

26. Would that not apply differently to the men?—Yes, some men could stand more heat than others.

27. *The Chairman.*] Have you any suggestion to offer as to what the standard should be?—No, I should scarcely like to do that, because I do not presume to be an expert on theoretical temperatures.

28. *Mr. Parry.*] You were in the face when that temperature of 80° fully saturated was taken in the Deep Levels on Saturday?—Yes, and I think that should be fully the limit for a six-hour place—in fact, I think it should be less than that.

29. You have heard several witnesses giving evidence in regard to the necessity for having pawls attached to windlasses to prevent accidents?—Yes, and I think it is a very reasonable thing as well as a very wise suggestion, because I have known a considerable number of such accidents occurring. The witnesses have referred to a man being struck with a windlass-handle, but they have omitted to make reference to the danger of a man being injured by the full bucket.

30. In regard to a standard of air, do you not think it should be fixed so that a workman should have some protection by law, and so that the matter should not be left to the Inspector of Mines to decide?—Yes; and I think the Inspector would prefer that himself, and the mine-manager also.

31. *Mr. Cochrane.*] You said, Mr. Lucas, that the connection with the Saxon shaft was the best means of ventilating the low levels?—Yes.

32. Do you know of any mining objections to that?—No.

33. As to baths, would you recommend that they should be installed at mines where only two or three men are employed?—No, I would not go that length, but only where more than half a dozen men are working.

34. From your long experience of the general health of miners have you observed many cases of miners' phthisis?—Yes, very many. We have a great number of men now who are just able to walk about the street, and who are not able to do anything.

35. Then, without a medical examination, you cannot tell whether these men are suffering from miners' phthisis?—They have been under examination by the hospital doctor before they stopped work.

36. Then you cannot tell whether it is miners' phthisis or tuberculosis?—The doctors have always said it was miners' complaint.

37. When it reaches the stage of being tuberculosis, so that such a man would be apt to communicate it to other men, would you exclude such men from the mine?—I am not in a position to say.

38. If the doctor says it has reached the stage of being highly infectious, what would you say as to the necessity for preventing the men from working in a mine?—Yes, certainly, I would exclude them if the doctor gave a certificate to that effect.

39. Would you be in favour of excluding from a mine any person suffering from consumption or any disease of that kind?—Yes, I think if any man has an infectious disease he should be excluded.

40. Do you think the conditions underground aggravate the trouble?—Yes, I think so.

41. Then, I think you said something about the testing of the air in the May Queen Mine: would you be satisfied with the test of the air taken from the stope as a sample?—I would say that if you wish to find the quantity of air which the men get you should test it in the stopes where the men are working, and in the working-face. In other mines you tested at the working-face, but in that mine you did not.

42. Do you consider analysing a sample of the air in the stopes a test?—Yes, certainly.

43. *Mr. Molineaux.*] I understand that you object to men suffering from contagious disease working in a mine?—No, I do not know that I objected. The question was whether a man should be allowed to work underground, and I said, "No"; it is a matter I have not considered.

44. You consider that a manager should have a right to insist upon the medical inspection of any doubtful case in regard to contagious disease?—I do not know. I am hardly prepared to answer that question.

45. How else could you find out if a man were suffering from such a disease?—Of course, if a man had the disease he would be under a doctor. I do not think that would require consideration.

GEORGE WARNE SWORN and examined. (No. 12.)

1. *The Chairman.*] What are you, Mr. Warne?—Mine-manager of the Waitohi Mine.

2. What certificate do you hold?—First-class mine-manager's certificate.

3. How long have you been mine-manager?—About twelve years.

4. And your total experience of mining?—Thirty-five years.

5. Where have you gained your experience?—Principally in New Zealand, but also in the Old Country as a youth.

6. Have you any opinion to offer to the Commission in regard to the question of ventilation?—Yes, I should like to go into that matter a little. After the Thames Deep Level crosscut had been started we were called together as an advisory committee to make a recommendation as to the method to be adopted for ventilating the crosscut. We went into almost every conceivable scheme, and we came to the conclusion that the best and really the only possible means of ventilation under the existing conditions was by way of a powerful blower. I might say that this blower is capable of delivering about 12,000 cubic feet of air per minute. The engine is about 50 horse-power, and, although at a short distance it would deliver that quantity of air, it would not do so at the end of a long line of pipes.

7. What would you call a short distance?—Say, 500 ft.

8. What would it deliver at the present face?—About 2,500 or 3,000 cubic feet per minute; but it can easily be increased to deliver 6,000 cubic feet if that were required. As far as the working of the blower is concerned, the men have only to ask and they would be given more air. The blower sends in a stream of cold air, and for that reason they keep the pipes as far back as possible.