801. And that it requires special treatment to ensure its safety ?—Yes.

802. And as a portion of that special treatment you have told us that it requires a more powerful fan ?—Yes.

803. Did you ever report that fact to the Under-Secretary ?—I was never asked to report it.

804. You knew that a more powerful fan was necessary, and because you were not asked to report upon that fact you did not do so ?—No. . . . The responsible Inspector would doubtless attend to that.

805. So far as you are concerned, you may know facts of the most pregnant character concerning safety or otherwise of a mine, but unless asked to disclose them you would not do so ?—I just reported upon the salient features in connection with the probability of a disaster. I drew attention to the necessity of safety-lamps. The inadequacy of the fan was a minor defect. I drew attention to the main dangers. These minor matters all contributed to the risk. I did not go through the whole list of causes of danger every time I wrote upon the subject to the Under-Secretary.

806. I am referring to the provision of the fan; are you prepared to again lay stress upon the adequacy of the fan ?—Yes, great stress.

807. Then it is not a minor matter ?—In comparison with the firedamp it is a minor matter. These are very serious reasons for apprehending danger. The absence of an adequate also constitutes a danger, in my opinion.

808. And you did not report it ?—I did not report every item. One or two of the principal causes of danger were sufficient.

809. There was one thing you said yesterday which I did not understand; when you measured the gaseous mixture you said there was no air. Must not there have been air if there was a mixture ?—Will you say where, because I measured the mixture in several places.

810. Where there was 68,000 ft. ?—I said there was no perceptible ventilation in bords Nos. 4, 5, and 6.

811. Did you say there was no air there ?—Gaseous mixture consists of CH_4 and air.

812. There must have been air in that vicinity ?—Yes, but it might have been still air; by "air" miners often imply "ventilation."

813. Containing sufficient oxygen to create an explosion ?—Yes, where I estimate 68,000 cubic feet of gaseous mixture was lodged.

814. Did you say there was no ventilating-current at that place when you visited it ?—The last time I visited it they had put new brattice up to the fall; prior to that there was none in those bords.

815. Was there any there the first time ?—There was on the 19th September perceptible ventilation elsewhere in the district after the explosion. The door at No. 6 bord was blown outwards, and there must have been ventilation there subsequently of sorts.

816. You said yesterday there was no ventilating-current at that place ?—Yes, in bords 4, 5, and 6 before the explosion, judging from the mine-plan and my own observations.

817. And though nothing had happened except the explosion there was ventilation there when you first visited it ?—I would say that there was slight ventilation, the door having gone. I did not measure any ventilating-current. I would not swear there was ventilation immediately after the explosion in bord No. 6.

818. You did not mean there was no air; you meant it comparatively ?—When we say there was no air we mean there was no moving air.

819. You told us yesterday that the force of an explosion, when ignited, was equal to 102·6 lb. per square inch ?—Sir R. A. S. Redmayne states: "The pressure due to the combustion of a mixture containing 9½ volumes of dry air to 1 volume of firedamp is equal to 102·6 lb. per square inch, and the calculated temperature of combustion is 3902° F."

820. You agree with that ?—Yes, of course; he is a high authority.

821. If that is so, and the quantity of gas you told the Commission was present, would not the force have been sufficient to blow the shaft and fittings to pieces ?—That might take a long time to compute.

821A. Cannot you give an idea ?—No.

822. Would you be prepared to deny that nearly 3,000,000 horse-power would have been generated on that basis ?—I do not deny or agree with that statement.

823. If that statement of yours is correct, then the approximate horse-power would be about 3,000,000 horse-power ?—I cannot answer without calculating.

824. Supposing that such a quantity of gas had been present, and if anything approaching that horse-power has been developed, would not the shaft have been blown to pieces ?—I cannot answer that either without calculating.

825. You do not know, then, what force would have been sufficient to blow the whole of that mine to pieces ?—I cannot answer that, neither could any one else.

826. You told us about the miracle that would probably have been performed if Martin had entered by the door ?—I consider it would have been a miracle if he had entered by the door, considering the position where his body was found.

827. You stated that the gas would be purest at or about the door ?—On the roof inside the door; that is so.

828. If that gas were very pure up there it would not have ignited ?—I cannot speak as to the degree of purity of the gas there.

829. But if it had been anything over 16 per cent., or between 10 and 16 per cent., would it have exploded ?—Yes, between 10 and 16 per cent. it would have exploded.

830. And over that ?—Not without the addition of more oxygen.