

## Trail Creek Geology.

It is now generally conceded by competent geologists and mining men who have examined portions of this district that the descriptions given by Mr. Clarence King, Dr. Rossiter W. Raymond and Professor Waldemar Lingren at the trial in the case between the Iron Mask and the Centre Star mining companies before Judge Walkem of the supreme court of British Columbia in May, 1899, are the best that have yet been given of the mineral veins which traverse Red Mountain and the adjoining territory. Too little importance has so far been given to the elucidation of so important a subject.

In presenting extracts of their opinions of the geology of this district no excuse to our readers is necessary as we have always maintained that the economic geologist should precede the advance of the investor and thus safeguard his interests. In this district much has been done in advance of the geologist and expert with results that might have been avoided by the exercise of precaution which after all is necessary to the success of all business enterprises.

Mr. King in his introductory at the special request of the court entered very fully into the whole subject. His large experience, practical as well as theoretical, enabled him to launch into the subject with ease and probably had it not been for the thoughtfulness of the court the public would not have been as well instructed on this subject on that occasion, at least, as it was by Mr. King's ability to make statements of the utmost importance to the investing public.

Referring to the immediate district surrounding Rossland, Mr. King said:

"The district immediately about

Rosslund is as is commonly known a part of a great whole, which whole is the mountain system that borders the Pacific from Cape Horn to the Arctic Sea. It is a system thus covering half the great circle of the globe and has its widest expansion about the latitude of San Francisco where it is 1200 or 1400 miles wide. That mountain system ranks next in physical importance to that of the east and west system which traverses Asia and Europe, but unlike that system it is an empire of mines; and its geology besides having a high abstract interest lies at the basis of the knowledge of mining for this immense area. The quantities comprised in this system of the Cordilleras are great almost beyond belief. They make the superposition of strata amounting to over 120,000 feet in actual measured thickness; they make a history from very near the dawn of geological history—absolutely till today of dynamic action and effect. And this dynamic action has consisted in the upheaval, in the depression, in the crushing and folding together, and in the dislocation of enormous blocks of this great territory. The sedimentary series which I have said amount to over 100,000 feet are derived from the older rocks in their immediate neighborhood.

"So far as we have been able to see, these sediments have never traveled to very great distances.

"Sometimes a series of strata amounting in all to 40,000 feet have been piled up consecutively and continuously and without break but all those series of various episodes of sedimentation were ended in a destructive dynamic period, and they have been uplifted crushed or depressed and then the process of sedimentation has begun under these terms."