INTRODUCTION.

The question whether there is danger of one or more destructive slides in the future involves two sets of considerations. Its investigation obviously implies an inquiry into the existing natural conditions. Are those conditions such as to warrant belief in practical danger to the town of Frank? Secondly, is the stability of Turtle mountain of such a low order that continued mining at its base would essentially add to the danger? As to the advisability of keeping the town in its present situation, these two problems are not of equal importance. If it can be shown that reasonable prudence should counsel the evacuation of the town-site because of the present natural condition of Turtle mountain, the question as to the influence of continued mining on the Frank coal seam becomes distinctly subordinate. Since your Commission believes that nearly all of the town-site is in danger of being overrun by one or more great slides, quite irrespective of the mining operations, the evidence bearing on this essential problem will first be stated.

A. Probability of a Great Slide due to Existing Natural Conditions.

The grounds for your Commission's affirmative answer to the question regarding danger of catastrophe because of the present state of the mountain, may be reviewed under five heads. These are: (1) The special, local conditions favouring such a slide. (2) The general conditions favouring a slide. (3) The similarity of conditions to those preceding the great slide of April, 1903. (4) The weakening of the North peak through the fall of rock in 1903. (5) The existence of new cracks showing incipient movement of the large block culminating in the North peak.

(1) Special Conditions Favouring a Landslide of the First Order.

After a careful study on the ground, your Commission has been forced to conclude that Turtle mountain presents a number of peculiarities which together form a highly special combination leading to continued destructive falls of rock from the North peak and its vicinity. Perhaps nowhere else in the entire Rocky Mountain system is a similar combination of features to be found. It is certain, even without further detailed examination by geologists, that this combination of features is not likely to be exactly paralleled in any other mountain mass of Alberta or of British Columbia. In the present case the form or topography of the mountain, its some-