

Q. You know vein matter, or else you would not say that you did. A. I recognized what I think is vein matter.

Q. Now, why do you call it "vein matter?" That is what I am trying to get at? A. I call it vein matter because it contains some quartz, because it contains pyrrhotite and chalcopyrite, calcite and all of those characteristic features of the veins of Rossland.

Q. And you say that that lies between the ore and the hanging wall? A. At some places, yes, sir; most places.

Q. Where? A. It is seen all the way down the No. 3 shaft, and is also seen in the winze.

Q. Where do you say this vein joins the Iron Mask, on the incline shaft? A. It does not join it on the incline shaft. This (indicating) is the incline shaft at this point.

Q. Where would it join it on a line produced from the incline shaft? A. At a point right here, about 40 feet below the collar of the winze.

Mr. Davis—It is only fair, my Lord, to state this. I asked this witness as to the direction of the vein, but I did not ask him to identify the different veins at the time. I said he was not an expert, and he was not put on to give expert evidence.

The Court—Still he has a right to cross-examine.

Mr. Bodwell—I think I will show your Lordship before I am through that Mr. Clarke has figured as an expert to a considerable extent in this case.

Q. The Iron Mask has a separate vein from that point up—the point 40 feet below the collar of the winze think you said? A. Yes, sir.

Q. It has a separate vein? A. Yes, sir.

Q. That is the theory of the defendants' case, then, that this is a separate vein from that point to the surface, and this is a separate vein, from the north of the incline shaft to the point of junction with those two veins, down to that point, which intersects, is that right? A. That is the way I regard it.

Q. And they don't join until they reach a point—say they don't join on the course of the incline until they reach a point 40 feet below the collar of the winze? A. They join at that place, about that point.

Q. Well, what course do you take for the incline shaft, what degree, what angle of inclination? A. Well, from its collar down to the blue level; it is about as shewn on the plan there; I think about 65 degrees.

Q. No, no. I am talking about the incline shaft. I say, what do you take for the course of the inclination—the angle of inclination for the incline shaft? A. It is about 40 degrees.

Q. What is the horizontal distance between the incline shaft and the Iron Mask east winze? Take a point at the bottom of the incline shaft. A. It is about 20 feet—15—

Q. (Interrupting). Don't you know exactly? Haven't you got notes? A. You are not asking me any particular point.

Q. I think I am. I asked you what was the horizontal distance between the Iron Mask east winze and the incline shaft, at a point at the bottom of the incline shaft.

Mr. Davis—At what point?

Br. Bodwell—At the bottom.

Mr. Davis—You mean the extreme bottom?

Mr. Bodwell—I don't care where he takes it. Take it at the extreme bottom. A. Well, I think that the question that you want answered is, would be answered by about 15 or 17 or 18 feet—15 or 20 feet.

Q. Now, what is the horizontal distance between

the Iron Mask east drift and the incline shaft, just above the mud seam? A. I am afraid I don't understand your question.

Q. Take the top of the mud seam as a point? A. As a point?

Q. Yes. A. That is no point that I know of.

Q. There is a point, suppose, at the top of the mud seam? A. Yes, there might be a million of them.

Q. Now we are getting at something definite. Now we are getting to what you know what you are about. Take the centre of the incline shaft and take a place at the top of the mud seam, and give the horizontal distance between that point and the centre of the Iron Mask east winze. Can you do that? A. I can give it to you approximately.

Mr. Bodwell—It is about 4 o'clock. Perhaps you had better get those figures.

The Court—Let me ask you, the alleged intersection—I don't know whether you contend there is not—but it does not matter, so I understand—the downward intersection, is it not?

Mr. Bodwell—Yes, the alleged intersection.

The Court—It is not a lateral in this way (illustrating) but it is downward.

Mr. Bodwell—And intersects on the dip. They allege this vein dips into our vein.

The Court—I know what you are asking, these distances, of course; the first time it struck. The fact you are asking for is, take here and there, and whether the intersection can occur?

Mr. Bodwell—Yes, your Lordship sees the point. I don't care to explain it too plainly.

The Court—He knows it as well as can be.

The Witness—Certainly.

Thereupon an adjournment was taken to to-morrow, April 21st, 1899, at 11 o'clock a.m.

Clarence King: Sworn on the part of the defendants.

DIRECT EXAMINATION.

By Mr. Davis.

Q. Where do you live, Mr. King? A. New York.

Q. What is your age? A. Fifty-seven.

Q. What is your business? A. That of consulting geologist and mining engineer.

Q. You are a graduate, I believe, of Yale University? A. I am.

Q. What course did you take there? A. A scientific course, involving chemistry, mineralogy, physics and geology.

Q. What were you engaged in after leaving Yale? A. I graduated in 1862 and in the early spring of 1863 I crossed the continent, riding on horseback from St. Joe to San Francisco to join the geological survey of California, which I did join in September of that year.

Q. How long were you with the geological survey of California? A. Until the autumn of 1867, with a short interval, in which I was in the service of the United States Engineers.

Q. Did the geological survey of California involve at that time any mining questions or examinations of the country with reference to mining? A. It did, but they were incidental, in a measure, to the larger work.

Mr. Bodwell—Unless my friend especially wants this on the record, I am perfectly willing to admit that Mr. King is a perfectly qualified scientific man to speak on the questions involved in this case.

The Court—I do not suppose either party will be satisfied with my decision—I will pay myself that