

across the railway by a box culvert built in solid rock, for the excavation of which double measurement was allowed, because, as said, of water having to be removed during the excavation; with regard to this removal of water, the engineers and contractors must have selected a very wet time for the excavation, for at the time of my measurement, then (June) there was little more than a trace of water in the culvert and approaches to it.

"In another plan where extensive borrow-pits of peat have been made, and a great deal of the rock from a rock cutting has been wasted on the sides of the peat embankment, whereby the embankment is made about twelve feet wider than what the specification requires, a stone drain has been built, through which water from the borrow-pits flow and spreads out over the swamp on the other side of the railway; a second culvert has been built about 100 yards off, draining the same borrow-pits, but there is a long off-take from it beginning in a cutting of slippery clay, eight or ten feet deep at the deepest, and about thirty or forty feet wide at the top, and carried down many hundred feet in length. The fact of the first mentioned culvert doing the same work, carrying the water across the railway, and then letting it spread out through the bush without any possible injury to anything, shows that at least the expensive and troublesome off-take at the second culvert is unnecessary.

"In another place a long, deep ditch has been made alongside the track, and several thousand cubic yards of easily excavated coarse sand taken from it and wasted. This ditch is said to have been made for the purpose of drawing off the water from a lighter portion of the same ditch. It can be plainly seen that the natural cause for this drainage is in the opposite direction from that adopted, and that by an expenditure of not more than two dollars the ordinary railway ditch would have been made to carry the required drainage by its natural course, more effectually than this large ditch, which cost over \$1,000.

"In addition to these cases of unnecessary extravagant expenditure, I may mention the tunnel—though any one may see by the profile there was a useless waste of money there. For this tunnel there was no price in the contract, but it was paid for by private arrangement at \$9 per cubic yard, amounting to about \$70,000 altogether. The price for solid rock cutting is given in the contract at \$1.50 per cubic yard; and the cost of an open cutting, instead of the tunnel would have been about \$35,000 or \$40,000, so that there was there an expenditure of at least \$30,000 that could have been saved to the country.

"I made no estimate of the work which I class as unnecessary and extravagant, but I am inclined to believe that it, including the tunnel, has amounted to between \$80,000 and \$100,000, besides the \$245,000, which I say is a correct estimate of the excess, due to the engineers' measurements and classification over what is right and just.

"I am sorry I have not kept a copy of any of my memoranda, which, as written in the field, are deposited in the Department of Railways and Canals. The cases mentioned are only a few that I can now quote from memory. There are hundreds given in my memoranda, but these will no doubt be sufficient to show the system pursued on this contract, and though I cannot now locate the cases, I feel sure the engineers in charge will have no difficulty in locating them from my description. I am sorry also that the circumstances which I have mentioned at the beginning prevent my giving my evidence in the usual way, when the matters referred to could be thoroughly examined, but I trust the Commissioners will accept my evidence in the only way in which I can now give it, and accept it as a true and unbiassed statement, as it is.

"I have the honour to be, Sir,

"Your obedient servant,

"To N. F. DAVIN, Esq., Secretary,  
"Canadian Pacific Railway Commission, Ottawa."

"LEONARD G. BELL.