Walkem, from time to time, asked you to assist the contractors as far as possible, and until lately? *Ans.*—Yes.

Mr. Galbraith—How has he expressed himself to you with respect to assisting the local contractors? *Ans.*—He has always said that he wished to help them along as much as he could.

Mr. Galbraith—Has he ever, directly or indirectly, given you orders, or even hints, to embarrass or cramp the contractors? *Ans.*—He has neither done one nor the other.

Mr. Wilson—When did the Provincial Government inform you that the cement purchased in 1874 was bought for the Cofferdam and sea-wall, and not for the dock? *Ans.*—The Government have never informed me that such was the case, and the fact I learned for the first time from a remark made by Mr. Beaven a very short time since.

Mr. Wilson—Had you been informed by the Government that the cement at Esquimalt was not bought to complete the dock, would you have made a calculation of the quantity of cement the dock would take?

*Ans.*—If I had not always been under the impression that the cement required for the dock was here, I should most probably have done so.

Mr. Wilson—Were you in ignorance of the existence of Mr. Sproat's letter concerning cement until it was produced before this Committee? *Ans.*—I was.

Mr. Wilson—When the question of including the cement in the dock contract was considered by you and Messrs. Walkem and Beaven, did either of those gentlemen inform you that Mr. Morris had suggested when the cement was purchased that the cement should be included in the contract? *Ans.*—I do not remember anything being said about Mr. Morris in the matter. The clause stating that the Government would provide the cement was in the original draft of the specifications.

Mr. Wilson—If the Provincial Government had acted on Mr. Morris' suggestion to sell the cement to the contractors, just as they acted on his suggestion to buy the cement, and had fixed a price per ton for it in the bills of quantities, were not Kinipple & Morris' bills of quantities so made that tenderers could have figured the cement in their tenders for the dock? *Ans.*—The bills of quantities need not have been altered, with the exception of the notes stating the Government would supply the cement. The body of the specification would also have had to be altered in this respect.

Mr. Wilson—Will you tell us what increase in the quantity of cement you have made on the dock work done? *Ans.*—The 5 to 1 I changed to 4 to 1 when the work started, as this was the most important, being the 9-inch skin over the bottoms of the foundations, and the lining to all walls. The filling in of the cellular pockets was of 7 to 1. Soon after the sea-wall started, I changed the 7 to 1 in it to 6 to 1, and all the 5 to 1 in it has been 4 to 1; and I may add that I have not ordered a reduction of the quantity of cement used in the concrete amounting to 1-7th part, which I might have done by clause 115 of the specifications, wherein it is stated that if the cement is mixed by machinery that amount might be dispensed with.

Mr. Wilson—Are the cement tests made by you as the specifications require; if not, in what do they differ? *Ans.*—The clause states the brick shall be put in water after being 12 hours in the open air. This would be the proper time if the cement was used, as it is at home, quite fresh; but as, from its age, it does not set as rapidly as it should, the bricks are kept out of water for a longer period, and lately they have been kept out 36 hours, for by that time I consider the cement is in the same state of hardness as it is at home when the cement has been made up 12 hours.

Mr. Wilson—Will not cement bricks 10 days old bear a greater strain than bricks 7½ days old? *Ans.* I think perhaps they would.

Mr. Wilson—Who are the makers of the late shipment of cement from San Francisco? *Ans.*—White Brothers.

Mr. Smithe—What tests of that cement have you made, and what is the result? *Ans.*—I have tested a sample sent by them; on 29th November, 1881, the average of three bricks gave a result of 564; again, on December 3rd, 1881, I tested three more, the average being 676. On December 13th, 1881, I tested three more, the average being 529½. I may add, there is a great difference in the result sometimes, owing to the way in which the bricks are made up, and bricks made out of the same barrel I have known to vary as much as 300 lbs. The standard required by the specifications is 750 lbs.

Mr. Wilson—In making up the quantity of cement to bring it up to the required standard, did you act on the advice of the Chief Commissioner, on the specifications, or on your own opinion? *Ans.*—On my own opinion.

Mr. Wilson—How often did Mr. Walkem examine your record of tests? *Ans.*—I don't think he has ever seen the book.

Mr. Smithe—Did you ever report to Mr. Walkem the amount of cement you ordered to be added, from time to time, towards making up the standard required by the specifications? *Ans.*—No.

Mr. Smithe—Did he never require you to do so? *Ans.*—No.

Mr. Smithe—Did he ever ask you how much cement you were adding on account of deficiency of quality? *Ans.*—No.

Mr. Smithe—Did he know that you were adding any cement to make up that deficiency? *Ans.*—I don't know whether he did or not.

W. BENNETT.

Signed, 14th March, in the presence of }  
THORNTON FELL.

TUESDAY, 14TH MARCH, 1882.

WILLIAM BENNETT—Continued:—

Mr. Smithe—When you submitted your estimate of 4,400 tons as being the additional cement required to complete the dock, did Mr. Walkem get you to check your estimate more than once, and did you do so and assure him that you could not possibly be wrong? *Ans.*—When I reported that at least 4,400 tons would be wanted, Mr. Walkem was much astonished at the large quantity which I estimated would be wanted. He asked me to go over my figures again, which I did more than once, and I felt quite sure that I had not over-estimated the amount required.

W. BENNETT.

Signed, 14th March, in the presence of }  
THORNTON FELL.

ARTHUR STANHOPE FARWELL:—

Mr. Helgesen—Are you connected with the Graving Dock at Esquimalt? *Ans.*—Yes, I am acting as Engineer for Messrs. Nicholson, Robertson, & Huntington.

Mr. Helgesen—Is that work progressing satisfactorily? *Ans.*—I consider that the work has gone on satisfactorily under existing circumstances.

Mr. Helgesen—In your opinion as an Engineer, how long will it take to finish the dock at the present rate of progression? *Ans.*—It will never be finished at all, taking into consideration that the contractors are out of cement.

Mr. Helgesen—Can you give any reason why the work is not progressing at a faster rate? *Ans.*—I consider the work has been prosecuted as fast as the supply of cement justified.

Mr. Helgesen—Have the contractors ever been detained, on the part of the Government, at any time, by reason of want of cement and other materials required for construction? *Ans.*—The only material to be supplied by the Government was the whole of the cement. The contractors used up the last of the cement considered fit for use, on the 4th March last; and since then all stone laying and concreting has been stopped.

Mr. Helgesen—Did the Resident Engineer condemn the cement you speak of as unfit for use? *Ans.*—I have no recollection of having any conversation with him about it.

Mr. Helgesen—How do you arrive at the conclusion that the cement on hand is unfit for use? *Ans.*—Mr. J. J. Robertson informed me on the 4th March last that Mr. Humber stopped his (Mr. Robertson's) using the balance of the cement, as it ought to be mixed with fresh cement.

Mr. Helgesen—Do you know if the Resident Engineer has condemned the cement here spoken of? *Ans.*—Not to my personal knowledge.

Mr. Helgesen—Did not the Government land the recent shipment of cement at the Dock before the other was exhausted? *Ans.*—As I said before, the contractors used up all the cement that was considered fit for use, on the 4th March. Between 70 and 80 barrels of cement were placed in Mr. Selleck's warehouse on the 6th March, about 9 or 10 o'clock in the morning.

Mr. Helgesen—How could the contractors, then, be detained by reason of the want of cement? *Ans.*—Clause 106 of the specifications will explain that. The clause states that "the cement will be deposited upon the works at least one month before it will be required for use, and at least two tests will be made by the Resident Engineer, one at the time of the delivery of the cement, and another on the tenth day after delivery, or at such other times as in the opinion of the Resident Engineer may be deemed advisable."

Mr. Helgesen—Has not the recent shipment of cement been within three miles of the works for many months, and how can that shipment affect clause 106 of the specifications? *Ans.*—I believe the last shipment of cement was landed at Victoria on Sunday, the 5th March last, and between 70 and 80 barrels of cement were taken round to Esquimalt the same day.

Mr. Helgesen—Has there been any extra work done by the contractors not provided for in the specifications? *Ans.*—I believe the site of the dock has been moved to the south 43 feet 6 inches. This alteration entails more excavation and decreases dumping space.

Mr. Helgesen—Will the local Government have to pay for this extra excavation, and what will it cost? *Ans.*—The contractors are paid a fixed sum per cubic yard for excavations and fixed sums per yard for depositing in different places. I have not calculated the difference the moving of the dock site will make in the excavating.

Mr. Helgesen—In your opinion what time will it take to execute this extra work with 25 men? *Ans.* I can't say.

Mr. Harris—Did you, when in the employ of the Provincial Government, ever make an estimate of the total cost of the dock? *Ans.*—No.

Mr. Harris—Were you ever asked to do so by the Chief Commissioner? *Ans.*—No.

Mr. Wilson—Was it understood in the Land Office, when you were in the Government employ, that all the cement required was on hand? *Ans.*—That was my impression.

Mr. Wilson—Did you know that the 716½ tons of cement were ordered for the Cofferdam and sea-wall, and not for the main dock? *Ans.*—I always considered the 716½ tons of cement were intended for the construction of the main dock work.

Mr. Wilson—Have you seen Mr. Sproat's letter of 2nd January, 1874, stating that such was not the case? *Ans.*—I never saw or heard of Mr. Sproat's letter, with reference to using the cement in the Cofferdam, until I saw it mentioned a few days since in the newspapers.

Mr. Wilson—Was the dock correspondence in the Lands and Works Office at that time? *Ans.*—It was supposed to be there.

Mr. Wilson—Did you see most of it? *Ans.*—In all probability I read it all.

Mr. Wilson—Is it your impression that Mr. Sproat's letter was not with the dock correspondence in the Land Office when you were in that department? *Ans.*—It could not have been.

Mr. Wilson—Were you in the Land Office when the main dock contract was let? *Ans.*—No; it was let a long time after I left the Government service.

Mr. Wilson—Did the specifications, bills of quantities, and estimates of the main dock arrive from Kinipple & Morris whilst you were in the Land Office? *Ans.*—Three complete sets of the plans, a number of specifications and bills of quantities were received in my time (1877). I have no recollection of any estimate being received at that time.

Mr. Wilson—Did you ever see any detailed estimate of the probable cost of the dock made by Kinipple & Morris? *Ans.*—My impression is there was such a document, but I can't say positively; the Land Office letter registers ought to settle that question.

Mr. Wilson—Were the plans, specifications, and bills of quantities, received by Mr. Vernon, drawn by Kinipple & Morris under instructions from Mr. Vernon? *Ans.*—The Land Office letter books will answer that.

Mr. Wilson—Do you know if Mr. Vernon amended the dock specifications? *Ans.*—I have some recollection of going through the conditions to be appended to the dock specifications with Mr. Bennett the

Resident Engineer, and jointly making some trivial alterations. The Land Office letter books will show what the alterations were.

Mr. Wilson—When did you first go on the dock works as Contractors' Engineer? *Ans.*—On 29th of August, 1881.

Mr. Wilson—When did you first discover that the cement at Esquimalt was insufficient to complete the dock? *Ans.*—I think about the end of September.

Mr. Wilson—Did you, at that time, make any calculations or estimate of the amount of cement required to complete the dock? *Ans.*—Mr. J. J. Robertson and myself made a rough estimate about that time.

Mr. Wilson—What was the amount of the estimate? *Ans.*—I have not the figures with me, but will produce them.

Mr. Wilson—Have you recently made a calculation of the amount of cement required to complete the dock; and, if so, will you give the figures? *Ans.*—I have made several. The amount of my last calculation is 6795 tons. As about 601 tons have been used, the quantity still required will be 6194 tons of 2240 lbs.

Mr. Wilson—Is it, in your opinion, possible to substitute stone for concrete in dock work, without diminishing the stability of the structure? *Ans.*—I am not prepared to say.

Mr. Wilson—Would such a change, if practicable, reduce the cost of the dock, viz., if rubble stone was substituted for concrete? *Ans.*—Yes; but how much I cannot state, without going into figures.

Mr. Smithe—Has any cement of an inferior quality to your knowledge gone into the dock? *Ans.*—I don't know; I never tested it.

Mr. Smithe—Has any additional amount of cement been put into the concrete beyond the proportions required by the specifications? *Ans.*—The cement has been entirely under the control of Mr. Bennett. In conversation Mr. Bennett informed me that the proportions had been changed from 7 to 1 to 6 to 1, and from 5 to 1 to 4 to 1, but I forget on what date.

Mr. Smithe—Have you observed in the work any evidence of inferior cement having been used? *Ans.* I can't say that I have.

Mr. Smithe—Do you consider that if cement up to the standard required by the specifications had been used in the sea-wall, it would be necessary, after three months have elapsed since it was laid, to prevent contractors from dumping against the back of it? *Ans.*—I think that would be an unreasonable time under favourable circumstances.

A. S. FARWELL.

Signed 15th March in the presence of }  
THORNTON FELL.

WEDNESDAY, MARCH 15TH, 1882.

ARTHUR STANHOPE FARWELL—*Continued.*—

Mr. Galbraith—How much higher has the east quay wall to be raised, and how much cement would it take to bring the wall up to its full height, and if there had been 1000 tons of cement on hand when work stopped in March, where could cement have been used excepting on the sea-wall? *Ans.*—A short piece of the east quay wall is up to the height to receive the two feet coping; other portions of the wall are several courses lower; there is a break left in the wall for the purpose of admitting water to test the caisson. The west end of the wall is also racked back. I think about 25 tons of cement will carry the wall up to the coping level, with the above exceptions. The Contractors, I imagine, have regulated their conduct of the work to suit the quantity of cement on the works.

Mr. Galbraith—As regards detention on account of want of cement, was there not sufficient to keep on with till Saturday night (March 4th)? *Ans.*—I left Esquimalt about 5.30 on the evening of March 4th, and believe there was sufficient cement to finish the day's work, and no more; this, Mr. Robertson can inform you on more positively.

Mr. Galbraith—Leaving out the question as to the supply of cement, do you consider bricks were supplied in sufficient quantities to carry on the brickwork in time to finish the dock within the specified time? *Ans.*—Taking into consideration the inclemency of the winters here, I think the time specified for the completion of the dock—viz., 23 months—unreasonably short. As regards the quantity of bricks made, I consider the Contractors have done all they could be expected to do. A new brickyard had to be opened, and last year was an exceptionally bad one for brick making.

Mr. Galbraith—When did the first cargo of sandstone reach the works; and how many cubic feet have been delivered? *Ans.*—On the 15th of January, 1882. A second cargo was delivered on the 28th January. The rough measurement of both cargoes was about 4500 cubic feet.

Mr. Galbraith—How long was construction on the sea-wall delayed for want of sandstone? *Ans.*—I consider there is no delay attributable to the Contractors.

Mr. Galbraith—If the sea-wall had been brought up to the height it is now, at an earlier date, would not the ground of complaint, that the Resident Engineer would not allow the wall to be backed up with filling, have been groundless? *Ans.*—I imagine the Resident Engineer holds an opinion as to how long the sea-wall should stand and dry out before any backing is placed against it; what that length of time is, I do not know. At whatever time the sea-wall was finished, I suppose the Resident Engineer would consider a certain time necessary to permit the wall to dry.

Mr. Galbraith—Have you had any experience in backing of dock walls, and do you know the danger of tipping against walls just built? *Ans.*—I have had no experience in dock building. I have a general knowledge of retaining walls, and I am well aware that caution should be exercised in placing any heavy weights against them when in a very wet or green state.

Mr. Galbraith—Could not the dock walls have been in course of construction now, if the excavations had been in a further advanced state? *Ans.*—I don't consider it would have been a reasonable and advantageous way of conducting the work. If the excavation had been carried on to the extent necessary to admit of the walls of the dock being built simultaneously, the material excavated would have to be handled more than once by the Contractors, entailing expense and loss.

Mr. Galbraith—If they had been, would there not have been more room for dumping? *Ans.*—Of course there would.

Mr. Galbraith—If more men had been employed, would not the excavations have been further advanced? *Ans.*—I am not prepared to say.

Mr. Galbraith—Do you consider sufficient men have been employed, and sufficient quantities of bricks and sandstone supplied, to complete the works within the specified time? *Ans.*—I consider, as I said before, that the contract time is unreasonably short; the Contractors, to the best of my belief, received no instructions as to what stone material was to be used in the dock up to about September last. I consider the Contractors prepared as large a quantity of bricks as could be expected under the circumstances I have above referred to. I believe the Contractors have employed all the men they could obtain; they are prevented by the terms of the contract from employing Chinamen.

Mr. Galbraith—What stone is mentioned in the specifications, and have the Contractors ever been notified not to use sandstone? *Ans.*—Granite and sandstone are mentioned in the specifications. The correspondence between the Chief Commissioner and the Contractors will answer the latter part of the question.

Mr. Wilson—Had the contractors a supply of sandstone on hand when the supply of Government cement was exhausted? *Ans.*—Yes.

Mr. Wilson—Which do you consider was behindhand, the contractors in supplying the stone, or the Government in supplying the cement to lay the stone? *Ans.*—The Government.

Mr. Wilson—Do you know whether the cement at Esquimalt was in good order, or whether it required pounding, crushing and sifting before it could be used? *Ans.*—Since I entered the employ of the contractors I believe the greater portion, if not all, the cement, was pounded up and sifted.

Mr. Wilson—Do you know whether the contractors were notified by either the Engineer or the Government that the site of the Dock had been shifted after the contract for the Dock was entered into? *Ans.*—I don't know, the work was laid out prior to my engagement with the contractors.

Mr. Wilson—Had you any conversation with Mr. Nish when that gentleman was here, and please state the nature of it? *Ans.*—I was introduced to Mr. Nish, I think, on the 4th February last, in the contractors' office, at Esquimalt. Mr. Nish only stopped a short time on that day, and I had no special conversation with him, that I remember. On the 10th February Mr. Nish again came to the office at Esquimalt, for the purpose of reading over the correspondence between the Government and the contractors. Mr. Nish read about half of it, and I read the remainder. Mr. Nish appeared struck with some of the letters, and remarked that there was a clear case of delays and damages, or words to that effect. I offered no remarks that I remember, except such as politeness demanded. The conversation was conducted by Messrs. Robertson, Nicholson, and Huntington.

Mr. Smithe—Do you think that you are "the man with the spectacles, the clerk" referred to by Mr. Nish in his conversation with Mr. Walkem? *Ans.*—Yes.

Mr. Smithe—Did Mr. Nish ever tell you that the contractors, embracing "himself and Messrs. McNamee, Huntington & Co., had not a leg to stand on" with regard to the claims of the local contractors against the Government for delays, &c.? *Ans.*—No.

Mr. Galbraith—Do you know why the position of the Dock was moved south? *Ans.*—I don't remember ever hearing any reason given for the alteration. The work was laid out before I was engaged by the contractors.

Mr. Galbraith—When did the contractors inform the Government that the cement was insufficient? *Ans.*—I don't know.

Mr. Galbraith—Did they give ample notice to the Government for further supplies as required by clause 106 of the Specifications? *Ans.*—The correspondence, I presume, will show what notices were given.

A. S. FARWELL.

Signed 16th March in the presence of }  
THORNTON FELL.

THURSDAY, MARCH 16TH, 1882.

W. S. GORE, Surveyor-General:—

Mr. Wilson—Have you had anything to do, as Surveyor-General, with dock matters? *Ans.*—Nothing beyond replying to letters occasionally, by instructions from the Chief Commissioner.

Mr. Wilson—Have you ever been asked to make a calculation, from the dock bills of quantities, of the amount of cement required for the dock work, and, if so, when? *Ans.*—Yes, I was asked to do so by Mr. Walkem, about the beginning of last week.

Mr. Wilson—Have you made the calculation, and, if so, will you produce it? *Ans.*—I have. I produce it (Exhibit 20). I give two totals in it, according to the weight of the cement. The amount is, estimating it at 83 lbs. to the cubic foot, 5421 tons, or, at 96 lbs. per cubic foot, 6216 tons.

Mr. Smithe—How do you arrive at the weight of 83 lbs. to the cubic foot? *Ans.*—All the books of tables that I have been able to consult, give the weight of Portland cement per cubic foot from 81½ to 83 lbs.: and more,



Mr. Smithe—How do you get at the other figures you have used, of 96 lbs. per cubic foot? *Ans.*—I understood from a member of the committee that it weighed that by actual test.

Mr. Smithe—Are you aware that Mr. Bennett has stated in his evidence that the weight of the original cement from England had to be 113 lbs. to the bushel? *Ans.*—I may have read it in the report of his evidence, but do not remember.

Mr. Smithe—Are you aware that in Trautwine's table of specific gravities and weights; that the weight of English hydraulic Portland cement manufactured by Gilmore, is given as ranging from 81 to 102 lbs. per cubic foot? *Ans.*—Since you have pointed it out to me, I see that it is so.

Mr. Smithe—Is it not then, in your opinion, probable, that to make an accurate estimate of the weight of cement for the whole dock, that the weight of a cubic foot ought to be taken at higher figures than 83 lbs.? *Ans.*—No, for the authority quoted in the previous question gives the weight per cubic foot as low as 76 lbs.

Mr. Smithe—If the lowest weight per cubic foot of Portland cement is given in the table quoted at 76 lbs., and the highest at 102 lbs., would not the average be considerably over 83 lbs.? *Ans.*—It would be six pounds more.

Mr. Smithe—If, then, the average weight per cubic foot, according to that table, be 89 lbs., what reason do you give for assuming that 83 lbs. is the correct weight of a cubic foot upon which to base your estimate of the quantity of cement required? *Ans.*—Having a choice of weights, I take 83 lbs. for facility in calculation, that weight making a cubic yard and a ton synonymous.

Mr. Smithe—Do you not think that accuracy of estimate is a much more important matter than mere facility of calculation? *Ans.*—I do, but I do not consider my calculations are inaccurate. I consider that my estimate would be nearer correct than the average mentioned above would give, when large quantities of new cement are weighed.

Mr. Smithe—But, when you find that the actual weight, as determined by this Committee, of the old cement at Esquimalt, and the new cement that has just been imported from San Francisco, is 94½ lbs. per cubic foot, and that, according to Mr. Bennett's evidence, the cement at the works in England had to weigh not less than 88 lbs. per cubic foot, are you not inclined to admit that 83 lbs. must, under the circumstances, be taken as too little? *Ans.*—No, I can't say that I am inclined to admit that it is too little. Paswell gives the weight of English cement at 81.25 lbs. per cubic foot, and I take it that the weights arrived at are the result of repeated experiments, and that the weight arrived at by this Committee is only a limited test, and that it is possible the weight may be greater than it should be as shown by the engineering formulas referred to.

Mr. Smithe—Is it not a fact that light cement is not considered to be of as good a quality, or as strong, as the heavier grades? *Ans.*—I believe that pound for pound they are equally strong, though measure for measure they might not be.

Mr. Smithe—What do you suppose was the reason for originally requiring the cement to be up to the weight of 88 lbs. per cubic foot, if it were not an advantage to have it over say 83 lbs.? *Ans.*—I really can't say what Kinipple & Morris' reasons were for anything they did.

W. S. GORE,  
S. G.

Signed 17th March, 1882, in presence of }  
THORNTON FELL.

FRIDAY, 17TH MARCH, 1882.

HON. J. W. TRUTCH :—

Mr. Wilson—Have you anything to do with the Esquimalt Graving Dock? *Ans.*—As the Agent of the Dominion Government I have.

Mr. Wilson—What are your duties in connection with that work? *Ans.*—According to my instructions from the Minister of Public Works, my duty is to watch the construction of the works, to examine the quality of the materials used in its construction, to see whether the plans and specifications are complied with in all respects, with a view mainly to my being in a position intelligently to determine whether or no to countersign the certificates of progress estimates of the Resident Engineer, and to report from time to time to the Minister.

Mr. Wilson—Has the cement so far used on dock work been up to the standard required by the specifications? *Ans.*—I consider it has not.

Mr. Wilson—Do you know whether the quantity has been increased in proportion, to make up the deficiency in quality, as called for in the specifications? *Ans.*—I know it only from Mr. Bennett's assurance to me that it has.

Mr. Wilson—Have you been satisfied so far with dock construction, or have you had to make complaints concerning it? *Ans.*—With the general character of the work done I have had no reasons to make any representations adversely, but as to the progress of the work I have.

Mr. Wilson—Did those complaints take the form of written communications to the Dominion Government? *Ans.*—Certainly, by reports to the Minister of Public Works.

Mr. Wilson—Was any action taken by the Minister of Public Works on your report? *Ans.*—I have reason to believe that communication on the subject was made to the Government of British Columbia.

Mr. Wilson—Can you give us the substance of it? *Ans.*—I did not see it.

Mr. Wilson—Do you know whether delay of dock construction last summer arose from the Provincial Government not having decided whether to construct the dock of sandstone or granite? *Ans.*—I do not; but I have no reason to suppose that any delay was occasioned by such indecision, if any existed.

Mr. Wilson—Do you mean by that, that at that time stone work could not be proceeded with? *Ans.*—Certainly it could not, as the completion of the excavations was delayed, in my judgment, far beyond the period prescribed by the requirements of the specifications; to that in the first place I attribute the retardation of the work.

Mr. Wilson—Has any communication passed between the Dominion Government and the Provincial Government which can be construed into a three months' notice to take possession of the dock, under the terms of agreement by which the Dominion pays the Province \$250,000 on dock work? *Ans.*—I think you can best obtain an answer to this question by getting the correspondence.

Mr. Wilson—Do you know whether the cement at Esquimalt is sufficient to complete the dock work? *Ans.*—I don't know how much is there.

Mr. Wilson—Have you made any calculation, at any time, of the quantity of cement required to complete the dock? *Ans.*—About a fortnight ago my attention was directed to the subject by the appointment of this Committee, upon which I directed the Assistant Engineer in my Office, Mr. Gamble, to make as careful a calculation of the whole amount required for the construction of the dock as he could; that calculation I have carefully gone over and verified, and in my judgment it is as close an approximation to the fact sought to be ascertained, as can practically be arrived at.

Mr. Wilson—What does Mr. Gamble's calculation show? *Ans.*—I produce it as Exhibit No. 21. The amount is 6010 cubic yards. I wish to state that, in my opinion, it is impossible to calculate exactly the amount of cement that will be used in the construction of the Graving Dock at Esquimalt; because, in the first place, the specification is so indefinite as to the composition of the various descriptions of concrete to be used, so much in each case being left to the discretion of the Engineer, and very properly so, and particularly as regards the greatest bulk of the concrete, viz., that mixed in the proportions of 7 to 1, where it is specified that fragments of rock may be inserted or put into the concrete after it is deposited *in situ*; and secondly, because, in order to obtain such exactness of calculation, it would be necessary to determine by admeasurement and weighing what each cubic yard of Portland cement will weigh at the time it is used, and further, the exact nature and quality of the other materials with which it is to be admixed must be ascertained and considered. The calculation, therefore, now exhibited to the Committee is not to be taken as an exact one. In the result it may be found that the quantity of cement used upon the dock work may either exceed or be less than the amount stated. Taking the cubical contents of the concrete to be as stated in the bills of quantities attached to the agreement, which quantities have not been checked in my office, and basing an estimate upon the established experience of engineering authority generally, we have arrived at the estimate which I have given you.

Mr. Wilson—Is it customary for Resident Engineers to check the bills of quantities in large contracts? *Ans.*—I should think not. I should take it for granted that calculations made in such offices as that of Kinipple & Morris would not require to be further checked.

Mr. Wilson—Is your opinion in accord with that of the Chief Commissioner, that Engineers' errors are proverbial? *Ans.*—I suppose that the Chief Commissioner, if he said that, said it chaffingly; but if he said it seriously, then I say that there are many other proverbs that are equally as untrue as that one. Mistakes are made by Engineers as well as others, and they have to bear the burden of their own mistakes as well as those of other people sometimes. I should have preferred not to have had this question asked or answered, as in my opinion it does not bear on the matter under enquiry.

Mr. Wilson—Have you had any other calculations made than the one made by Mr. Gamble? *Ans.*—Yes, by three of the senior Engineers employed by the Dominion Government on the Canadian Pacific Railway. The lowest of these estimates arrives at very nearly the same result as that which I have given you, the others are higher in amount, the highest being about 6800 tons.

Mr. Wilson—If Engineers were in the habit of making mistakes, would it not be prudent for the Committee to have Kinipple & Morris' bills of quantities examined, before expressing any opinion on their accuracy, or making any estimate of the probable cost of the dock? *Ans.*—I have seen no ground for doubting in the least degree the correctness of Kinipple & Morris' estimate and bills of quantities. I am not aware of any mistake that they have made. I therefore take it for granted that they are correct. If I were a contractor about to tender for the work, then I should certainly check over all their figures; as it is I assume them to be absolutely correct. If the Committee, however, have detected any mistake made by the Engineers, it might be a good ground for them to have the whole calculations and work gone over. The calculations would have been checked two or three times before leaving Kinipple & Morris' office.

Mr. Wilson—Do you know whether as strong work can be made with rubble stone as with concrete? *Ans.*—*Ans.*—I should not think so. The substitution of rubble masonry for concrete, and concrete for rubble masonry, depends upon what part of the work it is to be used in.

Mr. Wilson—Can rubble masonry be made here cheaper than concrete from imported cement? *Ans.*—I should say yes; but it depends a great deal in the nature of the masonry. Mr. Kinipple is a man of infinitely greater experience and knowledge in dock work than I have any pretension to. I should, therefore, not dispute the correctness of his opinion as to the proper material to be used in the separate parts of the dock.

Mr. Wilson—Have you ever had any calculation made of the probable total cost of the dock? *Ans.*—I have not had any calculation made.

Mr. Galbraith—From your long departmental experience in former Governments, would you have any objection to state, whether it was the Chief Commissioner's duty or not, to rely upon the advice of the Resident Engineer on all questions relating to material or construction of the dock, especially as the Resident Engineer was the appointee of the Engineers-in-Chief? *Ans.*—In the day that I was Chief Commissioner I held myself and was held responsible, officially and professionally, for the proper conduct of every work under my charge in all respects. Since Confederation, and the incumbent of the office of Chief Commissioner of Lands and Works having become not necessarily a professional man, the circumstances of the position are changed, and I can only give you my individual opinion, if it is desired, upon the point involved in the question.

Mr. Galbraith—Please give your opinion? *Ans.*—My opinion is that, under present circumstances, the Engineers for the dock, viz., Messrs. Kinipple & Morris, should be held responsible for all purely professional

matters connected with the construction of the work. The official responsibility for that, equally with all other Provincial works, attaches to the Chief Commissioner of Lands and Works.

Mr. Galbraith—Was it not Mr. Walkem's duty to rely on the Resident Engineer's advice in dock matters, relating to material and construction? *Ans.*—I can't say on two points. I don't know what the position assigned by the Chief Engineers to the Resident Engineer was, *i. e.* whether the duty and responsibility of professionally advising the Chief Commissioner of Lands and Works had been specially delegated to him, and also, the question is indefinite in respect of the expression "advising on material."

Mr. Galbraith—Look at the agreement with the Resident Engineer and his principals, and be good enough to state what you think his duties are? *Ans.*—The agreement shown to me furnishes no guide to my mind as to what the instructions were, it only refers to instructions which had been at that time given, or were to be given. It contains no special instructions as to the duties intrusted to Mr. Bennett; it simply appoints him Resident Engineer. The duty of a Resident Engineer, in general terms and under ordinary circumstances, I can give you my idea of. Such duties would be to lay out and superintend, in all respects, the construction of the works, to see that the material furnished and the work done was in all respects in accordance with the plans and specifications, to take steps to insure that an adequate supply of materials of all descriptions necessary for the construction of the dock were brought upon the ground in time to secure compliance with the time limit in the contract, and also to compel the contractor, by the means prescribed in the contract, to make such progress as should insure completion of the whole work within the time prescribed. These in general terms should, I think, be the duties of the Resident Engineer.

Mr. Galbraith—If an approximate estimate of the total cost of the dock were required from the Resident Engineer, would it not be his duty to go over the specifications and bills of quantities carefully, and ascertain what was wanted? *Ans.*—If such an estimate were asked of him by proper authority, that is by the Chief Commissioner of Lands and Works, it would certainly be his duty, in my opinion, unless prevented by instructions from his immediate chief, *viz.*, the Engineers in chief, to make such estimate to the best of his ability and judgment, which would necessarily involve careful examination of the specifications and bills of quantities.

Mr. Galbraith—If he made such calculation from the bills of quantities, would he not have seen how much cement was required for the whole work? *Ans.*—Yes certainly, he should have seen.

Mr. Smithe—If the Chief Commissioner of Lands and Works knew that the cement originally purchased by the Provincial Government was not intended for the main dock, but for a sea-wall only, was it not the duty of the Chief Commissioner to inform the Resident Engineer of the fact, in asking him to make out an estimate of the total cost of the dock? *Ans.*—I can't answer that question. I don't know what the duties of the Chief Commissioner of Lands and Works are. Under the existing system of responsible Government he defines his own duties.

Mr. Smithe—Would you consider the Engineers responsible for the Government undertaking to supply all the cement for the dock? *Ans.*—I should say that, if the Engineers so advised the Government or the Chief Commissioner, all the professional responsibility for that course being adopted must rest with the Engineers, but the official and financial responsibility must still belong to the Government in adopting that advice.

Mr. Smithe—Do you consider that it is better that the cement should be furnished by the Government than that it should have been included in the contract as part of the contractors' obligation? *Ans.*—Economically, I don't see why it should make any difference. The cement if delivered here at the proper time when required direct from England ought to cost the same whether consigned to the Government or to the contractor, but in another view it might be better that the cement should be purchased in England by the Government to insure its being of the proper quality, but that could have been provided against by its being required to be subject to test on its arrival here before use.

Mr. Smithe—If the Engineers recommended the Government to furnish the cement to contractors at cost price agreed upon, instead of free of cost, should not the Government have acted on the advice of the Engineers? *Ans.*—I don't see any reason why they should not have acted upon such advice if given. I think such a course would have been preferable for the Government, thus relieving them of all responsibility in relation to the cement from the time of its arrival until used.

Mr. Smithe—When Mr. Bennett ceased to be Kinipple & Morris' Engineer and accepted an appointment from the Provincial Government, should not the Government have instructed him as to his duties? *Ans.*—If Mr. Bennett ceased to be the representative of Kinipple & Morris and became the servant of, and solely responsible to the Chief Commissioner, then he should have received fresh instructions from the Chief Commissioner.

Mr. Smithe—If Kinipple & Morris no longer hold themselves responsible for the payment of Mr. Bennett's salary as Resident Engineer can he still be said to be their representative and employee here, and if he is not Resident Engineer representing Kinipple & Morris and has not received any appointment or instructions from the Provincial Government, can he be said to have now any status in connection with the Esquimalt Graving Dock? *Ans.*—Unless Kinipple & Morris' letter to Chief Commissioner dated 14th May, 1879, has been revoked, which I have now seen for the first time, I am clearly of opinion that subsequent to the date named therein, *viz.*: July, 1879, he has not been in the employ of Kinipple & Morris as their Assistant Engineer. Whether he has been employed directly by the Provincial Government or no, I have no knowledge. If not so employed by the Provincial Government it is impossible to say what is his position.

JOSEPH W. TRUTCH.

Signed, 17th March, in the presence of }  
THORNTON FELL.



MONDAY, 20TH MARCH, 1882.

JOHN JOHNSTONE ROBERTSON:—

Mr. Wilson—Are you a partner in McNamee & Co.'s contract at Esquimalt for the dock? *Ans.*—Yes.  
Mr. Wilson—Have you the correspondence with the Provincial Government with you, and will you produce it? *Ans.*—I have. (Correspondence produced.)

Mr. Wilson—Were you partners with McNamee & Co. when the dry dock contract was first let by the Government? *Ans.*—No, our partnership dates from 28th August, 1880, I think.

Mr. Wilson—Was the partnership entered into by you, with McNamee & Co., when Mr. McNamee was in this Province? *Ans.*—Yes, a day or two before he left, on the 28th, I think; he left on the 30th.

Mr. Wilson—Have you a copy of the partnership agreement? *Ans.*—We have, but I have not got it with me. I will produce it to-morrow.

Mr. Wilson—Can you give us the names of the other partners of McNamee & Co.? *Ans.*—Mr. McNamee, Mr. Nish, and Mr. Wright, of Montreal, were the original firm; and Messrs. Robertson, Nicholson, and Huntington, are the local partners.

Mr. Wilson—Where was the partnership arranged between the Montreal and local partners? *Ans.*—In the Attorney-General's office, in the presence of Mr. Walkem.

Mr. Wilson—Did Mr. Walkem take any part in making the arrangements? *Ans.*—After a conversation between Mr. McNamee, Mr. Walkem, and myself, Mr. Walkem said, now you two go on and make arrangements, I have got some writing to do, and I won't hear a word you say. After agreeing to certain terms and conditions of the contract, Mr. McNamee asked me how much money we could command, viz., put in to the contract. I told him about \$20,000. Mr. McNamee proposed that we should pay him down \$10,000, which I objected to. Some further discussion between Mr. McNamee and myself took place, when Mr. Walkem looked round and said to Mr. McNamee, you must be more liberal or else you will not be able to do business with them. Mr. McNamee then waived the claim for \$10,000 and asked for \$1,000, which I agreed to give him. We agreed upon most of the terms upon which the contract is based. Mr. McNamee then asked what solicitor would be employed to draw up the agreement. I proposed Messrs. Davie & Pooley. Mr. Walkem turned round and said, no, no, I cannot allow you to go there; this must be strictly private, and proposed that we should go to A. R. Robertson. I demurred somewhat about going there, and said that I preferred that Messrs. Davie & Pooley should draw up the agreement. Mr. Walkem said no, that they, Davie & Pooley, would make it known all over the city; finally, I agreed to Mr. Robertson being the solicitor. The purchase of the Reed Bros.' plant on the Esquimalt dock site was spoken of. Mr. McNamee said to Mr. Walkem, he supposed, if we purchased the plant, that the payment could stand till the final estimate, which Mr. Walkem agreed to. Before leaving the office, Mr. McNamee turned round and said, if you ever mention this or let it be known, I will swear it is not so, meaning the conversation we had in the Attorney-General's office. I told him I had no interest in telling it to anyone except my partners, and told him that my acquaintance with Mr. Walkem dated back about 16 years.

Mr. Wilson—Were there any conditions in the agreement suggested by Mr. Walkem? *Ans.*—Not in my presence.

Mr. Wilson—Who drew up the agreement? *Ans.*—A. R. Robertson.

Mr. Wilson—Who suggested the clause by which McNamee & Co., of Montreal, could, on receipt of a complaint from the Chief Commissioner of Lands and Works, take the contract from you on 24 hours' notice? *Ans.*—The first intimation we had of it was when Mr. Robertson read over the contract. Mr. Huntington objected to the clause. I said I saw no danger from it, as Mr. Walkem had promised me to give us all the assistance in his power, so we waived the objection raised.

Mr. Wilson—Was the clause already referred to agreed upon between you and Mr. McNamee in Mr. Walkem's office? *Ans.*—No.

Mr. Wilson—At whose request was the clause inserted by Mr. Robertson? *Ans.*—I don't know.

Mr. Wilson—Do you know if Mr. Walkem ever saw the draft of the agreement? *Ans.*—Not that I am aware of.

Mr. Wilson—What was the difficulty between you and Mr. McNamee with regard to powder, and had Mr. Walkem anything to do with it? *Ans.*—Mr. McNamee made several contracts with people in Victoria, Mr. Sayward, Shaw & Kuna, and Wilson & Son. There was a Mr. King here from the San Francisco Powder Co. Mr. McNamee said, when I go through San Francisco, I can make a favourable arrangement for you to get powder. Mr. Huntington replied to him "That will be very good, do so," with the understanding that we would order the powder as we required it. Shortly after we commenced work we were notified by a letter from a California Powder Co., that they had shipped on the ship Belvidere, \$3,600 worth of powder. The duty on the powder was, I think, \$900; the freight and other charges, I don't know. We considered it too great a quantity, as the whole rock excavation in caisson chamber, pump-wells, and dock bottom, amounted by the given quantities, to 2,880 cubic yards, so that the quantity of powder was too great for that amount of work. In that bill of powder we were charged 75 cents per lb for dynamite; \$3.50 per keg for black powder. Shortly after we sent an order to the same company for a small amount of powder, which came to \$107, and the price was 42 cents per lb for dynamite and \$2.50 per keg for black powder. I telegraphed to Mr. McNamee that he had better have some one to attend to his powder, as we did not intend to have anything to do with it. I believe the powder was sold by the Customs Officers at Nanaimo. Mr. Huntington told me, in speaking about the powder, that Mr. Walkem said to him that he had had a communication from Mr. McNamee requesting him to see us about taking the powder; also Mr. Walkem said he would telegraph to the Customs Department at Nanaimo to have them stop the sale for a few days, and that we had better take the powder and arrange with Mr. McNamee afterwards.

Mr. Wilson—In your agreement with McNamee & Co., of Montreal, was there any payment of \$15,000 to be made by you to them? *Ans.*—Yes, we were to pay them \$15,000 twelve months after the date of our agreement, and Mr. McNamee was to give us an order for the \$10,000 deposited as part of his security.

Mr. Wilson—Did Mr. Walkem ever ask you or Mr. Huntington for a note for the \$15,000 on behalf of Mr. McNamee & Co., of Montreal, and if so, what had he to do with it? *Ans.*—Yes, Mr. Huntington and myself met Mr. Walkem on James Bay Bridge. Mr. Walkem said he had had a letter from Mr. McNamee requesting him to ask us to make a note for \$15,000 payable at the Bank of Montreal, and they would arrange to get the money for it; he said Mr. McNamee had large contracts in the east, and employed a great number of men for which he had to provide large sums of money to pay for wages: we said nothing in reply for a few minutes, when Mr. Walkem said, "What is your answer to it?" Huntington said, "No, we would not give the note asked for." We then walked along, Mr. Huntington and Mr. Walkem conversing, but I did not hear what they said.

Mr. Wilson—Did the partners of the Montreal firm of McNamee & Co., come out here at the beginning of the present year, and if so, what did they come for? *Ans.*—Yes, they came, I think, some time in February. They said the reason of their coming was that they had received complaints from the Chief Commissioner that the work was not progressing satisfactorily, and that they had come out to see for themselves; and that they had come on a friendly visit. They were either two or three days in town before they came to see us.

Mr. Wilson—Did you go into all matters in connection with the dock with Messrs. Nish and Stewart? *Ans.*—Yes, we discussed a good many matters in detail; the progress of the work, the moving of the dock site from the original site estimated upon. Mr. Nish read a portion of the correspondence that I brought here to-day; then Mr. Farwell read part of the correspondence for him, and Mr. Nish said that we had a clear case of damages against the Government—the moving of the dock site without notifying us, we complained about. When we commenced the dock work we were not furnished with plans for some months after we commenced work. Until we got the plans we were not aware of the exact distance the dock site had been moved. The damage to us by moving the dock site cannot be estimated at present, as it is accruing every day, and will until the completion of the work. All materials for concrete, sand, shingle, coarse gravel, and cement, being landed on the wharf. Had the dock site not been moved, the concrete-mixer could have stood on the wharf, the sand and gravel shoveled direct from the pile into the mixer, and the shute would have conveyed the concrete right on to the work; as it is, we have to erect expensive trestle work to build tramways on, to run the concrete-mixer and cars 43 feet 6 inches out to the wall. Stone, and all other material used, has to be taken out over those tramways. Had the dock site not been moved, with a derrick we could have lifted the stone off the wharf and set them in the work. The moving of the dock site entails double handling of material. I would like to speak on the Engineer's report, dated 31st December, 1881, to the Chief Commissioner. I consider it very inconsistent, it is simply a record of dates, and very unfair. We, the local contractors, contend that we have done all in our power to expedite the work. Mr. Bennett made several applications to us to get sand, gravel, and other materials delivered on the wharf months before it would be required. All such material we had made preparations for conveying it to the work when we required it; if we could use 200 tons per day we had the facility for bringing it. To have brought the material before we required it, would merely have been taking up space on the wharf that we required for other purposes, and would have been more of a hindrance than an assistance towards forwarding the work. I see Mr. Bennett has not mentioned in his report the frequent applications that had been made to him to cross-section certain parts of the work which was necessary that it should be done before we broke ground, to enable him to arrive at the proper quantities excavated of rock and earth. We have waited upon him until we could wait no longer. I told our Engineer to go and cross-section that work, as we must go on, which he did, and Mr. Bennett plotted it from our Engineer's book and not from the work; and it has appeared to us from the beginning that Mr. Bennett has made it a special study to give us all the annoyance he could. In one instance alone, after taking the level of the entrance to the dock, we built the walls of the entrance to a height of 7 or 8 feet, he discovered that in some of the cells that had to be filled with concrete, that we had not gone deep enough to from one inch to five inches; there are different cells formed by brick walls in the foundation to entrance of dock, which we considered unnecessary to do as it did not add to the stability of the work. It merely put us to unnecessary expense in going over that part of the work again, to erect staging to convey the dirt away, for an inch or two we considered it did not interfere with the stability of the work. On another occasion three sleepers had been left on the bottom, outside of the foundation, they were bedded solid in the clay as thousands of tons of clay had rolled over them; they were outside of the sea-wall foundations and under the made ground behind the walls; it was an oversight that they were not taken out; clay had been deposited on top of them to a depth of several feet. Mr. Bennett by some means got to know that they were there, and ordered us to remove the dirt and take them out. On another occasion the central pier, about 20 feet square, we had built in some rather unshapely bricks in the centre of the pier. They were hard burnt bricks from the arch of the centre of the kiln. The following day Mr. Bennett came down and ordered us to open up the work and remove the hard burnt bricks. It appeared to me to be about as unfair and as ungenerous as his report. Part of these matters were spoken of to Mr. Nish.

Mr. Wilson—Had you any other conversations with Mr. Nish? *Ans.*—Mr. Nish called a second time to see us on the works, and came to me while I was on the wharf. He asked me to show him the originally intended line of the sea-wall. He quite agreed with me that the change entailed a great deal more expense upon us. He told me to go up to the office and he would come up and arrange matters in regard to a settlement. I told him we had employed an experienced book-keeper to balance our books, and we would be able to show him exactly how we stood. In walking along the wharf, he followed me up to where the concrete mixers were standing. I told him they were Government property. He asked me where they were made. I told him they were made at Bath, England, and the Government supplied them to the contractors. He turned round laughing, and asked me who got the commission on them. I told him I did not know, it was no part of our business to enquire. I went up to the office and waited, but Mr. Nish did not come up. I had occasion to go up to town soon afterwards and passed him on the road. I have never seen him since, and do not know what has become of him.

Mr. Harris—What reasons were given the contractors by the Resident Engineer for moving the dock site? *Ans.*—None whatever were given to us.

Mr. Helgesen—Please give the dimensions of the sills which were buried in the clay? *Ans.*—3 ft. 6 in. long, 4 inches by 6, sawn timber.

Signed 21st March, 1882, in the presence of }  
THORNTON FELL,

J. JOHNSTONE ROBERTSON

TUESDAY, MARCH 21st, 1882.

JOHN JOHNSTONE ROBERTSON—*Continued*:—

Mr. Wilson—Were any proceedings taken by Mr. Nish to dispossess you of your contract? *Ans.*—Yes, he commenced a suit against us to obtain the \$15,000 mentioned in the agreement. Afterwards, he applied for an injunction to dispossess us. I believe he did not obtain it; if he did, he did not put it in force.

Mr. Wilson—Were you delayed in getting out stone by the neglect of the Chief Commissioner to inform you whether your offer to substitute granite for sandstone was accepted or rejected? *Ans.*—Soon after commencing work on the dock I went to Nanaimo with men to put up buildings at the quarries, and to build a wharf; also to go to a place where I had seen granite from a distance, whilst travelling up the coast. There were two other gentlemen travelling with me, and we came up to Nelson Island. Granite being difficult and expensive to obtain, we deemed it in the interest of ourselves to look after it as early as possible. After discovering suitable granite, I made preparations for quarrying before I returned to Victoria. When the granite was delivered at Esquimalt, the cost of quarrying being much less than we anticipated from experience in similar work, it was suggested to us from parties who had looked at the stone and who admired its uniform shape, that the labour of dressing it and the facilities for getting it, would enable us to lay an offer before the Chief Commissioner to substitute granite for sandstone and bricks, under the impression that had Messrs. Kinipple & Morris known that such material was so easily to be obtained in British Columbia, that sandstone would not have been used in the construction of the dock. Shortly after the termination of the last Session, Mr. Walkem sent us a letter, with a printed copy, notifying us that it had been recommended to substitute granite for sandstone and brick. His letter requested us to furnish him with the price of substituting granite for sandstone. We immediately replied, giving him a price. I think to substitute granite for sandstone was some \$62,000 odd. We received no answer in writing to our proposal, I think, until sometime in September. We had expended about \$375 putting up buildings at the Newcastle quarries, and had made arrangements with parties to build a wharf at the quarry. We countermanded the order for the wharf when the request was made to us to furnish a price to substitute granite for sandstone and brick. I cannot say that that caused any delay. When we received written orders from the Chief Commissioner that granite would not be substituted for sandstone, we were ready to use sandstone, and we found a more convenient and less expensive place than Newcastle, viz., on Salt Spring Island. We furnished samples of stone to the Resident Engineer for his approval and received no reply until sixteen days after.

Mr. Wilson—Was any delay in the work or inconvenience caused by the neglect of the Chief Commissioner to arrange for prompt payment of the certificates for work done? *Ans.*—I cannot say that there was any delay, but there was a great deal of inconvenience and expense attending it. Our first certificate was not paid until four months after it had been presented.

Mr. Wilson—Have you had any experience in the construction of docks before your engagement in this one? *Ans.*—I have been employed on similar work, on the Brooklyn Dry Dock, and also as inspector of masonry of different locks and dams on the James' River and Kanawha Canal, in 1848, 1849, and 1850; also, up to a later date, with Peto, Brassy & Co.; also had the entire management of their cement works at Port Hope, Canada, supplying the cement for the different structures in that section of the Grand Trunk; also the management of their quarries at Port Hope and Queenstown, for the different structures between Coburg and Toronto.

Mr. Wilson—Do you know whether, in the construction of most dry docks, cement is consumed in such enormous quantities in making concrete, as at Esquimalt, or is natural stone generally used? *Ans.*—Wherever I have been employed, well-selected rubble for backing was used. I have never seen concrete used in such large quantities. The voids between the rubble stone were grouted with a preparation of cement and sand.

Mr. Wilson—In what part of the Esquimalt Dock is the greater quantity of cement to be used? *Ans.*—The whole bottom of the dock is covered with concrete to a depth of 6 ft. 9 in. by about 400 ft. in length and 90 ft. broad.

Mr. Wilson—Can you tell us about how much cement goes into that bottom? *Ans.*—About 1500 cubic yards of cement.

Mr. Wilson—Considering the character of the clay bottom of the Esquimalt Dock, do you think a bottom of 6 ft. 9 in. of concrete necessary for the stability of the dock? *Ans.*—It would be presuming too much to offer an opinion contrary to the advice given by Messrs. Kinipple & Morris. Was I not aware of the fact that they have advised that 6 ft. 9 in. of concrete should be laid in the bottom of the dock, I would not hesitate in giving it as my opinion, based upon thirty-seven year's experience of similar work, to say that from 2 to 3 feet of concrete would be enough to protect the arterial drains, and make a sufficiently solid foundation, as we know there is no change from clay to the depth of 10 feet below the lowest depth of foundations in the entrance. No fissures or springs have been encountered in the excavations near to the body of the dock so far as we have excavated.

Mr. Wilson—Is there any evidence in the work done on the dock, of inferior cement having been used? *Ans.*—Mr. Huntington can better answer this.

Mr. Helgesen—Did the Government ever notify the contractors to stop work on the dock, on account of the question being raised to substitute granite for sandstone? *Ans.*—No, they notified us to stop from

dumping the clay excavations behind the sea-wall; we had no where else to dump it. Part of that sea-wall has been built for three months. At present we are tipping our excavations where in all probability it will have to be removed again.

Mr. Helgesen—Has Mr. Humber ever stopped you from using the old cement, and thereby detained the contractors? *Ans.*—On Saturday, the 4th March, when we had used up all the cement that was in the barrels in the warehouse, except 11 or 12 barrels, the first that were opened, Mr. Humber declined to allow us to use them, remarking that they ought to have been mixed with the cement that we had already used.

Mr. Helgesen—Did the Resident Engineer condemn the 11 or 12 barrels referred to? *Ans.*—I never saw Mr. Bennett, the Resident Engineer, in the cement warehouse after the first day we opened the cement, neither am I aware of his ever having been in the warehouse from the first day until the day the Committee visited the warehouse. I don't know whether he condemned it or not, my orders not to use it were from the Inspector of Concrete.

Mr. Helgesen—In the correspondence between you and the Government, you state that Mr. Muir, the Engineer in charge of the pump, has been unobliging and altogether detrimental to the best interests of the contractors, please tell us if that is so? *Ans.*—Most distinctly yes, he has been detrimental to our interests. A great portion of the time that he has been there, his work did not amount to more than one hour per day; he refused to do other work when requested to do it. A great part of his time was spent loitering outside the engine-house. We bought him a certificate to qualify him for running the engine of the steamboat. When he had nothing to do on one occasion, we asked him to take the steamer and go for a load of water to the brickyard at Parson's Bridge, which he refused to do. I applied to have him discharged; Mr. Bennett advised the Chief Commissioner not to discharge him. We consider from the proper interpretation of the specifications, that the Resident Engineer may object to any person whom we might appoint, from running the engines and the auxiliary pump, but that he has no right to appoint or keep any person there contrary to our wishes, or any other man whom we have to pay for work done on the dock.

Mr. Helgesen—Did he ever run your steamer? *Ans.*—He has, but not lately.

Mr. Helgesen—Did a fire ever occur in the ash-box or engine-house, during his absence, on the steamer? *Ans.*—A fire did occur on two occasions, but I do not know if he was absent or not.

J. JOHNSTONE ROBERTSON.

Signed, 21st March, in the presence of }  
THORNTON FELL.

TUESDAY, 21ST MARCH, 1882.

MR. ARMSTRONG.

Mr. Wilson—Were you a member of the Walkem Government in 1874 and 1875? *Ans.*—Yes, I was Minister of Finance and Agriculture.

Mr. Wilson—Were you consulted in the ordering of the cement? *Ans.*—It appears to me there was an Order in Council drawn up by the Provincial Secretary authorizing the purchase of the cement.

Mr. Wilson—Do you know the quantity you ordered? *Ans.*—About 600 tons, I think it was.

Mr. Wilson—Do you know for what portion of the Dock the cement was ordered? *Ans.*—No.

Mr. Wilson—Did you, as Finance Minister, make any calculation of the total quantity of cement the dock would take? *Ans.*—I don't recollect having done so.

Mr. Wilson—Did you ever make, ask for, or see, any calculation of the probable cost of the dock, so as to know whether the expenditure upon it would be kept within the Imperial and Dominion subsidies? *Ans.*—I don't remember ever having done so. I took Messrs. Kinipple & Morris' estimate of the total cost of the dock, \$512,000.

Mr. Wilson—Was that before the plans were changed? *Ans.*—Yes.

Mr. Wilson—After the increase of £20,000 in the Imperial grant, did you ascertain what the more expensive dock required by the Admiralty would cost the Province? No, but I was given to understand that the extra cost would be \$6,000 or \$8,000.

Mr. Wilson—By whom were you so informed? *Ans.*—I can scarcely tell. It was talked of on two or three occasions, but who said so I cannot remember.

Mr. Helgesen—Was it not the general opinion of the members of the Government at that time that the original cement was enough to complete the dock? *Ans.*—I think it was understood it was not sufficient, but how much more was required I do not recollect.

Mr. Helgesen—Were you not then a friend of the dock scheme? *Ans.*—I was a friend of the dock scheme when I found we were going to get a subsidy of \$400,000 towards construction, and that the estimate at that time of the whole cost of the dock was \$512,000.

Mr. Wilson—Did you ever publicly mention that more cement than that ordered in 1874 would be required for the dock? *Ans.*—I don't recollect having done so, though I might have.

W. J. ARMSTRONG.

Signed 21st March, 1882, in presence of }  
THORNTON FELL.

THURSDAY, MARCH 23RD, 1882.

ARCHIBALD C. MUIR:—

Mr. Helgesen—Are you connected with the Esquimalt Graving Dock, and if so, what is your occupation there? *Ans.*—I am the Government Engineer in charge of the auxiliary pump and machinery erected.

Mr. Helgesen—Have you read Mr. J. J. Robertson's evidence given before this Committee? *Ans.*—I have, this morning.

Mr. Helgesen—Do you consider it correct? *Ans.*—I consider it incorrect.

Mr. Helgesen—Was it your duty to run the contractors' steamer and do other work for them on the dock, when required to do so? *Ans.*—It was not, but I have done so to oblige them.

Mr. Helgesen—Did you volunteer to run their steamer for them? *Ans.*—I ran it day after day, and never refused to do so. I am a licensed engineer. On the first occasion when they asked me to run the boat for them my licence had run out. Mr. Huntington said if I would oblige them by running their boat they would pay for the licence. I agreed to do so. On the second occasion, Mr. Westgarth came down to examine the steamer and test her boiler. The licence was run out. Mr. Westgarth advised them to renew the licence as they were unwilling to pay for an engineer to run the boat, which I agreed to and I did so. On many occasions I was unable to run the boat as I was engaged at the pumps and looking after the machinery belonging to the Government. They told me that Mr. Westgarth had given them permission to hire a man as a fireman under my charge, and I could send him out with the boat by taking the responsibility, which I did, and they hired a man to run the boat under my instructions for six or eight months.

Mr. Helgesen—Did you refuse to go with the steamer for a load of water when requested to do so by Mr. Robertson? *Ans.*—I did not. On one occasion, Mr. Robertson asked me to go on the boat about 5 o'clock in the evening; he did not say where. I said I was unable to go as I had steam up and the pumps working. He then left and spoke to Mr. Bennett on the wharf. What passed between them I don't know. Mr. Bennett told me that my place was in the engine room when steam was up, and I follow his instructions in everything that I do.

Mr. Helgesen—When did the fires spoken of by Mr. Robertson occur, and did they happen through your neglect? *Ans.*—The first time the fire occurred, the ashes had been left in the car and I was away on the boat to the sandspit for water, and while I was away the ashes began to smoke, and Mr. Humber, the inspector of concrete, told one of the men that was working on the platform to dump the car, as I was unable to do so before I left, as the gangway was blocked up with the carpenters making shutes to slide the concrete down. If I had been left at my work the fire would not have occurred, as a man cannot do two jobs at once.

Mr. Helgesen—When did the second fire occur? *Ans.*—On the 24th August last. Mr. Robertson asked if I would go to the brickyard. I said I would after I got the water out of the pump-well; he said that would do. I cleaned the fires and could not get the ashes dumped, and I was away all day up to 5.30 o'clock. When I returned I hoisted the cars of bricks on to the wharf. I went on the wharf as the boat was going to return to the brickyard, and asked Mr. Huntington if the Engineer was back. He said you are not doing so G—d d—n much. I asked him if I did not do my work. He said no. He said he wanted me to work 10 hours a day for them and not for the Government. I told him if there was anything wrong he had better see Mr. Bennett. He said to h—l with Mr. Bennett and the whole G—d d—n tribe. He asked me if I wanted to fight. I said no. He replied he would knock my skull in. I told him he had better not. He asked me if Mr. Bennett had given me any orders. I told him he had better see Mr. Bennett. He then asked me if I thought I was there for ever. I said no; I was liable to be removed at any time. Yes, he said, and just now. I walked to the pumping room as it was six o'clock, got my coat and went home, not thinking about the ashes that were left in the car. About eight o'clock the same evening, one of the men going to the boat saw a light on top of the car, went over and put it out with some water that was in a coffee pot and dumped the car. The contractors never spoke to me about it, but took the mean advantage to try and have me discharged, after working for them all day.

Mr. Helgesen—Did Mr. Robertson ever offer you \$1 per day over wages if you would stick to them and say nothing to the Government? *Ans.*—On one occasion Mr. Robertson told me wages was no object if I would do as they wished me. I told him I was employed by the Government for \$3.50 per day. He asked me who paid me. I told them that I was to look to them for my pay; that if they didn't the Government would. That was all that happened between us.

Mr. Helgesen—Did you ever see any soft bricks taken out of the work? *Ans.*—I saw soft bricks taken from the works several times. On one occasion I saw some large masses of burnt brick as large as a man could lift removed from the dead wall about half an hour, at the longest, after they had been put in. Mr. Bennett ordered them to be removed as they were rocking in the wall and unfit for use.

Mr. Helgesen—Did you ever see any timber taken out from underneath the clay; and, if so, what were the dimensions of it? *Ans.*—I saw upwards of a dozen pieces taken out from underneath the quay wall site. Mr. Bennett told them to remove them, but they had not done so; afterwards he made them take them out before they put the concrete on, which they did. They were from 3 feet to 12 feet long, and from 3 x 12 to 4 x 4.

Mr. Helgesen—Have the contractors ever asked you for any machinery without an order from Mr. Bennett? *Ans.*—Mr. Robertson on one occasion asked me if we had any pipe for the auxiliary pumps. I told him we had. He asked me for the key, so that he could get it out of the warehouse, which I refused to do. I asked him if he had an order from Mr. Bennett, and he said no, that the machinery belonged to them and not to Mr. Bennett or anyone else. I told him he would have to get an order for it. He said, the way you run us is tremendous, but I'll have you discharged or I'll burst the whole arrangement. He afterwards came back and asked for the pattern of the flanges of the pipe, which I gave him, and the number of feet there was in the warehouse.



Mr. Helgesen—Did you ever refuse to do work for the contractors? *Ans.*—I never refused to do work for them as I ran the boat day after day for them. I erected the donkey engine twice for them, and worked it for a week at a time; and in order to do this I had to do the pumping early in the morning before anyone else was up, and then they refused to pay for it.

Mr. Smithe—What interest do you think the public have in the alleged squabbles that have taken place between you and the contractors? *Ans.*—I don't consider they interest the public at all. To a certain extent the Government is the people, and I consider they have a right to settle the disputes between me and the contractors, as I am employed by the Government.

A. C. MUIR.

Signed 23rd March in the presence of }  
THORNTON FELL.

MAURICE LUKE HUMBER:—

Mr. Helgesen—Are you connected with the Graving Dock, and, if so, what is your occupation? *Ans.*—Yes; I am Inspector of Concretes.

Mr. Helgesen—Has that branch of the business been carried out according to the instructions of the Resident Engineer? *Ans.*—Yes.

Mr. Helgesen—Did you, on the 4th March last, refuse to allow the Contractors to use the balance of the original cement on hand, and thereby detain them in the work? *Ans.*—No.

Mr. Helgesen—Were the Contractors ever detained for want of cement? *Ans.*—They worked on the 4th March up to 6 o'clock, I then left, and on Monday morning about 9 o'clock Mr. Bennett came down and asked Mr. Robertson why they were not at work on the wall, and he replied there was no cement; Mr. Bennett told him there was 75 barrels then in the building. They were ordered to use the balance of the original cement, but refused to do so.

Mr. Helgesen—Did the Resident Engineer condemn the balance of the original cement on hand? *Ans.*—No. There was a small portion which he ordered not to be used, as it had been set by water.

Mr. Wilson—Did Mr. Bennett inform you that any of the old cement on hand, on 4th March last, was fit to use without being mixed with new cement? *Ans.*—We were in the building together some weeks before; there was 15 or 16 barrels which he had ordered to be used, but they (the Contractors) would not use them, and there was some 5 or 6 barrels upstairs which was covered up, which was fit for use.

Mr. Wilson—How often did Mr. Bennett visit the cement warehouse? *Ans.*—I don't know how often he was there, but he has been in several times.

M. L. HUMBER.

Signed 23rd March, in the presence of }  
THORNTON FELL.

FORBES GEORGE VERNON:—

Mr. Wilson—During what time were you Chief Commissioner of Lands and Works? *Ans.*—From February, 1876, to June, 1878.

Mr. Smithe—Had the Cofferdam contract been let before you took office? *Ans.*—The contract had been let, before I took office, to Messrs. Hayward & Jenkinson.

Mr. Smithe—Did Hayward & Jenkinson carry out their contract? *Ans.*—No; they obtained permission from the then Chief Commissioner (Mr. Beaven) to transfer the contract to Messrs. Reed Bros.

Mr. Smithe—Was the contract transferred to Reed Bros.? *Ans.*—Yes.

Mr. Smithe—Had the transfer of the contract to Reed Bros. been arranged before you took office? *Ans.*—Everything had been arranged, and the new contract signed by Messrs. Reed Bros., in London, before I took office.

Mr. Smithe—Were the plans and specifications and bills of quantities prepared by Kinipple & Morris under instructions from you, or had the instructions been given before you took office? *Ans.*—The instructions had been given before I took office.

Mr. Smithe—Were the plans, specifications, and bills of quantities received by you when in office? *Ans.*—Yes.

Mr. Smithe—Did you receive any detailed estimates of the cost of the dock from Kinipple & Morris at the time that you received the plans and specifications, or at any other time? *Ans.*—No detailed estimates were ever received by me.

Mr. Galbraith—Did you receive any estimate of cost of the dock from Kinipple & Morris? *Ans.*—I received, shortly after my first assuming office, a rough estimate of cost of dock in answer to a private letter addressed to the firm, and before the specifications and bills of quantities were received. I afterwards ascertained the same information from documents in the office.

Mr. Smithe—Were any steps taken by you towards calling for tenders for construction of the dock? *Ans.*—All the steps I took in connection with the Graving Dock will be found on record in the Sessional Papers and in the letter book of the Land Office. Owing to the refusal of the Government of Mr. Mackenzie, in Canada, to give the \$250,000 due to this Province by Canada, and the fact that the negotiations which the Elliott Government had entered into with the Imperial Government were then pending, I was of course not in a position to call for tenders.

Mr. Smithe—Were Mr. Sproat's letters referring to cement supply, with the dock correspondence in the Lands and Works Department? *Ans.*—I never saw any of the letters referred to.

Mr. Smithe—Did you ever hear or in any way learn, until recently, that the cement originally purchased in 1874, was intended for the sea-wall of the dock and not for the main dock itself? *Ans.*—I never understood that the cement was intended only for the sea-wall until the fact was elicited by this Committee.

Mr. Helgesen—Had you any knowledge how Kinipple & Morris arrived at the full cost of the dock? *Ans.*—No.

Mr. Helgesen—Did it not occur to you that detailed estimates of cost should have been carried out in the bills of quantities when you paid for the plans and specifications? *Ans.*—Before paying for the plans and specifications I consulted with the Resident Engineer and the Surveyor-General. These Officers agreed with me that Messrs. Kinipple & Morris were entitled to the money they claimed. I was, of course, aware that the detailed estimates were not sent, but I consider it would have been injudicious on the part of Messrs. Kinipple & Morris had they sent them before the Government were prepared to invite tenders and prosecute the work. The specifications and quantities were received on 4th April, 1877. Tenders were not invited, I think, until 5th September, 1879, a period of two and a half years. The change of Government took place in this interval, involving departmental changes. Had such information been sent with the specifications, the information would have been in the possession of a number of persons, including myself, who might possibly have afterwards taken advantage of such information and tendered for the work, in fact I could have tendered myself after I went out of office. I knew that I could at any time on application have obtained these detailed estimates from Messrs. Kinipple & Morris and the Resident Engineer, and I should, undoubtedly, have obtained this information before calling for tenders for the dock; besides this, we had good reason to expect that the Imperial Government would have taken over and completed the work at no expense to the Province, and in such case they would, doubtless, have procured their own estimates.

Mr. Helgesen—Did you believe while in office that the original shipment of cement was a sufficient quantity to complete the dock? *Ans.*—I knew there were some 700 tons of cement stored at Esquimalt, but being unable to invite tenders for the dock, from reasons previously stated, the question of insufficiency or otherwise never arose.

FORBES GEO. VERNON.

Signed, 23rd March, in the presence of }  
THORNTON FELL. }

FRIDAY, 24TH MARCH, 1882.

WILLIAM BENNETT—*R.-examined* :—

Mr. Helgesen—Did you give the contractor timely notice when the alteration in the dock site was determined on? *Ans.*—The alteration of the position of the coping line of the quay wall was settled on before a spadefull of excavations were removed. Mr. Mahood, then the contractors' Engineer, assisted me in taking the sections by which the position was decided, and the contractors must have then known what we were about.

Mr. Helgesen—Mr. Robertson states in his evidence that "the damage" to the contractors "by moving the dock site cannot be estimated at present, as it is accruing every day, and will until the completion of the work;" please tell the Committee if that is so? *Ans.*—I do not agree with Mr. Robertson that he has been put to so great inconvenience by moving the dock back. The concrete mixer is now standing on the wharf, and gravel shoveled direct from the pile into it, so that the only inconvenience is in running the mixer a few feet further. The statement that with the derrick the stone could be lifted off the wharf and set in the work, would only be applicable to a small portion of the work. Surely Mr. Robertson does not mean that he could erect a derrick with sufficient sweep to set all the stone work; some of which would be as far as 500 feet from the coping line, and, supposing he could, then a few feet extra would make no difference. But this is simply impracticable. It is an impossibility to carry out the work without staging, and the allusion to expensive trestle work being necessary on account of the dock being moved back, is, I think, calculated to mislead unprofessional minds. I regret to see that Mr. Robertson states that he thinks I have made it a special study to give the contractors all the annoyance I could, such being in direct variance with the fact, as I have always done my best to help them. I could not, however, overlook their neglect to take out the excavations at the entrance to the proper grade, nor their failure to make good, ground excavated at the foot of the incline, where the east quay wall is now built, and where the timber was buried, nor the fact that large masses of bricks fused together in shapeless masses were built into the wall, although the contractors were warned not to use them; to this I attribute the animus of Mr. Robertson's remarks. With reference to the bricks referred to which I ordered to be removed, I beg to state they were taken out within an hour or so of their being put in, and not on the following day as stated by him. Mr. Mahood took three cross sections for me at the head of the dock before the ground was broken. The excavations were not delayed at all in consequence of my not taking them. I copied his notes into my level book.

Mr. Helgesen—Do you know if the contractors gave ample notice for a further supply of cement as required by clause 106 of the specifications? *Ans.*—As far as I know the only application by the contractors for cement, was for 100 tons on 23rd July, 1881. I believe they have recently written to the Chief Commissioner to the effect that there was not enough cement on hand, but I am not aware that they have made an application for any specific quantity, or when they required it, and, therefore, they have not complied with clause 106 in this respect.

Mr. Helgesen—Do you consider that the work done up to the present date is of a substantial character, and in compliance with the specifications? *Ans.*—I consider the work will prove quite satisfactory.

Mr. Wilson—In your former evidence you stated that your tests of cement made in 1881, gave 450 lbs. for that in fir casks, 600 for that in oak, and the two kinds mixed 600; have you verified that statement by your test book? *Ans.*—When I gave the statement referred to, I arrived at the result from a passing look through the test book at the time the question was asked, and since I have examined, with greater care, I find the average is not so large as I imagined. The average of oak and fir test bricks, after being made 24 hours, being about 490 lbs., and after being made 26 hours before immersion, about 573 lbs.; it seems, therefore, that the bricks 24 hours' old should have been left out of water for a longer period to get a fair test, taking into consideration the age of the cement. I examined the work carefully as it was being executed, and consider the extra quantity of cement I ordered to be used was quite sufficient to ensure good results.

Mr. Wilson—How much cement have you received from San Francisco and when? *Ans.*—Without the invoices I cannot positively say, but approximately 50 tons arrived, per S.S. "Elder," on or about 4th March, 1882, and 100 tons on or about 14th March per S.S. "Idaho." This has all been stored at Esquimalt.

Mr. Wilson—Has any more been ordered from San Francisco? *Ans.*—Not that I know of.

Mr. Wilson—Have you made any tests of the San Francisco cement since its arrival? *Ans.*—I have, and beg to hand in the results (Exhibit 22.) The tests have been made, allowing the bricks to remain before being put in water some 12, some 24, and some 36 hours, the average result being 657 lbs.

Mr. Wilson—Was the cement ordered from San Francisco required to stand a test of 750 lbs. as required by the dock specifications? *Ans.*—Not that I know of. Samples for testing were obtained from San Francisco, and the order was given for the kind that gave the best results, which was about 650 lbs.

Mr. Wilson—Do you know the cost per ton, laid down at Esquimalt, of the San Francisco cement? *Ans.*—Not exactly, but think it will be about \$33.

Mr. Wilson—Why was the dock site changed 43 feet 6 inches after the dock contract was let? *Ans.*—For prudential reasons. If the quay wall had been built as shown, the shore ends of the dam, which are constructed on rock bottom on both sides, would have been cut into and the stability of the dam thereby greatly endangered; in addition to which the auxiliary pump would have had to be taken down, as the excavations for the apron in front of the inverts would have undermined the structure.

Mr. Wilson—Did you recommend the change to the Chief Commissioner, and did he approve of it? *Ans.*—I may have mentioned the matter to him verbally, but do not remember doing so.

Mr. Wilson—What is your estimate of the cost of removing the 43 feet 6 inches between the quay wall and the dock? *Ans.*—I have not yet made the calculation, but will do so.

W. BENNETT.

Signed, 24th March, in the presence of }  
THORNTON FELL.

SATURDAY, MARCH 25TH, 1882.

WILLIAM WILSON:—

Mr. Walkem—Are you one of the members for Victoria City? *Ans.*—I am.

Mr. Walkem—Have you not taken considerable interest in the dock? *Ans.*—I have.

Mr. Walkem—Have you not had almost constant interviews with members of the firm of Nicholson, Robertson, & Huntington within the last six months? *Ans.*—I do not remember ever having had an interview with Nicholson. Robertson has called at my store with Huntington and spoken about dock matters, probably three or four times. Huntington has quite frequently called at my store in the evening, about 7 o'clock, and has talked about the dock. It was from him I first found that the cement at Esquimalt was insufficient to build the dock.

Mr. Walkem—When did you learn that fact? Sometime last autumn.

Mr. Walkem—Was it not in August or September last? *Ans.*—I really cannot say. In ordinary conversations one is not in the habit of taking notes of what is said, or when said; it is merely a matter of memory.

Mr. Walkem—Did you not keep the fact from the knowledge of the Government? *Ans.*—I neither kept it from them nor took it to them. It was shortly afterwards that I read in a *Colonist* editorial that \$100,000 worth more cement would be required. The article conveyed information to me and to everybody who read it; and, doubtless, to the Government.

Mr. Walkem—Did you, directly or indirectly, advise the insertion of the article in the *Colonist*? *Ans.*—I had nothing to do with it, directly or indirectly. I did not furnish the information to the *Colonist*; indeed in the former answer I mentioned that it conveyed information to me. I do not know who wrote the article.

Mr. Walkem—Were you not informed by one or more of the local partners of the firm of McNamee & Co., prior to the beginning of March instant, that they were going to push or rush the cement work ahead to get the Government in a fix for want of a sufficiency of cement to go on with? *Ans.*—Huntington told me, several times, that they had debts which they were anxious to pay; and, as their capital was small, he was sorry that they could not draw from the Government on the materials on hand, the same as Reed Bros. did on the cofferdam contract. He said they had what was to them considerable money locked up in sandstone, which was on the dock site, but that until they put it into the work they could not get paid for it; that they were rushing things so as to get a certificate, which would not be granted until they had done, I think, over \$10,000 worth of work. He also said the Government was complaining of them for not getting along fast enough; but in his opinion they would have to stop before completing the sea-wall, as there was not enough cement to finish it. He expressed fears that, owing to the small quantity of cement, he might not be able to get the \$10,000 worth of work done in time to get a certificate and money to pay his workmen their February wages.

Mr. Walkem—Did he not inform you, also, that they were going to rush things so as to place the Government in a fix about the cement? *Ans.*—I do not think he so expressed himself. My impression of what he said amounts to this: that both the contractors and the Government would be in a fix. The Government, through not having on hand what the contract called for, for the purposes of the contractors; and the contractors, through having to stop, and so not obtaining a certificate and their money, which they wanted.

Mr. Walkem—Did he not state that he was going to push matters so as to place the Government in a fix as to cement? *Ans.*—This question I have already answered.

Mr. Walkem—Have you not told a friend of yours that Mr. Huntington said so? *Ans.*—I really do not remember using Mr. Huntington's name in that way. I have, like many other people, talked about the cement revelation. Exactly what I said on different occasions I do not remember. I have very little doubt that I said that the Government is in a fix about the cement. I thought so then, and I think so now.

Mr. Walkem—Did you inform the Government of what Huntington said? *Ans.*—I do not think I did, as my opinion is, that I am not called upon to convey to the Government conversations people may have with me on dock or other matters; of course sometimes it may happen that in talking with members of the Government, or any one else, a certain subject may arise when conversations, or anything else bearing on the subject, may be incidentally referred to.

Mr. Walkem—If you had the interest of the dock at heart, don't you think it would have been advisable to have given all such information to the Government? *Ans.*—This is a curious question. Surely you do not think it is for outside people to advise the Government as to the condition of public works, when they are under the charge of a Chief Commissioner and an Engineer. I may say on this particular matter I have already told you in a former answer, that shortly after I heard of the cement being inadequate, the *Colonist* editorial made public all the information I had on the cement, and more.

Mr. Walkem—Were you not taken into or through the cement storehouse by J. Robertson, or one of the firm, in February last? *Ans.*—Yes; a party of the Members of the House visited the dock and went into the cement house too.

Mr. Walkem—Were you not offered by one of the local members of the firm, an interest in the quarry they opened for getting the granite out for the dock? *Ans.*—No; nor in anything else connected either with the contractors or the contract.

Mr. Walkem—Were any of the creditors of Reed Bros. indebted to you or your firm when you presented, what are known as the Cofferdam claims, to the House for enquiry and settlement? *Ans.*—No, not that I am aware of.

Mr. Walkem—Did you not circulate a report, based merely on what Robertson or Huntington told you, that the Chief Commissioner of Lands and Works was interested with McNamee & Co., of Montreal, in their contract or in a share of some \$15,000 claimed by them? *Ans.*—Huntington mentioned to me that the Chief Commissioner of Lands and Works had been asking him for a note or notes for \$15,000 which was due by the local partners of McNamee & Co., to McNamee & Co., of Montreal. I was greatly surprised to hear this, as I could not see what the Chief Commissioner of Lands and Works had to do with money matters between the different partners of the firm of McNamee & Co. It is likely that I mentioned the circumstance in conversation with others, but I seldom referred to it, as I was not sure in my own mind that the circumstances were as stated.

Mr. Walkem—Did you not endeavour to impress Members of the House, and others, with the belief that the Chief Commissioner was interested with McNamee & Co? *Ans.*—Beyond mentioning what had been told me, I did not, as I had no other information.

Mr. Walkem—Are you not in the habit of circulating damaging stories you hear, whether you know them to be true or not? *Ans.*—I do not think that I have that habit.

Mr. Walkem—Did you tell this story to any of the members of this Committee before you nominated them in the House? *Ans.*—Not that I can recall. I certainly never tried to prejudice any member of this Committee; my desire was, and is, to elicit the facts connected with the dock, and those facts to be dealt with on their merits.

Mr. Walkem—Have you not stated to certain Members of the House that you thought that the Chief Commissioner had a personal interest in the purchase of the cement in 1874? *Ans.*—Such a thought never occurred to me, as my belief is that the cement was not purchased by the Chief Commissioner of Lands and Works. I always understood that Mr. Sproat managed the cement matter.

Mr. Walkem—Have you not had interviews with certain parties with a view to you, or your brother, taking or obtaining an interest in the dock work? *Ans.*—No. The only interest I have ever taken in the dock work has been to try and help it along. I may as well mention here one or two circumstances connected with the contractors on money matters. One day last autumn, when confined to my house by indisposition, I received a note from Captain Clarke asking me to frame for him, on behalf of the contractors, an application to the Chief Commissioner for an advance of, I think, \$30,000; I returned an answer that next morning I would be at my store and would then see him. He called upon me and informed me that he had been over with one of the contractors to see Mr. Walkem, and from what he said he believed that the money could be got if a written application was put in for it. He said that if they could get the money, he could sell them a steamer, and some other things the contractors wanted for the dock work. I told him that since receiving his note I had thought the matter over, and that I had come to the conclusion that the advance of money in aid of the contractors was beyond the power of the Government; that such a thing was never done, and that I would have nothing to do with an application which seemed to me to be impracticable. Mr. Huntington afterwards called to see me on the same matter, and I tried to dissuade him from making the application. I recommended him before writing, to ascertain verbally from the Chief Commissioner whether he had the power, and next whether he had the inclination to make the advance. Sometime afterwards Huntington told me that the application had been made, and that it was unsuccessful. He seemed greatly disappointed, and explained to me what his financial position was, and expressed the wish to get capital to help him in his work. In other conversations the same subject was referred to, and he explained to me the character of his contract and the profit that he thought was in it. I advised him to get five or six people to help him, so that he could handle it more profitably, and get rid of the worry incidental to carrying on of a large work with a small capital. He said that he thought he could get two or three friends to help him but that others would be necessary, and I remarked that if five people would put in \$10,000 apiece he could pay off his liabilities, push the work lively, and it appeared to me, make money out of his contract. I told him that if an opportunity offered I would mention it favourably to friends of mine, but I could not of course touch it myself, being a member of the House, and besides contracts were altogether out of my line. When Mr. Nish was here, Mr. Williams and I called to see him at the Diard House and talked generally over dock matters. In the course of conversation, I told him that the local contractors understood their

business, but were hampered through lack of capital; that they were trying to get five or six people to help them; and that I thought of recommending friends of mine to assist. Nothing more was said about this, the conversation drifting off into cement, and the kinds and prices of that used on the canals in Canada. Some days after, Mr. Nish spoke to me on Government Street, and asked me whether the contractors had obtained assistance. I said I thought not so far; and I told him that I heard that, besides local liabilities, a sum of \$15,000 was due to the Montreal firm, and that, unless he made some arrangement with the local men to let that stand over, they were not likely to get it. I had no further conversation with Mr. Nish on the subject. Under the circumstances I made no recommendation to any friend of mine to aid the contractors. I have not done so myself, and as regards my brother, I never proposed to him to do so; indeed, I do not think I mentioned any of the above circumstances to him.

WM. WILSON.

Signed, 25th March, in the presence of }  
THORNTON FELL.

MONDAY, MARCH 27TH, 1882.

MR. WALKEM, recalled:—

Mr. Smithe—Have Messrs. McNamee & Co. a deposit of \$10,000 in a Bank in Victoria, as required by the conditions of the specifications? *Ans.*—\$10,000 were deposited by a Montreal bank draft in the Bank of British Columbia here, first to the credit of the Chief Commissioner, who, to the best of my recollection, endorsed over the draft so as to let it lie to the credit of the Government, as the Chief Commissioner has no account in the Bank.

Mr. Smithe—What are the conditions for payment of the draft to the Government of British Columbia, should McNamee & Co. fail to complete their contract? *Ans.*—I cannot tell, without looking at the specifications; but I think both the specifications and the contract with McNamee & Co., and the usual agreement handed in such cases to the contractors of such large works for payment of interest on the deposit until there is a failure in or completion of the work, will fully show. The practice of the Dominion Government in such cases was followed.

Mr. Smithe—Has interest been paid to McNamee & Co. on the amount of the draft, by the Government? *Ans.*—I don't think so. I don't think the question would arise until completion of the work.

Mr. Smithe—Is the Government drawing interest on that \$10,000? *Ans.*—Of my own knowledge I am not quite certain, but I know that arrangements were contemplated by the Finance Minister for obtaining interest on it, either as a special deposit or in some other way, so that the interest account would, if possible, balance itself.

Mr. Smithe—Do you know if those contemplated arrangements you speak of were executed by the Minister of Finance? *Ans.*—I cannot tell from recollection.

Mr. Smithe—Do you know if that deposited draft has any real value? *Ans.*—I did not say there was a deposited draft. I said there was a deposit by draft, which I saw marked good by the acting Manager of the Bank of Montreal. The draft was, of course, cashed.

Mr. Smithe—Then, I am to understand that there is a cash deposit by McNamee & Co. in the Bank of British Columbia at Victoria, to the credit of the Government? *Ans.*—Certainly; the draft would necessarily pass through the bank books in Montreal and here as cash.

Mr. Walkem resumed—The further tenders which were sent in for dock construction produced by me are as follows, the dates representing the time they were received at the Land Office here:—

3rd January, 1880—	Stewart, Strann, & Co., Ottawa.....	\$374,926 52
5th       "       "	J. Griffiths, San Francisco.....	882,163 48
14th       "       "	Charles Peterson, St. Catherines, Ontario.....	395,545 22

Lake & Co., of England, who promised to tender, eventually declined. The lowest of the above tenders is about \$21,000 over McNamee's, and the 27th December, 1879, had been fixed as the last day for receiving tenders here, hence they were not reported on, tenders having been received after that date.

The first telegram sent by me to Kinipple & Morris as to total quantity of cement required by dock specifications was dated 21st December, 1881, and the reply thereto was 5,000 tons. On the 14th March inst., while this Committee was sitting, I sent the following cablegram:—

"Kinipple, Greenock:

"Stated here that cement required by dock specification is nearly seven thousand tons, calculate total amount accurately and cable immediately."

Reply received 16th March:—

"Total quantity cement five thousand tons."

As to the orders for cement from England, they were given by cablegram. The first being about 2nd November, 1881, to Kinipple & Morris, as follows:—

"Order for cash two hundred tons former quality of cement in oak. Bank B. C. will pay; will cable respecting shipment."

As Mr. Bennett said he wanted 300 tons about the 12th or 13th November, I sent another cablegram as follows, to Mr. Kinipple, at Greenock:—

"Order another hundred tons cement; ship the three hundred by 'Tropic,' leaving Liver; col end November; Andrew Welch Company, Agents, Liverpool. Freight arranged, two pounds nett."

A further cablegram, 12th January, 1882, to Kinipple & Morris, as follows:—

"Ship two hundred fifty tons cement as before, per 'Bodrhyddon,' Liverpool, Welch agent; freight arranged."

6th February, 1882—"Order two hundred tons cement, half fir, half oak; ship end February, through Beeton."



The cement ordered in San Francisco was by personal order. The following letter received from Welch, Rithet & Co., with invoices, explains itself :—

“VICTORIA, 23rd March, 1882.

“SIR,—In compliance with your order given on 23rd February, to procure \$1566 worth of White's London Portland cement, best quality, and also for 100 tons of same given on the 8th inst., we have now the honour to enclose, herewith, the invoices amounting to \$1,584 and \$3,383.27 respectively.

“You will observe we have only charged the actual cost of the labour for removing the cement from the wharf to your storehouse in Esquimalt. We have also to acknowledge the receipt from you of the cheque of the corporation of the City of Victoria for \$1,566, in payment of the first order. We are, &c.,

(Signed) “WELCH, RITHET & Co.”

With reference to Johnstone Robertson's evidence, there are several inaccuracies in his statement. In the first place, with respect to what took place in my office between him and Mr. McNamee, it is true, as he says, that I wanted to have nothing to do with their private arrangements. Mr. Robertson's, Mr. Drake's, and Davie & Pooley's names were mentioned for doing any legal business between them. Mr. McNamee wanted one settled upon, as he said he didn't want his business known all over the town. I told him he was quite right. He picked upon Mr. Robertson himself, as I had recommended him to him on a prior occasion. What little I heard of the arrangement persuaded me that the local men would not find it a profitable one, and I told them so, as I had promised to give them, as Mr. J. Robertson states, what assistance I could. More than this I did so, as I informed them it was in the interest of the work that I should do so. When Robertson subsequently told me what his arrangement was, and before it was finally agreed upon, I advised him against going into it, as I intended to hold the contractors to the contract, and I didn't think McNamee & Co., of Montreal, had given him much chance of making any profit. I even allowed the money for the Cofferdam plant, purchased by them, to remain due from 16th September, 1880, until 11th August, 1881, and became in a measure personally responsible for its payment either to the auctioneer or the Government. Robertson had proposed that the plant should be given to them at a sum privately fixed upon, as he was afraid that if it was put up at auction he would have to pay more for it. I declined to agree to it.

The statement respecting the interview about McNamee's powder and note is also incorrect, because he omits to state that I told him that I had nothing to do with either matter, and was only acting in a friendly way with a view of preventing or of settling any disputes between them and the Montreal firm, as I was naturally anxious that the work should be pushed forward, and not obstructed by personal quarrels.

The statement of closing the sandstone quarry at Newcastle on account of my asking him for an estimate of the cost of granite is in fact, and on the face of his own evidence, untrue. He told me that he stopped work on the sandstone at Newcastle for two reasons: first, because he wouldn't want the stone for several months, and therefore didn't want to lie out of the money for several months; and, in the next place, because he firmly believed that sandstone of even as good or a better quality could be got at a place, as he then said, about halfway between Victoria and Nanaimo, which place is the same, I believe, as he now gets the sandstone from.

The several letters which I have sent to the partners at Esquimalt, and which are submitted to this Committee, and are being published, are, to the best of my belief, strictly accurate in their statements; the replies, occasionally with Mr. Robertson's name appended to them, evade them or show a sudden and unaccountable loss of memory on Mr. Robertson's part of what occurred. I refer, of course, to the question of granite and sandstone. Shortly after the House rose in 1881, Robertson told me that they, whom I supposed meant his partners, had gone fully over the specifications and had found that the whole matter of the change was in my hands, and that all I had to do under the specifications was to write out an order making the change in the materials, and give them a chance of making some money on the job, as they saw very little in it otherwise. Almost daily I was waylaid, either at the end of the bridge or some place on Government street, by Mr. Robertson, and asked to alter my decision and give them the order to make the change to granite. I was so annoyed by his persistence that I was obliged to take another road home so as to avoid him. I think I was followed up in this matter more closely than by Mr. Wm. Wilson to change my decision about the swing bridge. At an interview with Robertson, at which Capt. Clarke was present, I virtually accused him of having misstated, and pretended to have forgotten, all that occurred with respect to the granite and sandstone; he was silent for a time, and then said his letters were a mistake. Capt. Clarke almost shouted to him that if he was a man he ought to apologize, and repeated this two or three times. Robertson said his letters should be withdrawn; I told him I did not care if they were not. Capt. Clarke has stated, in a letter to the office, what occurred at the above interview, and his statement is true. I refused, after August or September last, to have any interviews with Mr. Robertson, without some one being present, so as to protect myself. I told him, in the presence of Mr. Harrison on one occasion, and Mr. Gore on another, that I objected to any interviews with him without some one being present. I did this because he could not be trusted. Notwithstanding this, when applied to by Mr. Ward, of the bank, to know how far I intended to go, I informed him it was my desire to assist the men in every way, as I wanted the work pushed on as long as they could handle it. Mr. Ward will have no objection to state this. There are other inaccuracies in Mr. Robertson's evidence, which I don't think worth contradicting.

The several orders given for cement, excepting what may be called the Corporation cement, were sanctioned by Order in Council. Mr. Armstrong, I see, has stated in effect, that when he was in the Ministry he thought the purchase of more cement was talked of. I am very clear, speaking for myself, that such conversation never occurred, nor did I ever hear of any similar one amongst the members of the Government; his memory must be at fault.

GEO. A. WALKER.

Signed, 27th March, in the presence of }  
THORNTON F. L.