831. The oxygen is necessary for the explosion?—Yes.

832. Also down from the door the mixture would have been less pure?—Naturally.

833. Well, if Martin had gone into this mixture where the gas was less pure, would not the probability of an explosion have been increased ?—Yes, all things remaining the same.

834. You made this statement: That when you inspected near the old fall you saw a pile of rails?

—I saw a pile with some rails sticking out near where Martin's body was found.

835. You did not really mean a pile of rails ?—I saw some rails sticking out of a pile of stone, and the rails were perhaps a foot or more from the floor.

836. The rails were sticking out of the debris a foot or more from the floor ?—Yes.

- 837. If it is proved that there was only one rail, would you deny it ?--There was a pile containing I saw the pile containing rails and stone, and I assumed, therefore, that there was a pile of rails.
- 838. As regards the fan, you stated that it was adequate to comply with the existing law?—I said the fan was adequate for the minimum quantity of air prescribed under the existing law— 150 cubic feet per man per minute.
- 839. It was adequate to comply with the existing law and regulations?—Subsection (1), paragraph (2), of section 40 of the Act says, "Provided that where the Inspector was satisfied that such rate (150 cubic feet per minute) is insufficient to provide adequate ventilation, he may from time to time require the rate to be increased." So you see 150 ft. per man per minute is an absolute minimum quantity.

840. Professor Dixon, in his evidence, said that  $2\frac{1}{2}$  per cent. of gas could be detected by the

ordinary miner ?-- I am not sure if he said that.

841. I think you said yesterday that this was a specially dangerous mine, because there were large areas of high workings to be ventilated ?-That is my opinion.

842. I suppose for the last seven or eight years you knew that fact ?—You must consider my reasons for anxiety as a whole.

843. I am trying to analyse them as a whole ?—A large area in itself is not a danger.

844. A large area of high workings to be ventilated is not in itself a danger?—That is so unless

under unique conditions, as at Ralph's Mine.

845. Another thing you stated yesterday as a danger was that there were inexperienced men all around as far as the gas was concerned ?-That is a fact, owing to there being only one other mine containing gas in New Zealand where the men can be trained.

846. You say that the mine is dangerous because there are inexperienced men all round ?—You

are attributing to me words that I never uttered.

847. You say the men all round: did you only mean the New Zealand men !-- I mean all through The New-Zealander is not experienced in gas-testing as the English collier is, because the men at Home often work in a gaseous mine. A man may be working at such mines as Denniston all his life, and never see gas.

848. You have said that the men here all round are inexperienced in dealing with gas ?—I have explained why.

849. Do you say that it is a cause for fear that in this mine the men all round are inexperienced in gas?—It was one of my causes of fear that the men all round generally about the mine were inexperienced in firedamp.

850. Did you report that fact to the Department?—No.

851. Do you consider it important ?—I considered it as one of my reasons for my fear of danger.

852. Did you consider that it contributed to the danger ?—It does.

853. But you did not report it ?-I have told you over and over again that I did not write a specification of all my fears; I simply remarked the prominent causes.

854. You made this statement yesterday, on the ventilation-point: "As I was not in the mine for a long time before the explosion I cannot say that the mine was ill ventilated, but the fan was not sufficient "?-That was my statement.

855. Is it correct ?-Yes.

- 856. If Mr. Bennie reported that the mine was not ill ventilated, would you be prepared to contradict him?—He forms his opinion and I form mine. I do not answer for his opinion.
  857. Do you adhere to your opinion if he denies it?—I am satisfied that the mine could not be
- adequately ventilated with that small fan-that is, adequately ventilated to remove and render harmless the noxious gases.
- 858. Do you know the provisions of Special Rule No. 3 ?—Yes; it is to the effect that the manager shall see that an adequate amount of ventilation is constantly produced in the mine to dilute and render harmless noxious gases, to such an extent that the working-places of the shafts, levels, stables, and workings of the mines and the travelling-roads to and from such working-places shall, so far as is reasonably practicable, be in a fit state for working and passing therein. It does not matter what the Every working or travelling part of the mine must be adequately ventilated. where I consider the company made the mistake and the mine was wrecked for the time being. company broke the rules, and you have taken good care to avoid alluding to ventilation of the mine.

  859. Do you know the provisions of Special Rule 1?—Yes.

860. When did you form the opinion that the duties imposed upon the manager under Special Rules 1 and 3 had not been fulfilled?—When I heard of the explosions and ignitions.

861. Since the explosions ?—Yes.

862. And am I right in inferring from that that the fact of the explosion caused you to entertain that opinion ?-Whenever there was a man burned by an explosion there was inadequate ventilation at that place, otherwise the noxious gases would have been diluted and rendered harmless in that section.