

35. I mean, with ten or twelve holes exploded?—I have known places where the smoke would clear away in a few minutes, and other places where you could not get back for two hours.

36. Take the Otira Tunnel: the heaviest explosions are in the heading. Have you worked under conditions of that kind, where there is 50 lb. of gelignite exploded in one charge?—I have worked in railway tunnels.

37. Where 50 lb. is exploded at one charge?—That makes a lot of fracture round the holes, and I want to say that it frequently happens that from lack of supervision, or want of method, or from having an inexperienced workman or inexperienced foreman, heaps of dynamite is burnt that should not be used at all, and fumes caused unnecessarily. It frequently happened in the Otira Tunnel that more dynamite was used than should have been. It is possible for a fracture to burn if too much dynamite is used.

38. Where the exigencies of the case actually required the explosion and there were experienced men in charge of the work, would it be possible to get back to the face in anything like five or ten minutes?—I would not say that it would in a bottom heading.

39. No matter what the ventilation was?—It would take five or ten minutes in any place. If the ventilation was not adequate it might take an hour or an hour and a half.

40. In your opinion, as far as the actual burning of gelignite or dynamite goes, it all depends on the experience of the men in charge, and then the amount of fumes depends on the quantity of explosive that is used?—Yes, and the ventilation.

41. Is it possible, in your opinion, to ventilate the heading at the Otira Tunnel so as to clear away the fumes of an explosion of the kind I have mentioned in five or ten minutes?—I do not see any reason why the smoke should not be cleared away in ten minutes.

42. *Hon. Mr. R. McKenzie.*] Will you tell us the volume of air per man per minute that you would consider adequate ventilation for the number of men working in the tunnel, and to clear the air of fumes in ten minutes or a quarter of an hour at the face?—I should want to go into figures. I should want to know the number of men and the quantity of smoke.

43. What is the allowance under the Mining Act?—100 ft. per man per minute.

44. Is that sufficient to supply the men reasonably?—No. 100 ft. per man per minute passing through a place is a very small volume indeed. It should be the minimum always.

45. You cannot give us any idea of the quantity that is required in the Otira Tunnel?—In measurement, no; but I would say that a powerful exhaust fan might be installed that could be used only for that purpose in the bottom heading every time a shot was fired and there was an immense amount of smoke. The fan should be set in motion at such times, and by sucking the smoke up quickly it would cause a circuit, and cause an immense amount more air to come in at the inlet.

46. Are the men working in the tunnel at present connected with the Miners' Federation?—They are a unit of the Federation. About four men working there now are still members of our union. We disbanded the branch there.

47. But not as a body?—No.

48. Do you know whether they have a union there of their own—a branch of any union?—I would not call it a branch.

49. Is there a union of any kind?—Yes, there is a West Coast Workers' Union. It spreads over an area of probably 150 miles, from the Cass right round the coast.

50. Can you tell us what the rate of wages is that is paid for underground work in mines and tunnels on the West Coast as a rule?—Yes. The Reefton wage is 10s. 6d., and 11s. for machine work. At No. 2 State mine it is about 11s. and 11s. 6d. a shift.

51. What is the wage for men working outside doing such work as shovelling gravel?—10s. a day is considered the regular wage. You never hear of a man being paid less.

52. Do you know whether the men working in the tunnel at present work the full eight hours a shift in dry places?—I should say that is quite possible, because they have not got the bank-to-bank clause.

53. You cannot say definitely?—No. They are in further now than they were when I was there.

54. Can you tell us whether they go to their work and back in their own time or in the contractor's time?—They do it in their own time one way, I believe.

55. *Right Hon. Sir J. G. Ward.*] Is this agreement, dated the 19th December, 1908, and signed by Judge Sim, the agreement that is in existence now between the miners working at Otira and the contractors?—No. There is no agreement now. That agreement expired, and Mr. McLean has since been making his own arrangements.

56. Are the wages paid higher than those set out in that award?—Mr. McLean is paying higher wages now than he was paying at that time.

57. *Hon. Mr. R. McKenzie.*] Do you think it possible to get a sufficient number of men to man that work fully, at a fair and reasonable rate of wages?—Yes, if the conditions are made good in the tunnel I do not see any reason why there should not always be plenty of men there to do the work. My reason for saying that is that at the Reefton mines, just a few miles away, there is never any scarcity of labour. Such mines as the Big River and the Blackwater, situated in almost inaccessible places, pay lower wages than Mr. McLean, and they can always get men to do the work.

58. *Hon. Mr. Fraser.*] Can you speak from your own knowledge as to whether the ventilation is good or not at the Otira Tunnel, and as to the other conditions that you refer to?—No; I am basing my statement on this: that there are hundreds of Mr. McLean's ex-employees passing through my hands.