9-10 EDWARD VII., A. 1910

many places where it was caused by excessive use of explosives, and where the material was wasted this ought not to have been done. Under these circumstances, I declined to certify any further estimates in Districts 'B' and 'F,' and resigned my position as Chief Engineer, stating that, in view of the general disregard of my instructions, I had lost confidence in that portion of the engineering staff who were responsible for the measurement, classification, supervision, and inspection of considerable portions in District 'B' and east of Rennie Crossing in District 'F,' lately gone over by me.

I based the statements contained in my resignation both on the facts admitted by the engineers on the ground, in May and June, 1909, in their sworn statements made in my presence, and also upon my personal examination on the ground. On my going over the work, in both Districts 'B' and 'F,' I found many cuttings and borrow pits where the classification made by the engineers was such that, from my professional experience of nearly thirty years, I could not agree with it. This was especially so in cuttings where ledge rock and other materials were shown on cross-section sheets, but where, on the stations being pointed out by the engineers on the ground, no such ledge rock was found to correspond with such crosssections; or where, in order that a reasonably accurate measurement of such rock should be made, it was evident that more numerous cross-sections should have been taken. In various places where assembled rock was shown on the cross-sections, an examination of the material on the adjoining slopes showed no assembled rock such as indicated in my interpretation of clause 34 of the general specifications, dated January, 1908. From my notes, taken on the ground at the time, I have compiled some examples or illustrations of the objectionable classification.

In regard to my loss of confidence in a certain portion of the engineering staff, I may say that this was due to their failure to carry out, in accordance with my views, the terms of the general specifications, and of my instructions and interpretations of clauses 34, 35 and 36 of the specifications. The engineers on the ground, who saw the work frequently while in progress, ought necessarily to be best qualified to make the classification, provided they have the necessary experience and are honest, and, though I may doubt whether some of them had the necessary experience (as exemplified by the manner in which some cross-sections were taken), I do not challenge the honesty of their intentions. However, being quite unable to agree with their classification in very many places, I preferred to resign my position and salary.

Mr. Lumsden has been examined by myself, as counsel appointed by the committee; by Mr. R. C. Smith, K.C., representing the commissioners of the Transcontinental railway, and Mr. J. H. Moss, K.C., representing the engineers. It is difficult to compress in any short space the result of the evidence. This is more difficult because it is not easy to reduce to any simple propositions either the statements contained in the letters or in the written statement of Mr. Lumsden on page 71 of the proceedings.

Mr. Lumsden says that he does not challenge the honesty of intention of the staff, although he doubts whether some of them have the necessary experience; so that, not only in the original statement, but repeatedly in his evidence, Mr. Lumsden has disclaimed any charge of impropriety or bad faith on the part of the staff. The charge that some of the engineers lacked experience is probably intended to apply more particularly to some of the resident engineers, and whatever foundation there may be for this charge, it does not seem to be of much importance considering the machinery provided for the working out of the supervision of the construction of the railway, both by the staff of the National Transcontinental Railway Commission and by the engineers appointed on the part of the Grand Trunk Pacific Railway Company.