

The main dip shown on the plan was the intake airway. All the openings off this main dip on the east side were closed by stoppings so as to direct the air down to the lower workings. These stoppings were formed of light timber frames to which brattice cloth was nailed. They did not comply with the requirements of the regulations. From the point in the main dip where the east and west levels were driven off brattice should have been carried into the working-faces so as to force the air around these to keep them always in a fit state for persons to work therein.

The evidence submitted to us shows that bratticing to conduct the air current round the working-faces was not carried out. For some time prior to the 6th November, 1940, the ventilation of the west level must have been badly deficient, with no perceptible current of air from the point where it left the main dip. The east level would be in a somewhat better condition because it was not so far away from the main intake, also because from the dip to the first rise place shown on the plan this level was acting as the main return airway.

Owing to the flimsy nature of the stoppings there must have been a substantial leakage between the intake and the return airways, and so the total volume of air provided by the fan was largely wasted.

A report of the Coal-mines Inspector, Greymouth, dated 3rd August, 1938, in reference to the discovery of gas at this mine states that the gas was found in a rise place following the hade of the fault. This was on the east side of the workings, and the position is indicated by an arrow on that side of the plan. It is not unusual in coal-mining to find gas when approaching a fault in the coal-measures, and it is of some significance that the rise heading on the west side of the mine in which the ignition of gas occurred on the 6th November last was also approaching, and must have been within a few feet of, the fault which bounds the workings on that side.

On the morning of the 6th November, 1940, the following men were employed in and about the mine: John Kaye (sen.), John Leighton Kaye (jun.), Frederick Llewellyn Williams, Lindo Colpo, Alexander McIntosh (manager of the mine and the holder of a Fireman-Deputy's Certificate), Adam Boote, William Burnett, and Norman Pattinson. Pattinson and Kaye (jun.) were working on the surface and the others underground. Reference will be made later to the provision in the Coal-mines Act which permits workings of this class to be carried on under the supervision of a fireman-deputy.

The explosion which forms the subject of this inquiry caused the death of the following men within the mine: Kaye (sen.), Colpo, McIntosh, and Williams.

The positions in which their bodies were found are shown on the plan. John Kaye (jun.), who was also killed, was working outside the mine.

Although there is some conflict of evidence, the weight of evidence is to the effect that it was customary for all these workers to travel to the mine each morning on a motor-trolley from the terminus of the tramway at the Greymouth-Westport road. One of the workmen, Williams, who lived at the Ten-mile, was in the habit of joining the others at the tram terminus and riding up to the mine with them. We are satisfied that on the morning of the day upon which the fatal explosion occurred all of the eight men employed at the mine travelled together in this way. According to the statement made to the police by Boote, the whole party arrived together at the bathhouse at about 7.30 a.m. There they changed into their working-clothes. After changing they all went up to the mouth of the mine, except Pattinson, who worked on the tram-line taking coal from the incline to the party's bins. When the men arrived at the mouth of the mine the manager, McIntosh, went in to make an examination. He returned at about 8 o'clock, and the other men then entered the mine to commence their day's work. Although Boote in his evidence before the Commission antedated this statement it was confirmed by other witnesses, Burnett and Pattinson, and we therefore accept it as being correct in its original form rather than as amended. It follows that the mine fan was not started until just prior to McIntosh entering the mine, and was therefore running for a few minutes only prior to the entry of the rest of the men and the commencement of work. It follows further that if McIntosh entered the mine before the other workmen he was only a few minutes ahead of them and, in the light of later events, his examination of the mine workings must have been perfunctory and incomplete. The law requires every part of the mine in which workmen are to work or pass during the shift to be examined for gas with a locked safety-lamp before workmen are allowed to enter. Such examination cannot fail to disclose the presence of gas.

As to the actual happenings in the mine between 8 a.m. and the time of the explosion—which was given as 9.15 a.m.—the only direct evidence is that of Boote and Burnett. These men were working together in the end of the east level, and while at work they were caught by the explosion. Boote states that Kaye (sen.) and Colpo were working in the end of the west level. McIntosh was stated to have had a roving commission in the mine and went wherever his services were required. Williams worked alone in the rise heading off the west level. Burnett stated that prior to the explosion he and Boote filled four or five boxes of coal. According to the evidence of Pattinson, there were twelve boxes sent down that morning, so that seven or eight boxes were filled either by Kaye and Colpo in the west level, or partly from that place and partly from Williams' place in the rise heading. As the end of the west level, after the explosion, was found to be cleaned up and two shots were found in the face ready charged in preparation for firing, McIntosh had probably been in the west level for the greater part of the time between 8 a.m. and 9 a.m. It was his duty to charge the holes and to prepare to fire them.

There is some doubt whether Williams could have been working in his own rise place for an hour prior to the explosion without discovering the gas therein. He may have been there, but it seems to us more likely that he assisted Kaye (sen.) and Colpo in the level until the whole of the coal lying there had been filled and sent out. He would then go to his own place. The evidence of Boote and Burnett describes how they effected their escape, but nothing in their evidence throws any light upon the cause of the explosion. The evidence of Inspectors Parsonage and McArthur and of Frank Duffy, Superintendent of the Rescue Station—which was also confirmed by our own examination of the workings—leaves no doubt that the cause of the explosion was an ignition of gas in the rise heading off the west