

## APPENDIX No. 3

of any great excess of solid rock or other classified material that might have been returned in such cutting.

Similar statements are found in several of his letters and throughout his evidence.

The same method was pursued by him on district 'B.' He went over 150 miles, the whole tour of inspection being made between June 16 and June 22, 1909. No measurements were taken and only one small digging was made.

At the conclusion of the trip on District 'B' letters of protest against the manner in which the inspection had been conducted were written to the Commission by district engineer Poulin of District 'F,' (found on p. 483, Ex. No. 73); by District Engineer Doucet, of District 'B' (p. 488 Ex. 74); and by Mr. Heustis, assistant district engineer of District 'B' (p. 487 Ex. 79). These letters were read clause by clause to Mr. Lumsden and admitted by him to give a substantially accurate account of what was done. (See testimony of Mr. Lumsden as to Poulin, p. 485-488; as to Doucet, p. 491, 492; as to Heustis, p. 516-519).

Mr. Lumsden's evidence on this point is as follows:—

Q. Do you or do you not think that this trip furnished sufficient data, as Mr. Poulin puts it, to justify a re-classification of the work?—A. I think from what I know, if I was doing it again I would get fuller information on the ground.

Q. Very much fuller?—A. Well, I could.

Q. If you were doing it again you would take a different procedure; you would examine the engineers more fully on the ground?—A. That is what I mean.

Q. And investigate into the reasons for the different classifications. Anything that struck you as requiring explanation, you would ask for an explanation on the spot? Is that so?—A. To a certain extent that is so.

Q. In other words if you were doing it again, you would conduct it or see that it was conducted somewhat more sympathetically with the work; that is to say, you would not allow the board to maintain such a remote attitude towards those in charge of the work and you would get more in touch with them and find out what they had been working in their minds, and what they had been doing?—A. I think it would be better if we had done so. I say that.

It is obvious that such information as Mr. Lumsden acquired on these trips was quite insufficient to justify him in losing confidence in his engineering staff or even in subjecting them to criticism without further investigation.

There were in all four questions upon which Mr. Lumsden says he differed from the classification of his engineers, the principal as before stated, being in the classification of massed material, or assembled rock, as Mr. Lumsden called it in his interpretation. The blue print accompanying his interpretation gave no dimensions, nor yet the proportion of rock or boulders necessary in the mass to constitute assembled rock; and it is quite apparent that there was reasonable ground for difference of opinion both as to the clauses of the specifications themselves, as shown by the radical difference between Mr. Lumsden and all the counsel and other engineers who expressed opinions upon the clauses, and also as to the meaning of Mr. Lumsden's interpretation. Another difference of opinion was with respect to what is termed 'overbreak' or the rock displayed beyond the theoretical slopes in a cut. According to the specifications this was to be paid for if it was caused unavoidably, but was not to be paid for if caused negligently by the use of excessive blasts. Mr. Lumsden, in common with all the engineers, admitted that a certain amount of breaking away behind and beyond the theoretical slope in rock cuttings is quite inevitable, and that it will vary to some extent according to the character of the material and other circumstances. As Mr. Lumsden stated this overbreak is a very small item indeed on District 'B' and in District 'F' if any errors in the return of solid rock have been made owing to undue allowance for overbreak, that is a matter which can be readily adjusted by engineers,