IN THE COURT OF)
COAL MINES REGULATION)
HOLDEN AT BULLI)

No. 1 of 1965

BEFORE HIS HONOR JUDGE GORAN

ASSESSORS: MESSRS.MAHON and BUCK

FRIDAY, 17th DECEMBER, 1965

IN THE MATTER OF AN INQUIRY IN PURSUANCE OF THE COAL MINES REGULATION ACT INTO AN ACCIDENT WHICH OCCURRED AT THE BULLI COLLIERY ON 9th NOVEMBER 1965 AND ITS CAUSES AND CIRCUMSTANCES.

(PART HEARD)

MR.PARKINSON: I would like to ask Your Honor a question, if I may. As general president of the Miners' Federation, my attention has been drawn officially to the fact that since this public inquiry commenced last Tuesday week, on the four working days of last week in the mines and the four working days up to yesdarday, there have been another eight incidents, of fire in mines in this district, including one at Old Bulli Colliery yesterday. I want to know, Your Honor, if your jurisdiction is completely tied to S.31 or S.33 or in the light of these circumstances that I have just portrayed, would you have jurisdiction to extend the terms of reference of this particular inquiry?

HIS HONOR: The answer to that is simple, Mr.Parkinson. I have no jurisdiction to extend the terms of reference as such in this inquiry because my charter is to inquire into this fire and its circumstances and make such observations as I think fit. The charter does not refer to observations but the Act gives me that power once this inquiry is started.

Those matters can be inquired into on this condition only, that they are relevant to what I have to inquire into in this inquiry. If I may make my point clearer by referring specifically to one incident that you have mentioned: If it be that the nature of the incident in the Bulli Colliery to which you have referred is in some way similar to the incident in this inquiry so as to make my inquiry into that incident relevant to the matters into which I am looking in this inquiry, then my present charter extends to such an investigation. Whether it extends to any of the other incidents you have mentioned in other mines is another matter, but it may be that they are similar incidents and may serve to explain what has happened in this incident. And if that is so, then it is not only my wish but my duty to make some inquiry into those, but of course the inquiry is limited by the fact of their relevance. Now, it must be shown to me prima facie that there is a good reason for my looking into any of these incidents before I could do so. That is the position, Mr.Parkinson.

MR.PARKINSON: Thank you, Your Honor.

MR.SULLIVAN: May I make an application in relation to a witness I propose to call. It is the widow of one of the deceased who has evidence which we feel Your Honor should hear in connection with this inquiry. It is Mrs.Esme Isabel Murray of Thirroul. She, of course, is suffering from the effects of what has happened and we would like permission to interpose her before the present witness is cross-examined.

HIS HONOR: For myself I see no reason why that should not be done. Is there any objection from the Bar table?(No objection)

MR. SULLIVAN: I would like to do that now if the Court will permit.

MR.REYNOLDS: My learned friend has been good enough to provide me with a proof of the evidence which he expects this witness to give. I would like Your Honor to have a look at it before she gives evidence to consider whether it really is helpful in the circumstances. Having regard to the fact that this is a Ministerial inquiry I do not want to put legal submissions to Your Honor about it because they may be completely irrelevant but it will be my submission in all the circumstances that this cannot really assist Your Honor.

(His Honor was shown a copy of the proof of evidence).

HIS HONOR: I propose to hear the evidence on two bases and I make myself clear, I think: It is obviously evidence partly of a hearsay nature. As to that part of the evidence which is of a hearsay nature I shall base no finding upon it but I shall use it as a possible source of further evidence in regard to the matter. I think I am able to distinguish judicially between the type of evidence upon which I can make findings and that upon which I cannot. I shall bear this in mind.

The other basis is that it is evidence of a direct nature concerning one of the workmen who had worked in this area. That evidence excludes what was said to Mrs. Murray by way of explanation or comment by Mr. Murray but since it is evidence of a direct nature about a circumstance which is stricly relevant to this inquiry I will admit it. It may also be of relevance on the issue of repute, that is, as to whether it was common knowledge that this condition obtained in this section for some time prior to the fire.

MR. SULLIVAN: I propose to put her in the box and read the statement onto the notes and if my learned friends wish to ask any questions they may do so.

HIS HONOR: I think in this case the evidence should not be given by a mere reading of the statement. I think the witness should be asked to reply from her memory.

MR. SULLIVAN: Very well, Your Honor.

ESME ISABEL MURRAY,
Sworn, examined as under:

MR. SULLIVAN: Q. Is your name Esme Isabel Murray? A. Yes.

Q. Do you live at Thirroul? A. Yes.

Q. Are you the widow of the late John Hilton Murray? A. Yes.

Q. Did he work at the Bulli Pit? A. Yes.

Q. Was he one of the victims of the disaster of 9th November? A. Yes.

Q. Do you remember something about him in the week before 9th November last? A. Yes.

Q. Did you notice anything about him? A. Yes.

Q. What did you notice? A. That he remarked about not being able to taste his food for the taste of gas in his mouth. He

would sit at the table and go (demonstrates) and go (demonstrates) "nothing I eat I can enjoy".

HIS HONOR: The witness made certain movements of her mouth .

WITNESS: That is the movements he made (Demonstrates).

MR.SULLIVAN: Q.How long before the disaster was that? A. It was during the last week.

Q.Subsequently did you notice anything else about him? A. I did. On the Sunday, normally he worked around the yard all day but he just - he would do a little job and come inside and have a rest and then he would go out again and try and do a little bit more and then, normally, he was a chap that went out in the yard and did the garden and only came up for his meal.

HIS HONOR: Q. How old was he? A. 53.

Q.Was he an active type? A. Very active.

MR.SULLIVAN: Q. Was there any conversation between you and him on the Sunday about his dinner? A. Normally before I go to Church I put on the meat and I asked, before I went, would he like a baked dinner, which we always have, and on that day he said No. I said "Well, what do you want?" He said "Well, what have you got?" I said "I have a tin of salmon there". I said "If you fancy that?"He said, "Oh I will try that".

Q.Did you prepare dinner? A.Yes.

Q.Of that nature? A.Yes, after I came home from Church I gave him his salad and salmon - a tin of salmon I had.

Q.Did he work in the garden in the afternoon? A.Yes.

Q.On the Sunday? A.Yes, just a little.

Q.Did you notice anything about him? A. He just seemed to be tired, which he normally wasn't ,really. He was rather an active man.

Q.On the night of the 9th November you were visited by the Minister for Mines, were you not? A.Yes.

Q.The honourable Mr.Lewis? A.Yes.

Q.And by your local member of Parliament, Mr.Jackson? A.Yes.

Q.By a representative of the mining company, who was Mr. Hetherington? A.Yes.

Q.That is a representative of the A.I.S?A.Yes.

Q.Did the Minister say to you" they have recovered three bodies"? A.Yes.

Q.Did you say to him, and the representative of the mining company, "There is something wrong here" - (Objected to by Mr. McNally as leading).

Q.Tell the Court what you said to these gentlemen -

MR.REYNOLDS: Really, can what she said be any evidence of anything?

HIS HONOR: Only in this way, and this is the only way in which I will take it, you of course are very familiar with those cases where persons make complaints - ?

MR. REYNOLDS: Yes. It is not a complaint of anything she knew about. It is .er opinion.

WITNESS: It is the truth.

HIS HONOR: You see, this is a matter between lawyers. I am sure Mr. Reynolds is not suggesting you are saying anything other than the truth.

MR. REYNOLDS: Complaints have been given and Your Honor has taken a view about it but this is not a complaint by a person in a position to make a complaint.

HIS HONOR: I was about to say it is in the nature of those cases where there are complaints. This is not a complaint - obviously it is not - but it is of the same nature and shows a consistency of the witness' evidence, or tends to show a consistency.

MR. REYNOLDS: Unless she is challenged and it becomes necessary to prove she has been consistent, this cannot be given in chief. I am quite concerned, frankly, with what the Press do about this sort of thing. One saw yesterday that the Press highlighted those parts of Mr. Donegan's report which we all conceded were not really admissible and that was the only thing the Press wrote about. Of course, Your Honor cannot control that.

HISHONOR: I have not seen it.

MR.REYNOLDS: I have, Your Honor. It is one of the circumstances that makes it necessary for a person in my position to rise to his feet about these things.

HIS HONOR: There is merit in what you put. I will allow the evidence in this form:

Q.You did make a statement - you said something? A. Yes.

Q.Do not tell us what you said? A. Yes.

Q.You said something about the incident to these gentlemen? A.Yes, there and then.

MR. SULLIVAN:Might I press this evidence, Your Honor. This statement was made in the presence of one of the actual parties to the inquiry, that is the Honourable Mr. Lewis and the representative of Australian Iron & Steel, that is, Mr. Hetherington who I understand is their Industrial Officer.

HIS HONOR: It would not be because of the fact that it was said, it would be because of the possible resultant admission by any of these persons. I do not think the Minister for Mines by remaining silent in these circumstances could be held to have made an implied admission. Mr. Hetherington is a representative from the Mine but he may have no knowledge whatsoever as to what happened downthere and one cannot say in the circumstances he must be taken, by saying nothing, to have admitted the situation.

MR. SULLIVAN: May I put this question to her:

Q.You spoke to these three gentlemen as you told us and did you mention your husband's complaints - shortly? A. Yes.

CROSS-EXAMINATION:

MR.McNALLY: Q.What time do you usually have tea? A. 4.30.

Q.Your husband did not work on Saturday? A.Never.

MR.PARKINSON: No questions.

MR.MURRAY: No questions.

MR.REYNOLDS: No questions.

MR.LEE: Do you say your husband did not work on Saturdays? A.No.

Q.Was he all right on the Saturday? A.Yes, oh yes. When I say "Yes", well he was not working around the yard, that is what I mean,he was not working around the garden.

Q.On the occasions he mentioned about the taste in his mouth, was that after he had come home from work? A.Yes, prior to his meal.

Q.Then he would be home for the night and go back next morning was that the procedure? A.Yes.

Q.How was he at breakfast time? A. He was a man that did not really complain. He did not mention anything at breakfast, it was only before the evening meal that he would mention about the gas being in his mouth.

Q.He made the mention of the taste in his mouth soon after he came home from work?A. When he came home from work, when he would be sitting at the tea table .

(Witness retired)

MR.SULLIVAN: I do not know whether there are any witnesses expenses involved here but if there are - ?

HIS HONOR: If there are I make the usual order.

HENRY ARTHUR JAMES DONEGAN
On former oath:

MR.LEE: Before my friends proceed with cross-examination it may be that Mr.Donegan is in a position to make some observations which may be of assistance to Your Honor, I do not know, in regard to the evidence just given and with Your Honor's leave I might ask him a few questions on that?

HIS HONOR: Very well.

MR.LEE:Q.The effects of carbon dioxide and methane - do they have any effect upon the respiratory system? A.They are both asphyxiants.

Q.What, if any, connection, is there between the inhalation of one or other or both of those gases and a person appearing to be, say, overtired or not his active self? -

MR. REYNOLDS: I do not know whether the witness claims to be qualified in this medical field?

HIS HONOR: Q.Are you qualified? A. I am not a physiologist but I have to be acquainted with a lot of the physiological effects of gas.

Q.You have made yourself familiar with those? A.I have.

HIS HONOR: I allow it. 427.H.A.J.Donegan,: x.

MR. LEE: Q. Yes, Mr. Donegan? A. The presence of carbon dioxide increases the respiratory ventilation. I will not give all the figures but I think the presence of 5% of carbon dioxide increases the ventilation of the lungs 300% .

HIS HONOR: Q. Do you mean you breathe three times as fast, as hard? A. Yes. Incidentally, carbon dioxide has a taste; that is recognised.

MR. LEE: Q. Just before you get on to the taste, which I think we all know about anyway: This increased ventilation, would that in your opinion or would it not have an effect on a person of feeling more tired than he otherwise would? A. Certainly. If anybody is breathing at three times their normal rate it will make them tired.

CROSS-EXAMINATION:

MR. CRANE: Q. In connection with the piece of timber that was recovered, would you say it was burnt by friction or burnt by a naked flame? A. I would say that it was heated by friction until flame appeared.

Q. And would you say that to reduce it to the charcola state of the timber here in Court, it would have a flame of high intensity? A. Not necessarily.

Q. You did say in your report that a flame with a degree of 900 degrees would be required to burn the mine cable and to burn the ventilation tube? A. Yes.

Q. And you do agree that the fire in that particular area was of that intensity - the fire in the rib? A. The flame temperature of methane is in the vicinity of about 1,100 degrees Centigrade.

Q. And would you agree with the report when it states that to burn you would need a temperature of 600 to 700 degrees? (No answer).

MR.LEE: I do not think the report does say that, with respect. It was a letter from the Forestry Department. It could be a little misleading.

HIS HONOR: Have you a copy of the letter, Mr. Crane. You might refer to the passage you are referring to.

MR. CRANE:Q. On page 12 in the last paragraph about halfway down, "This mixture will ignite providing the first two make up a sufficiently low proportion of the total at about 600 to 700 degrees Centigrade." Is that correct? A. That is the mixture of vapours given off in the distillation of the wood.

Q. Do you agree this mixture will ignite provided certain conditions happen? A. Yes.

Q.And would you also agree in the report, that the hydraulic oil would ignite at 350 degrees? A. 351 degrees - I think I state that the principal component of the hydraulic oil will ignite, but if you look at my reports of my tests of the wood you will find that the wood glowed at 340 degrees Centigrade, 10 degrees below it.

Q.Coming back to the tests now: Did you perform the test yourself in the Joy Manufacturing centre? A. I was present, yes, when it was carried out.

Q.Could you tell His Honor how long those tests covered?A. We were at the company, I suppose, for a couple of hours or

probably more.

Q.Did you yourself apply pressure with the four foot length of pipe? A.Not myself - Mr.James, Inspector James. I was present when he did it though.

Q.That actual test that Mr.James applied with his weight, with the leverage of the four foot pipe - how long did that take? A. A matter of minutes, I suppose.

Q.Do you agree in your final test you went up to 400 lbs. before you detected, in your opinion, the flames glow, or spark?A. I was not able to state definitely that I saw that ephemeral flame and I give reasons later on for not seeing flame.

Q.Do you think it would be a fair comparison to make a test such as in the Joy Manufacturing Yard? Was the machine running or was it stationary when the tests were made? A. The vehicle was stationary and the motor was running against the brake.

Q.And it had holes drilled that made it more of a cooling agent than the actual car No.40? A.Yes. I covered that in my report, the reasons why the test -

Q.So it would be reasonable to assume that the heat generated by the burns on the machine would be of a higher intensity down the line with the conditions that it was working than the ones when it was tested in the Joy Manufacturing Yards? A. No, there is not necessarily a strict comparison because at the time of the application of the brakes in the mine might have been shorter than the time that Mr.James was applying the wood on the brakes.

Q.Do you agree it is a steep grade and the brakes would be required to be used considerably in the mine? A. Evidence has been given to that effect.

Q.And the braking effect with the car would be much greater than that which could be applied by Inspector James for the duration of five minutes? A. The brakes were on the vehicle. Mr.James was not applying the brakes.

Q.He was applying the pressure to the friction of the timber? A. He was holding, endeavouring to hold the timber in the same position as the piece of timber was found. He only needed to exert sufficient force to hold the timber in position .

HIS HONOR:Q.He was not forcing it against the disc or against the universal? A. He was forcing it into the position in which it was found.

MR.CRANE: Q.He was trying to effect the pressure of the disc, the revolving disc, against the timber to create a friction, was he not? A.Yes.

Q.You said in your opinion that heat can be generated in those burns to carry a flash, to make a flash, to ignite the oil fluids? A.No.

Q.How do you explain the fourth clause in your opinion, Mr. Donegan, "The brake assembly was hot due to one and half hours running of the shuttle car on a fairly steep grade. This would have contributed to generation of flame"? A. It would have contributed to it. Every source of heat will contribute to a generation of flame.

Q.So that you use that the heat which was generated in a burn in your test could not have been sufficient to create the frction or start the spark on the timber? A.No.

HIS HONOR: Q. What does that answer mean? You do say or you do not say it? A. The question was a peculiar question.

Q. What is your answer to that question - just No? I will have it read.

MR. CRANE: Q. I will put this question: Are you of the opinion that the heat generated by burns can create a flame? A. Not alone.

MR.PARKINSON.Q.You saw the grade the shuttle cars had to travel, say between A and 2 Heading, down to the face? A. Do you mean from No.2 cut-through down to the place?

Q.Yes? A. Yes.

Q.Would you describe it as a steep grade?A. Everybody else has so I don't see why I shouldn't.

Q.No, this piece of wood. Evidence before the Court is to the effect that the shuttle car has been in operation from approximately 8 o'clock on the morning of the 9th until the time of the ignition, which was somewhere in the vicinity of 60 to 70 minutes? A. Yes.

Q.Do you think, in view of the fact that No.40 shuttle car had done three to four trips prior to the ignition, that it would be possible for the shuttle car to pick up that piece of wood, say on its first run and in the other two or three runs had generated the heat to the point that ignition would be created? A. Considering what I remember from previous evidence, I think that piece of wood could have been picked up at almost any time from the last time that the brakes were inspected, and since Ihave heard evidence -(Objected to by Mr. Sullivan and Mr.Reynolds).

MR.REYNOLDS: This is only an interpretation.

HIS HONOR.Q.You have given an opinion as far as you can go? A.Yes.

MR. SULLIVAN: The witness was speaking of since the last inspection, and that has two assumptions.

HIS HONOR: I rule the second part of the answer is inadmissible.

MR.PARKINSON:Q. The question I asked you was - should I put it this way: Assume that the shuttle car had picked up that piece of wood in the brakes on its first journey that morning. In the subsequent three or four journeys could that piece of wood, as a result of braking that would be required during its operation, could that piece of wood have reached the stage where it could have ignited a concentration of gas? A. I think it is possible.

Q.You think it is? A. Do you want me to give my reasons?

Q.Well,I would like the reasons? A. I think they are mentioned in my statement. No.1, there was no possibility for easy dissipation of heat from the brake assembly so that any heating of the wood taking place would not have the possibility of dissipation, so that there would be a gradual rise in temperature of that wood, and I think in view of the temperatures attained in short runs with the brake on against the motor, that there is a distinct possibility that the wood would have reached glowing temperature at a particular point of friction.

HIS HONOR: Q.Have you any idea how long it would have taken to burn that wood into charcoal? A. The tests that we carried out in the laboratory I did not time, but the splinters of wood - I think, starting to glow - well, they did glow at 340 degrees centigrade and were starting to glow about half an hour after we started the test from cold.

Q.That is in the furnace? A.In the furnace.

Q.The equivalent in the brake area would have been a constant pressure of about that same time? A. The rise in temperature might have been faster.

Q.It might have been faster than the furnace? A. Yes, because we took the furnace up at a deliberately slow rate so that we could obtain the temperature of ignition.

Q.What do you think are the probabilities of that wood having charred in that way in, say, three or four trips? A. I think the possibilities are quite distinct. It would not need to char very much to form the charcoal which would become self-igniting at that temperature of 340 degrees centigrade.

Q.The charring we see in the sample of wood now: Is that due not only to the heat generated at the temperature of ignition but also due to the after-heating from the fire? A.Yes. I do not think there was a great deal of heat applied afterwards.

Q.You do not think so - it is extensively charred now, isn't it? A. It is also charred - it is also stained with oil and with coal dust.

Q.Let us have a look at the piece of wood. (Exhibit K shown to witness) Would you say there is an overlay of grease and coal dust on some of the charred portion? A.Yes.

Q.I am pointing to one there? A.Yes. There was an overlay of grease. This sample, if it was taken apart, I believe would show more evidence of charring in the centre.

Q.In the centre? A.Yes. I have not seen it though.

Q.Does the overlay of grease and coal dust seem to indicate to you that it had charred on some occasion prior to this and then subsequently been covered with the overlay? Would you expect, for example, if there was charring and then ignition at this particular time, say on this last trip, two trips, three or four trips - would you have expected to have seen a deposit of grease and coal dust on it afterwards? A. I am not too sure, Your Honor, whether that oil on the sample might have come from ruptured feed lines to the braking system.

Q.After the fire? A.Yes. I could not say that. I believe the photographs show those lines have been ruptured.

Q.Well, you have got a ruptured feed line and you might have had some oil but you would not have got coal dust, would you? A. No - there was coal dust in the enclosure.

Q.You mean it might have come on it afterwards ? A.I think coal dust in that enclosure there would be flung on to the wood in any case by the rotation of the brake disc just there.

Q.The brake disc would not be rotating and flinging coal dust on after the flash would it? A. It might have . It would not take very long but still -

Q. Then would not that amount of coal dust deposit there be further round than that? A. Not necessarily.

MR.PARKINSON.Q.Do you remember that the shunt, and indeed the working area of 8 Right, was simulated for the purposes of gas testing after the events on the 9th? A. I have heard that.

Q. I don't know but is it possible, at all possible, to simulate the condition of that shuttle car with that piece of wood jammed in the brake disc or wherever it was jammed, of course with the exception of the gas? Would it be possible to simulate that condition? A. Not exactly.

Q.Not exactly? A. Not exactly. It would be almost impossible to simulate an exact condition. The very nature of the particular piece of wood might be different. This piece of wood may have been more splintered, more easily charred. It might be in a slightly different position. The oil that might have been spilt on it may be different quality. There are so many conditions attaching to it that I think it would be very difficult to exactly simulate the condition to carry out another test to see whether it would happen, I would say.

Q.And so would you say that the picking up of this piece of wood, or any piece of wood for that matter, is a distinct possibility in the working of shuttle cars during operations? (No answer).

HIS HONOR: I suppose you have the answer in the fact of what happened, Mr.Parkinson.

MR.REYNOLDS: It is hardly the specialist field of a chemist, anyway.

MR.PARKINSON: It is true that it happened, Your Honor, but I was trying to find out -

HIS HONOR: It is an actuality. Do you mean for the future?

MR.PARKINSON: Yes.

HIS HONOR: I do not think this witness is qualified to answer that.

MR.PARKINSON: Those are all my questions.

MR.MURRAY : Q. The position is that you in your tests at the Joy Manufacturing Company were attempting to examine physically the piece of wood against the moving brake disc to ignite it? A.Yes.

Q.And you used all the pressure you could including the use of a lever? A.Yes.

Q.Before you had done that you had tested the brake disc on the application of the pad applied by the calliper on the disc itself? In other words, the heat generated by the braking action? A. Yes, we determined the temperature.

Q.And I am suggesting to you that the heat generated by the braking action itself was greater than the heat you were able to obtain by the jamming of the piece of wood against the brake disc? A.It is a possibility.

Q.And it is true that the flash point of the brake fluid is not far above ordinary boiling point? A. That is the flash point,yes.

HIS HONOR: Q.That is the same as the ignition point, is it not? A.No, the ignition point is 351 degrees centigrade, the flash point is in the vicinity of 101 degrees.

Q.Would you tell us what a flash point is? A.The flash point is the temperature at which the vapour will ignite when a naked flame is applied to that vapour - the vapour above.

Q.In other words, you have to have a flame? A.You have to have a flame.

MR.MURRAY: Q.It is quite definitely the fact that if anyone was so mindful, for horse-play or prank or other reasons, to throw water or even urine against a brake disc, steam would be given off? A. I heard statements that brakes sizzled when spat on.

Q.So it would be common knowledge - it was common knowledge from your discussion with the men - that these brakes were certainly so hot that they were above boiling point? A.I received that impression from all the evidence.

HIS HONOR: Mr.Murray, do you suggest this prank or some other activity took place?

MR.MURRAY: Yes, I am instructed that at times the men in the mine, in pure horse-play, had done this very thing prior to this event.

Q.And from 100 degrees to 300 degrees, the 100 and something is the flash point and the 300 and something is the ignition point? A. 351 degrees.

Q.Your tests reveal that the application of the brakes even on the perforated disc readily produced a temperature higher than the ignition point of the brake fluid, do they not? A. They produce a temperature of up to 450 degrees centigrade.

Q.Well, you see, the first run produced temperature at the edge of the brake drum of, in its higher range, 300 degrees centigrade. That was your first run, was it not? A.Yes.

Q.And this is on a perforated disc? A.Yes.

Q.Which has a tendency to cool more readily than the solid disc used by shuttle car No.40? A. Yes.

Q.The temperature applied through the calliper on to the brake pad is very high indeed, is it not? A. The temperature?

Q.The pressure. The brake pressure on the pad on the disc is a very high pressure indeed? A. I am not a mechanical engineer but I would imagine that the pressure would have to be great to stop a vehicle of that weight and size.

Q.Now, what I am putting to you , this piece of wood theory, the micky block theory - you know what a micky block is do you not? A. No, I do not know what a micky block is.

Q.Assume that is the term in the mine for a piece of waste wood. The micky block theory is inconsistent with the evidence of Mr. Mangles, is it not, who gives evidence that the first point of ignition was on the left hand side of the shuttle car near the anchor point in the direction of his right hand as he was seated? A..I think that evidence conflicted with the evidence of the other shuttle car driver.

Q.I am pointing to Mr.Mangles' evidence. He was sitting in the vehicle and he saw, just as he was completing his move into the

shunt, some ignition on the left hand side of the shuttle car near the anchor point, namely in his right forward direction as he was sitting. That is correct, is it not? A. That is what he said. I -

Q. And if the ignition took place in that direction it is inconsistent with the jammed timber theory? A. It would be but might I -

Q.Well, is that so? It is obviously inconsistent, is it not? Would you agree with that? A. But there are mitigating circumstances in that - (Objected to by Mr.Reynolds).

WITNESS: Might I make an observation, Your Honor?

MR.MURRAY: Q.You may in a moment, Mr.Donegan -

MR.LEE: This observation may be of some assistance to counsel . It has been suggested there is an inconsistency between Mr. Hope and Mr.Mangles. Might I point out that neither of those witnesses has ever suggested at any time that what he saw was the first flame from the shuttle car. Each one has merely said "This is what I first saw, I don't say it was the first flame." It may be that Your Honor may have to decide, if you possibly can, which flame came out first, but there is nothing inconsistent in the evidence.

MR.MURRAY: Q.It is possible that when Mr.Mangles drove into the shunt, indeed likely, that he applied the brake as he did so? A. He said he endeavoured to - he thought he had applied it.

Q.As he was driving in. Are you familiar with the way these men drive these vehicles in the mine? A. I have seen them driving them but I am not familiar.

Q.Well, they drive them at about as fast as it is possible under the conditions, don't they? Assuming he had applied the brake and immediately he entered the shunt and the brake was on as he drove into the area of where we are now told the gas was, the pressure of the brakes was likely to have been in excess of 300 degrees centigrade? A.You mean the temperature?

Q.Yes. I am sorry. I said pressure, I meant temperature? A.Yes, it is possible.

Q.How long did it take you in the laboratory with the perforated disc to get above 300 degrees centigrade, with the brakes applied? A. I did not test it in the laboratory.

HIS HONOR: Q. Well, in the Joy Manufacturing Company? A.In the Joy Manufacturing Company, I could not say at the moment what time that took.

MR.MURRAY: Q.A short time though? A. The motor would be running for some minutes, I would imagine.

Q.And necessarily the application of the brakes over a period of say an hour would have had a cumulative effect so far as temperature is concerned; that is right? A. There would have been a fluctuation in the temperature due to the brakes being applied and released.

Q.And then applied again? A. But there would have been a gradual build-up in the temperature.

Q.So that after the first hour of work it is likely that when Mr.Mangles applied the brakes as he entered the shunt, the

temperature on the disc caused by the friction pad was above 300 degrees centigrade? A.It would be possible.

Q. It is likely in the light of what you found on p.13? A. Yes, it is quite likely.

Q.Assume now that pressure of the hydraulic system which drives the pad against the disc had forced the emission from the system of a small quantity of the fluid, if that small quantity had fallen on the heated disc and the heated disc had been above 351 degrees centigrade, ignition would have taken place? A. That is so, but the wood glows at a temperature of 340 degrees centigrade.

Q.You see, you keep coming back to yor theory, Mr.Donegan. I am putting to you an alternative? A.Yes.

Q.Because you do not know what pressure the wood, exhibit K, was exerting against the disc? There is no way of knowing that, is there? A.No, except that it was jammed so hard that they had to disassemble the brake assembly to get it out.

Q.But there is no way of knowing whether that is greater than or less than the pressure you were able to apply at the Joy Manufacturing Company, is there? A.I could not say definitely, no.

Q.So I am now suggesting to you that it is more likely that a drop of brake fluid emitted by the application of the brakes by Mr.Mangles on to the hot disc caused ignition than it is that the wood was sufficiently tightly jammed in to have ignited itself? A.No, because if a temperature is reached at which wood will glow before the temperature is reached at which oil will ignite, then the wood has the best chance of igniting the gaseous mixture.

Q.But the wood will only reach that temperature if it is sufficiently tightly jammed against the brake drum, will it not? A.We can drop the temperature -

Q.Is that correct: The wood will only reach that temperature if it is sufficiently tightly jammed against the brake drum? A. When wood is already - already in charcoal form, it will ignite at a considerably lower temperature.

Q.Your theory depends on the following assumptions: If the wood is sufficiently tightly jammed against the brake drum, if it had been charred so as to form charcoal, and if the friction between the wood and the brake drum got at above 300 odd degrees centigrade, then the wood would have ignited? A.It would have ignited and it possibly could not ignite at a temperature much lower than that merely by the fact that it had already formed charcoal.

Q.My theory I put to you is that if the brake drum had been heated by the pad above 351 degrees centigrade and the pressure of Mr.Mangles applying the brakes as he drove into the shunt had emitted a droplet of the fluid, then certainly the droplet of fluid would have ignited it? A. Yes, but I think the first condition would have obtained first, and you will ignite at the most, at the lowest source of temperature.

Q.Only if the wood is sufficiently tightly jammed into the system? A.Not necessarily. It is not a question of sufficiently tightly jammed into the system. It is a question of whether the temperature is reached first.

HIS HONOR: Q.If I may interrupt, what you are saying is this, is it, that on Mr.Murray's assumption, that temperature would have

been reached by the brake drum itself, by the brakes themselves speaking generally, and would have ignited the wood before the drop of oil ever dropped down on to the heated surface? A. In the absence of wood, if that temperature had been reached by the brake drum as Mr.Murray says - in the absence of the wood there could have been an ignition if the temperature had reached more than 351 degrees centigrade. In the presence of the wood, the temperature - which glows and emits flame at a lower temperature - the ignition point would have been reached before the ignition point of the brake fluid.

Q.Has the presence of the wood anything to do with the rise in temperature in the brake drum area? A. I do not think so, not particularly.

Q.So as to have a situation where the brake drum area, using that term generally, is heating up to a temperature which at a lower point will ignite wood, on your theory, and at a slightly higher point will ignite the brake fluid; is that the position? A. That is right, Your Honor. Those are facts.

Q.And the confusion appears to arise by a feeling that it is the fact that the wood is there that is causing the brakes to heat up? A.That seems to be.

Q.MR.MURRAY: That is the test that was carried out, was it not- the wood was jammed on the brakes? A. That is the test which was carried out and which failed because we could not observe, definitely observe, flame.

Q.But what I suggest toyou is slightly different, that the brakes were heated by their own system, not by the application of the pressure of the wood? A. I am not denying that the brakes would be heated by their own system.

Q.Certainly friction on the wood surface would have produced its destruction over [illegible] would it not? A.Yes.

Q.And it would have conformed in shape to the surface against which it was pressing? A.That is right.

Q.And as the surface was destroyed by the proximal friction, so the pressure of the jammed-in wood would be reduced? A. That is right too.

Q.So that the longer the block was in the brake surface the lesser the pressure would have become for two reasons, (1) the moving surface is forcing the proximal surface of the wood to conform to its own shape, and (2) any charring on the other side is causing the wood to crumble; and these factors progressively reduce the pressure of the jammed-in block? A. They would reduce the pressure but the mere fact that the pressure was reduce would not reduce the temperature.

Q.My theory does conform to two pieces of evidence and I am suggesting that your theory does not, namely that Mr.Mangles observed the fire on the left hand side of the car near the anchor point first - whether it was there first or not is Mr.Lee's point, perhaps no one knows, but he observed it there first. Secondly, no miner smelt smouldering wood. What do you say about that? A. He possibly would not have smelt smouldering wood.

Q.But when you were testing out at the Joy Manufacturing Company, smoke was emitted long before you got any of these high temperatures? A.That is right.

Q.And smoke smells? A.Yes.

Q.And as I put to someone earlier, perhaps unnecessarily, when you were present, the smell of smouldering wood is a very atypical smell in a mine? A.Yes.

Q.And you would certainly have expected the men to notice it? A. Yes.

Q.Will you agree now that my theory is consistent with two pieces of evidence which your theory is not, namely where the fire was first observed and the absence of evidence as to the detection of the odour of smouldering wood? A. May I put a proposition to Mr.Murray, Your Honor?

HIS HONOR: Q.Yes. Put it to me? A. Then to you, Your Honor: I for one would not like to state the origin of a flash, even a flash in the heavens of lightning at times, unless I saw actually the zig-zag flash of light. I would not like to say where it came from and when a flash occurs it would be very hard to pinpoint its exact origin except for the fact that it was in that general region which was down near the fire. Now your second point, Mr.Murray?

Q.Something about smoke? A.Yes. The wood could have been in there sometime before and being charred due to heat, friction - the heat of the brake block and friction for some time before, so that the immediate area in contact with the brake disc could have been devoid of volitile smoke which men might have noticed - they might have noticed it on a previous occasion and because there was insufficient heat to keep the smoke going it would have disappeared. There has been no evidence as to whether they noticed smoke on a previous occasion coming from the brakes except that the brakes did smoke. The consequence is that it is quite possible -

HIS HONOR: My attention has been drawn to the fact that there is some evidence of men having seen smoke from this drum.

MR.MURRAY: Q. The evidence was that the men had seen that the brakes did smoke? A.Yes.

MR.MURRAY: Q.It is true, given the conditions we have now been told availed, that ignition could have come from a number of sources - your theory - my theory - a blow from a hammer on the side of the shuttle car - just as an academic example? A.With the presence of gritty material, dust or something like that on the shuttle car there could be generated a spark.

Q.It would be (a) of sufficient temperature and (b) of sufficient caloreal or B.T.U. content? A. It could be of sufficient temperature to ignite gas but there has been no evidence here there has been any collision.

Q.Alternatively, a blow of the hammer such as used by the timber man on the side of the shuttle car, you will agree could have caused a sufficient spark? I know there is no evidence of anyone doing so, I am putting it hypothetical? A. Ignition can occur of gas in a mine even from the working of the picks in a coal cutter.

Q.Certainly,also, had it happened, a collision of the miner with a metal object could have caused a spark sufficient to ignite the gas? A.It could.

Q.Of the shuttle car, I meant? A.It could have - if it had occurred.

Q.Such as a steel brattice stool? A. But it does not always follow that every time a spark occurs from the striking of a metal object it will ignite gas.

HIS HONOR: Q.What Mr.Murray is putting is this: Is it a possibility? A.It is a possibility, a remote possibility in this case.

Q.MR.MURRAY: I am suggesting that is a piece of standard new mine brattice. (Shown to witness)? A.Yes.

HIS HONOR: Untreated?

MR.MURRAY:I will come to that.

WITNESS: Yes.

MR.MURRAY:Q Treated? A. By the smell it is treated.

(Piece of brattice tendered and marked Exhibit AA).

HIS HONOR: Q.Do you say you can smell it? A.Yes.

Q.Smell hession? A.Yes, typical.

Q.What is the distinctive smell about the treatment? A. Just the normal smell of brattice, that is all.

Q.Brattice? A. Hession in brattice.

MR.MURRAY: You are the analyst in charge of the Mines Department Laboratory? A.That is right.

Q.What research is carried out in your experience in the industry in New South Wales apart from research into production methods? A. What research?

Q.I will withdraw that . Do you know of any programme of research being carried out by the deparmment or any other person on the question of provision of effective gas detecting devices in New South Wales? A. We test gas detecting devices for the Coal Fields branch and for the Commonwealth Government.

Q. Do you know of any organisation which has, in the last twenty years, carried out any research to produce better gas detecting devices? A. Any organisation in New South Wales?

Q. Yes? A. No because other countries with infinitely more financial resources have, places like the experimental station at Pittsburgh, the Research Establishment at Buxton and Sheffield, England, the Establishment under Dr. Cybulski in Poland and various other countries have places which have men and can afford to have men on such research and they accept each other's work and I do not see any reason why - it would be impudence on our part to doubt the work or the result of the work and we would, I think, just be regarded by a lot of these other places as egregious asses if we endeavoured to duplicate the work or perform it.

Q. What scientific liaison is there between your Department and these other research departments? A. Correspondence, and I have visited them.

Q. How often is a man who can benefit from such a matter sent over to these places to see the work and bring back ideas to Australia? A. Well, I have carried out my research at my own expense and in my own time but the Department has sent a number of colliery inspectors abroad to ascertain the latest position.

Q. You say they have sent a number abroad. Over what period? These things change from time to time, don't they? A. Yes.

Q. These developments? A. At least one of the witnesses before the Court has been sent overseas by the Department, Inspector Muir. Mr. Anderson has just returned.

Q. When did Mr. Muir go? A. I think it would be within the last twelve months.

MR. REYNOLDS: April 1964.

HIS HONOR: Q. Where did he go? A. I would not know exactly. For the same reason, I would not know exactly where Mr. Anderson went.

Q. When he goes abroad does he make full reports and recommendations? A. I understand he makes reports.

Q. What happens to them then? A. They are seen by the permanent head of the Department.

Q. And then? A. Recommendations will be made following some of these inspections.

MR. MURRAY: Q. In your view is there adequate liaison between our own organisations and those overseas which, according to your evidence, are conducting the research? -

HIS HONOR: You do not have to answer that question. You are an officer of the Department. If you feel any embarrassment about it you do not have to answer it.

WITNESS: Thank you, Your Honor.

MR. MURRAY: Q. Do we have access on a weekly basis to the research of the places you have mentioned? A. All publications of those places I have mentioned, of the United States Bureau of Mines and the Mines Research Establishment in England come to the laboratory.

Q. It is essential before any person testing for mine gas can draw a proper deduction for safety or otherwise, for him to know, not only the percentage of methane present but the percentage of CO2? A. In this particular area he should know.

Q. The critical thing is the proportion of CH4 to CO2? A. Yes.

Q. Not the percentage of methane alone? A. That is quite right.

Q. Until someone is provided with a device which will measure the proportion of CO2 he cannot really make a true deduction as to whether or not conditions are safe or otherwise? A. That is quite right.

Q. It would certainly be a big advantage to have a device which will detect CO2? A. It certainly would.

Q. Indeed, to your knowledge, there are countries in the world in which this is insisted upon in the mine? A. In Japan 25,000 units of the Riken are in use.

HIS HONOR: Q. Do they detect CO2? A. Yes, as well as methane.

MR. MURRAY: Q. In your experience it would certainly be an enormous advantage for the men charged with safety in the mines of this State if they were equipped with this commonly known device? A. It would be a big step towards safety in this area.

MR. McNALLY: Q. (Calls for Exhibit "Y"). I think you had something to do with the preparation of that chart? A. The major portion.

Q. When was that distributed? A. I would not say exactly, but possibly two years ago.

Q. That was distributed to mining institutions and coal mines in this area? A. By the Joint Coal Board - as well as other areas.

Q. I think you, or certain inspectors of the Department took samples of gas. I want you to go now to Table 4, if you would. (Witness refers to Exhibit.)

Q. Set out there at the top of the page are the first four percentages. You see the first, it is 15.1 per cent and it is in relation to sample No. 3694? A. Yes.

Q. Then we have 15.4%, 10.2% and 59.3%. Do those figures represent the actual content of the gas that was contained in the cylinders when they were obtained? A. They are the actual percentages of the constituents of the samples that we took.

Q. They, I understand, were obtained from eleven different places round between the shunt and the goaf area; is that the position? A. Yes. They are marked on the maps at the back of the report.

Q. Each of those would represent the nature of the gas that was at the particular point where the gas was taken? A. Yes.

Q. Rather than using those long numbers I will use the 1A, 2A and 3A figures. Do you understand? A. Yes.

Q. Sample 1A contains 10.2% methane? A. Yes.

Q. That gas would not be detectable upon a Davis Safety Lamp? A. In that particular atmosphere the safety lamp would have gone out.

6 Vols

Mines

9600/

Blue Buckram

French Joint

17 Dec 1965

6 Vols

Q. Similarly, with the methane contained in sample 2A it wouldhave caused the safety lamp to go out? A. Yes.

Q. And in sample 4B the methane present would cause the safety lamp to go out? A. Yes, combination of methane and carbon dioxide.

Q. I think in your report and the plan, the gas chart, the chart you prepared, you expressed the opinion that 1% of methane can be detected by an expert observer? A. Possibly. I would not like to try to do it myself.

Q. Would you agree that with any degree of certainty one cannot detect below approximately 1½% methane with the Davis Safety Lamp? A. I think 1¼ to 1½%.

Q. Approximately? A. Yes.

Q. Would you agree with me that sample 3A, going back to Table 4, would not be detectable on a Davis Safety Lamp?A.Yes, it would be very hard to detect.

Q. Sample 4A would be impossible in fact, there is very little methane there? A. Absolutely impossible, it is 99.8% of air. You would not expect it.

Q. Similarly with Sample 1B, very little methane present? A.Yes, again, 99.4% air.

Q.Undetectable upon a lamp? A. Yes.

Q. The same can be said of 2B, 3B, 4B and 6B? A. Yes.

Q. Coming back to Sample 5A where there was 1.4% methane present? A. Yes.

Q. In that sample there was 2.2% carbon dioxide? A. Yes.

Q. Would you agree with me that carbon dioxide has a tendency to reduce the flame caused by any methane present? A. Yes, I think I have stated that.

Q. Would you agree with me it is unlikely a Davis Safety Lamp would detect the presence of that methane in the sample? A. No, I would not say it was unlikely but I would say the possibility of detecting 1.4 would be reduced by the presence of carbon dioxide with it.

Q. So it may well be it would not be detected? A.It may be.

Q. You agree with that? A. Yes, it may be.

Q. Would you agree with this: With the possible exception of Sample 5A if a test had been made at each of those places with a Davis Safety Lamp for methane, the methane would not have been detected? A. Those samples you mentioned?

Q. Yes. A. Yes - I would like to point out though that the ventilation was entirely different.

Q. I appreciate that. A. Yes, both in quantity and direction.

Q. Are you able to say which of those gases would more closely resemble the gas that was present in the shunt area, assuming gas was there, or are you unable to say? -

MR. SULLIVAN: At the time of the fire?

MR. McNALLY: Q. Yes. A. Well, with the ½" or ¼" drop in barometric pressure I have already pointed out there would be a tendency for the 10,000 cubic feet of gas in the million odd cubic feet of gas held in the goaf to move out and its most probable point of emission or issue would be towards the A Shunt at that particular - the shunt in A Heading.

Q. I think you misunderstand the question: Are you able to say or estimate the content of the gas that was on the floor of the shunt, assuming it to be there at the time of the fire? A. The air-free portion - (Interrupted).

Q.Yes, forget the air-free portion for the moment: Are you able to estimate the percentages of the various gases in the original atmosphere? A. No.

Q.It could not be done? A. No but I should imagine behind the brattice the composition would be approaching that, if not even richer than that, of sample No. 3702, that is, behind the brattice.

Q.It depends how tight the brattice was -? A. As to how much gas would leak through.

Q.That is the difficulty of simulating the area now, since the fire. You know, do you not, that an attempt has been made to alter that part of the mine since the fire to simulate the conditions that existed before the fire? A. I have heard that said.

Q. Would you agree that it would be a very difficult thing to do, to simulate exactly the conditions that existed before the fire? A. To simulate exactly the conditions, because there is the question of the barometric rise or fall, for a start.
Q. The tightness of the brattice? A. Yes, it is just a question of whether it was tighter on a particular occasion.

HIS HONOR: Are you going to suggest it was left in some sort of loose form by the officials who erected it?

MR.McNALLY: I do not understand Your Honor.

HIS HONOR: As I understand the evidence the test was carried out with the co-operation of the officials who were the only ones who knew what the conditions were at the time of the fire. Are you going to suggest that the officials of the management left the brattice in some sort of a looser state for testing under simulated conditions than obtained at the time of the fire?

MR. McNALLY: I would not have thought that could be implied in any way by the question I asked.

HIS HONOR: But in all fairness to everybody here, we have to envisage what you are asking the witness. You are asking the witness to say you could not simulate the conditions with any degree of accuracy because of one factor, the tightness of the brattice. That is your submission. The suggestion that flows from that is that if the brattice is not as tight as it was before the fire you are going to get a greater flow of gas. I take it that is what you are putting?

MR.McNALLY: No.

HIS HONOR: You have to ask me to draw an inference and is the inference you are going to ask me to draw that the brattice under simulated conditions was not as tight as the brattice that was erected before the fire?

MR.McNALLY:No,Your Honor, I am not going to ask Your Honor to do that.

HIS HONOR: Very well.

MR.McNALLY:Q. What other matters would prevent the management or whoever was doing it simulating conditions as they existed before the fire? A. Other than the erection of brattice?

Q. Yes? A. Which would differ the conditions before the fire to what it is now?

Q.Yes? A. If there had been an alteration in barometric pressure, if the barometric pressure had risen all the gas would tend to move back into the goaf.

Q. Any other matters? A. I do not think any alterations in temperature would be significant in that particular place.

Q. Would the shape of the goaf have any bearing if there had been any falls in the meantime in the goaf? A. A fall in the goaf would make itself immediately evident by an issue of gas, after which there would have been an ingress of air.

Q. Assuming the shape of the goaf had changed somewhat since the fire, would that affect the area of the 2 cut-through in A Heading? A. The shape of the goaf?

Q. Yes. The size of the goaf may compare with what it was at the time of the fire -? A. I cannot see the size of the goaf is going to alter because there is a certain quantity of coal and a certain specific gravity been removed from it which fixes the volume of the voids in the goaf.

Q. I suppose it would be a difficult thing to simulate the ventilation conditions generally in that area since the fire? A. To reproduce the same ventilating conditions as occurred prior to the fire?

Q. Yes? A. I think the management could reproduce the same ventilating conditions as far as possible. The only alterations which could have occurred would have been the rises and falls in barometric pressure - the only alterations I can see.

HIS HONOR:Q. If the barometric pressure had risen so that it was higher at the time just prior to the fire you would get less concentration? A. Air would tend to move into the goaf on the edges, rather than gas through.

MR.McNALLY:Q. How long after the attempt to simulate the conditions was made would you say the ventilation system would more closely approximate the ventilating system that existed at the time of the fire? A. Long enough to produce about 20 changes of air in the place, I suppose and that would not take very long, depending on the quantity of air being used for ventilation.

Q. Do I understand correctly that the piece of wood that was heated is only heated whilst the brakes are applied? A. No.

Q. Is it heating all the time the car is running? A. The brakes are in an enclosure and if the brakes generate heat and that heat cannot be dissipated, then if the brakes are not being applied then heat is still - the wood is still subject to the residual heat.

Q. The temperature of the wood is not being increased whilst the brakes are being applied; is that correct? A. That is right, but up to a point when charcoal is formed, once charcoal is formed in the presence of air the charcoal will self ignite.

Q. The formation of charcoal is caused by the heating itself, is it not? A. Yes.

Q. Is it necessary for the piece of wood to actually ignite before any surrounding methane would also ignite or is it sufficient for the piece of wood to simply be glowing? A. When the piece of wood is glowing there is a blue halo around it so that it would ignite. Something with glowing temperature is sufficient to ignite methane. You have to have quantity heat as well as temperature.

Q. So if a piece of wood, assuming this piece of wood was not ignited, but simply glowing, it could ignite gas? A. Glowing, yes.

Q. You understand the evidence, that the shuttle car had been down the face near the miner, had then come up the hill past the shunt and then reversed into the shunt? A. Yes.

Q. Does your theory depend upon the brakes being used at some time between leaving the miner and going into the shunt? A. Between leaving -?

Q. The miner. The face? A. Yes.

Q. At some time the brakes must have been used in order that your theory be correct? A. Yes, the brakes would have been used going down to get the load and the brakes would also be used to stop the car when it is coming back.

Q.Into the shunt? A. Back up, before it went into the shunt. He would have to stop.

Q. You assume the brakes were used at some time between leaving the face and the explosion, or, the fire? A. Yes.

Q.Is it sufficient for that purpose that the brakes simply be applied on one occasion to stop the car? A. To ignite the wood?

Q. Yes? A. Not necessarily, the wood may have reached that condition of charcoal formation and the temperature would of itself generate a temperature when it would finally ignite.

Q. You say the wood may have been glowing before the car went into the shunt? A. It is a possibility. It is a possibility that it could have been glowing before it went into the shunt and did not ignite the gas till it came in contact with gas which was of ignitable composition.

Q. Whichwas apparently somewhere near the bleed tube. That is where the gas was apparently situated? A. I don't know just exactly where it was but it was quite evident there was gas in the area.

Q. If it be a fact that this piece of wood was glowing from the time the driver left the face up until the time of the fire it would appear that there would be no gas in sufficient quantity between the mining face and the shunt, in any event? A. That is right.

Q. If that be correct, that the wood was glowing at this time, it would be fair to assume the only gas in the area was near

the end of the bleed tube, or the only gas - I will put it this way - into which the piece of wood - through which the piece of wood passed was near the bleed tube? A. The only gas that could cause inflammation?

Q. Yes. A. I would not be prepared to say the only gas which was ignitable was that near the bleed tube but it is quite possible since there was a reduced pressure within the bleed tube that gas would be drawn to that point.

Q. That gas would be in the bleed tube and surround the end of the bleed tube? A. There would be some there.

Q. Would you agree that bearing in mind the steepness of No.2 cut-through - I suppose we could assume a miner driver might well apply his brakes during the whole time he drives down No.2 cut-through? A. Yes.

Q.And then he stops his car and it is filled with coal? A.Yes.

Q.Then he starts up the incline again. I suppose it is reasonable to assume the brakes would not be used during that time? A. That is right.

Q. And then he reverses into the shunt? A. Yes, I take it he will put his brakes on to stop the car when he got past the shunt.

Q.That would only be a matter of applying the brakes once? A.Yes, to stop.

Q.Then he did not apply his brakes again till the fire?A.Yes.

Q.Isn't it reasonable to assume on that evidence that the piece of wood was glowing before he got to the shunt? A. It couldhave been quite possible it was glowing before he got into the shunt.

Q. This, bearing in mind the fact that he had previously gone down the steep incline? A. That is right, and with ventilation currents and the normal air and the passage of the vehicle - sort of business - the wood would still keep glowing,it had reached glow point.

Q. It is more likely it was glowing before he arrived at the shunt than the alternative, that it started to glow when he applied his brakes for a shorter time before going into the shunt? A. More likely.

Q. It would appear on the probabilities, assuming there was inflammable gas in the shunt area on the inby side of the brattice, that is, it is highly likely it was concentrated in the area near the end of the bleed tube? A. There would be gas there if it had leaked through the brattice.

HIS HONOR:Q. Would there be gas in the other part, other than near the bleed tube? A. I think so.

MR. McNALLY:Q. What other part do you refer to? A. Anywhere in the shunt - in the vicinity of the brattice - the gas is very heavy and being a fluid it will flow.

Q.You would expect, would you not, immediately the glowing piece of wood came in contact with a mixture of gas that would ignite it would ignite immediately? A. Yes.

Q. So that we can assume it had not come into contact with such a body of gas until it was at least three quarters of the way into the shunt? A. Until it had reached that position in the shunt where there was inflammable gas in sufficient quantity.

Q. I want you to assume for the moment that the fire did not occur till the car was at least three quarters of the way into the shunt? A. From the evidence --

Q. Would you agree that that evidence, if accepted, would indicate there was no inflammable gas at any point inby - (Question withdrawn).

Q. Would you agree that you can assume from that there was no inflammable gas at any point inby of the [illegible] the back of the car would be when three quarters of the way into the shunt - (OBjected to by Mr. Lee).

HIS HONOR: Q. Would it depend on the concentration of inflammable gas? A. It would depend upon the concentration of inflammable gas. All coal holds gas to some extent.

MR.McNALLY: Q. Just assume the wood was glowing before going into the shunt: Why would it happen the car would be three quarters of the way into the shunt before a fire broke out? A. Because the position where the ignition took place - at that position where the ignition took place the concentration of the gas portion in the air would be sufficiently high to be inflammable - until it reached that point it would not be inflammable.

Q. So at least we can assume there would be more gas at that point than there would be inby of that point? A. Than there would be inby of that point, yes.

MR.McNALLY: No further questions.

HIS HONOR: Q. The chart which is now Exhibit "Y", which was produced by Mr. McNally, do you say you had a hand in the preparation of it? A. A major hand, myself and Dr. Outhred of the Joint Coal Board.

Q. What was the purpose- apart from generally benefitting the world as to the nature of gases - was it to be issued to mines officials? A. Yes, and it had to be something which was of general application because it was to be issued in all fields.

Q. Was it in fact to your knowledge issued to those officials in mines charged with the detection of these gases? A. To the deputies?

Q. To the deputies in particular and perhaps the Under-Manager and so on? A. I don't know just exactly what the issue was but I understand that was what it was for.

Q. That was the purpose? A. Yes.

Q. I want you to have a look under "Blackdamp"? A. Yes.

Q. Under "Remarks". I take it that since you had a major part in making this you agree with this, do you: "Can be the principal constituent of outbursts and of issues from mine strata including floor. When formed by de-oxidation of air contains 87% nitrogen and 13% carbon dioxide. In coal issues or outbursts consists mainly of carbon dioxide and may be accompanied by methane"? A. Yes.

Q. Was that a fact that was known to you and was that issued for the deputies, amongst others? A. That was a fact known to me and I think the Joint Coal Board issued it to as many people as they thought would be interested in that information. Those figures there, 87% nitrogen and 13% CO2 are the perfect figures.

Q.What is the date of it? When was it done? A. About two years ago, the last one. There was a previous one the Joint Coal Board had prepared and Dr. Outhred got in touch with me, when it needed to be revised.

MR. SULLIVAN:Q. Would it be fair to say the inference to be drawn from your tables, that is Tables 4 and 5 is that the more you ventilate the goaf gases the less likely there is to be a fire or explosion?A. The more you ventilate the goaf edge.

Q.The less likely? A. Yes. The goaf, though, would have to be ventilated to the return air so that this gas did not pick up more.

Q. But they are less likely to explode or catch on fire if the goaf edge is well ventilated? A. Yes.

MR.REYNOLDS:(By leave). Q. This concerns the calculation you made about the effect of the fall in barometric pressure on the emission of gas from the goaf? A. Yes.

Q.You deal with that in your report at p.5. If I understand your working you deal with it on two bases: You took the area of goaf as being approximately 5 acres and the average height of the seam taken out as six feet and arrived at a figure of 1,300,000 cubic feet? A. Yes.

Q. Then you approached it on another basis and you took the amount of coal shown tohave been won from this area from the records and you took the specific gravity and arrived at 1,200,000 cubic feet? A. Yes.

Q. You said this: "The voids in the goaf amongst the fallen rock would still be the same volume"? A. Yes.

Q. You mean if a cubic yard of stone falls from the roof to the floor it would occupy a given area on the floor and leave the void of a cubic yard where it came from? A. No, I mean if it is a cubic yard it would leave a voidof a cubic yard where it came from but where it falls on the floor once it starts to break it will occupy a greater apparent volume because it will have voids within itself.

Q.But would it occupy a greater real volume? A. The mass that has fallen would still be exactly the same.

Q.In other words the fall will not affect the quantity of void in the whole goaf area, is that what you say? A. No. I can explain this to you -

Q.No, you see, these are the words, "the voids in the goaf among the fallen rock would still be the same volumr ? A.That is right, the same volume as the coal that had been removed.

Q.Is that right? A. They are exactly the same volume.

Q.Just go back to my question and see whether you agree with it now. If a cubic foot or cubic yard of stone falls from the roof onto the floor and breaks into a number of pieces, there would be a void in the roof of a cubic yard? A. That is right, the same as the -

Q.And there would be a cubic yard of volume taken up by the pieces where they fell and broke? A. That is right, not counting the voids in between the pieces.

Q. Well, they are still voids, aren't they? A.Yes, but I mean they are voids which have been introduced when the matter broke.

HIS HONOR: Q.If it breaks up,the perimeter volume is greater? A.That is right.

Q.But the internal volume? A. The actual volume of the rock would still be the same but it would occupy more space because of the voids it would then contain.

MR.REYNOLDS: Q.I understand that, but there would still be the same amount of air and gas in the goaf? A. The same amount of air and gas in the goaf.

Q.Now, this is the part that troubles me and I want to read you some evidence at p.289? A.Yes.

Q.You know the part that is troubling me, do you? A.No. I just wanted to explain why I have given those two calculations which I am careful to just check.

Q.I follow that, and you get figures which are approximately the same for practical purposes? A.Yes - it is for checking.

Q.I want to see whether you agree with this, at p.289. Now do you have it there? A.Yes.

Q.If we take the second question from the top of that page: "Q. You went on to refer to the figures you had got as to the extraction of coal from the goaf: 51,749 tons with a specific gravity of 1.57 and you calculated, and these are approximate figures only, that the removal of that coal would leave a void of some 42,000 cubic yards? A.Yes."? A.Yes.

Q.Well, 42,000 cubic yards is 1,134,000 cubic feet? A. Approximately.

Q.So it is the same sort of - A.Yes.

Q.It is a bit haphazard, but it is within the same region? A.Yes.

Q."Q.Your report goes on 'Such voids,however, do not remain so - " - this is Mr.Menzies' report? A.Yes."

Q."Q.Your report goes on 'Such voids, however, do not remain so and are generally partially filled by collapsing roof. The volume of such roof expands considerably as it falls'? A.That is right. Q.But unless it is subjected to crush by the overlying strata, the collapsed roof does not form a compact mass?A.That is correct. Q.It has been proved experimentally that broken material such as rock will occupy a volume one third greater than the compact mass? A.Yes. Q.As far as you could see there was no evidence that the goaf area in question had been subjected to excessive weight? A. No. Q.And you thought that it was reasonable to assume that the goaf had void spaces equal to approximately one third of its total volume? A.Yes. Q.That is some 14,000 cubic yards? A.Yes. Q.And so you thought it reasonable to assume that the goaf area in 8 Right Section contained some 14,000 cubic yards or 378,000 cubic feet of a gas mixture ? A.Yes." You would disagree with that, would you?A.Yes.

Q.Entirely? A. Yes because -

Q.Because it is just not right? A. That is not right, that particular part - that one third, it is more than that.

Q.And even if the premise was right that it occupies one third more than the volume, taking one third would be quite wrong, would it not? A.Yes.

Q.That would be wrong too? A. It is approximately one third but it could vary according to how much the -

Q.But look, even if it occupied one third more , to take one third of the total would be quite wrong? A.Yes.

RE-EXAMINATION:

MR.LEE: Q.Going back to your tests on the shuttle car would this be a fair statement in the light of Mr.Murray's cross-examination that whether it was the wood which ignited or the hydraulic fluid drop or drops that ignited there, the heat in that particular area was quite capable of igniting one or the other or both; that is the conclusion, is that so? A. The heat was,yes.

Q.And in fact the tests that were taken at the Joy Manufacturing Company - I will put it to you this way - you say that the conditions that obtained in the shuttle car No.40 whilst in operation were much more favourable to the generation of heat than the conditions which obtained at the Joy Manufacturing Company? A.I would say that, yes, definitely.

Q.One little thing you mentioned in your report and on which I did not question you and no one else; perhaps you should be questioned on it; You did indicate that there was coal dust in that brake guard? A.Yes .

Q.Which had taken on a profile of the disc and which you thought had been coked; do you remember that? A. I think Inspector James thought it had been coked.

Q.Assuming now that there had been brake dust, an accumulation of brake dust in that area, with the disc whizzing around the long side of it -

HIS HONOR: You said brake dust. Do you mean coal dust?

MR.LEE: Q. I am sorry, coal dust in the area on the floor of the guard and the disc whizzing around in the immediate proximity and making a face against the coal dust and the disc, could that coking itself be sufficient to give the necessary spark? A. From spontaneous ignition the temperature might

rise to the stage where the coal dust would ignite and that would ignite the -

Q.In order to turn the coal dust into coke what temperature do you need? A. It will start to turn into coke about 400 degrees centigrade which is about the same pemperature, but of course it is higher than that required for the wood or the oil .

HIS HONOR: Q.That would be enough to ignite the wood or the brake fluid? A.Yes, with the exception that the wood will char, charcoal will ignite at a lower temperature.

Q.But in any case it is more than enough for the wood and more than enough for the brake fluid? A.Yes.

Q.Would the fact that you got a coking of the coal dust there indicate that that temperature has been reached? A. Unfortunately I did not get a sample of that coal dust. I had to leave it and it was all removed afterwards.

Q.But assume the evidence is correct that it is coked coal dust? A. If it was coked coal dust it could have reached the temperature sufficient to ignite the gas.

MR.LEE: Q. I think your last answer was the one I was really leading to. In other words, the coking of the coal dust could ignite the wood if it had not already been ignited?A.Yes.

Q.Ignite the brake fluid if it had not already been ignited? is that so? A.Yes.

Q.Or of its own accord, the mere coking, ignite any gas that was within the area, is that the position? A.Yes,spontaneous ignition can occur.

Q.Once you get a spark, and we will assume that the spark did come from somewhere,from the area of the brake disc and the universal shaft, somewhere from that area without being precise; I suppose you could not then say, if there were gas present, precisely what flames you would expect to get , whether they would go out the back, the front or where they would go, could you? A.Well, first of all I think it would be a flame rather than a spark.

Q.Well, as you please? A. And secondly, once a flame is introduced into a inflammable mixture the flame will rapidly propagate through the inflammable mixture if such mixture is not of a composition that will burn rather than explode.

Q.I just want to lead your mind to a word which was used by one of the counsel here, namely the word "inconsistent," in reference to a flame going out the back of the shuttle car and a flame coming from the side of a shuttle car. Now assuming there was a spark or a flame in the brake discs, do you consider there would be anything unlikely about flame going in two directions at the same time? A.Not at all. It will go wherever the gas is.

HIS HONOR: Q.You might take into account of course the fact that if there had been gas present some turbulence would have been created by the shuttle car moving into the shunt? A.Exactly.

MR.LEE: Q. One other matter you did want to explain to one of the counsel was why it was that in your tests in the laboratory you did not see or might have missed what you described as an ephemeral flame in test No.4, page 15, where you said "Untreated timber gave an ephemeral pale flame and glowed at 340 degrees centigrade."

HIS HONOR: I think the witness explained that yesterday. He said it was the fact that he could not see it in daylight or with a torch. I am satisfied, Mr.Lee.

WITNESS: I gave that as an explanation of missing the flame at the Joy Manufacturing Company and the ephemeral flame which I saw in test No.4, I definitely saw.

MR.LEE: I have no re-examination on the formula or the equation that was applied and I will leave it at that.

WITNESS: May I just say two more things, Your Honor. This is in connection with the safety lamp and gas indicators and we had a short discussion on which should be used first. At a northern colliery, two northern collieries, the following two incidents occurred - fatal incidents. On one occasion an under-manager and a deputy who had normally, they thought, completed their inspection of a mine, arriving at the pit bottom decided that they would have a look at a fall which was not far from the pit bottom. This was in Millfield Greta Colliery. They left their safety lamps at the shaft and walked back over that fall to their death into an atmosphere of carbon dioxide. Had they had their safety lamp with them, without any effort on their part the lamp would have gone out directly the flame had hit the extinctive atmosphere. That is the first instance.

In the second instance a deputy, who is one of the mine officials, did not use his flame safety lamp when he was examining - not examining, he was going to correct what might have been an accumulation of methane in a roof cavity. He merely wanted to direct some ventilation into that cavity to get rid of what might have been an accumulation of methane. He had to climb on to a platform to get there.He climbed on to the platform and died in an extinctive atmosphere of methane because he did not take his lamp up with him. If he had taken his lamp up with him he would have put it on the platform and it would have immediately gone out.

So it is for those two reasons, Your Honor, that I stated there that the safety lamp is the first indication that the man taking his safety lamp around with him will get of an indication of dangerous concentrations of gas,whether it be CO2 or methane, before he would have to make testing effort with any other instrument, methanometer or gas indicator, to see whether it was there. I just thought I would clear up that matter because there seems to be some idea that the methanometer or the Toka or the Riken or some such similar instrument could displace the safety lamp. I think it would be very unwise to do that and in circumstances like that could cause other fatalities.

MR.LEE: Q.They are the two points, are they? A.Yes.

(Witness retired).

MR.LEE: That concludes the evidence of the Department.Your Honor mentioned that you wanted to hear again from Mr.Mangles and we have made arrangements, and I hope this is in accordance with Your Honor's direction that Mr.Mangles will be here at 11 o'clock on Monday. The only other matter I wanted to raise at this stage, now that the evidence of the Department has concluded, is the position as to cross-examination, With great respect, I would submit that I should have the opportunity in subsequent cases to cross-examine first.

HIS HONOR: Yes, I think so. Who has some evidence?

MR.MURRAY: I do not think at this stage either of my clients, that is the Union or Mr.Kent, will have any evidence. There may be something I can put by way of supplementary or additional

matter, depending on what is put by the other parties.

MR.SULLIVAN: If I may say so, I think my friend should indicate nowwhether he proposes to call evidence rather than say "at this stage, perhaps I will."

HIS HONOR: Mr.Sullivan, I do not like to put any counsel in that position because there is no jury and it may come about that something occurs during the course of evidence which may raise another issue. If that be the case, I am not bound by strict rules and if it does arise you, for example, would be able to call further evidence or put your own witnesses back in the box. As far as I am concerned I want to get as close to the truth of the matter as I can by natural means rather than by legal means.

MR.SULLIVAN: May I put it this way: I understood Mr.Lee was calling evidence in chief and he did handle it as evidence in chief. Other people were given the right to cross-examine, with counsel for Australian Iron and Steel having the opportunity of going last. A certain order of cross-examination was conducted and why should not the evidence in chief which the other people at the Bar table may choose to call be asked for in the same order.

HIS HONOR: I take it Mr.Murray says "I have no evidence to call, I may seek leave later to call evidence."

MR.SULLIVAN: He said "At this stage."

MR.MURRAY: I will rephrase it, Your Honor. I have no evidence.

MR.SULLIVAN: Perhaps those at the Bar table could be asked in that way.

HIS HONOR: Are you calling evidence, Mr.Parkinson?

MR.PARKINSON: No.

HIS HONOR: Are you calling evidence, Mr.McNally?

MR.McNALLY: No.

HIS HONOR: Mr.Crane, do you call evidence?

MR.CRANE: I have no evidence.

HIS HONOR: Mr.Sullivan?

MR.SULLIVAN: I call Clifford James Lake.

MR.MURRAY: May I add that if Your Honor was mindful of any witness we could call or any assistance we could give, that is entirely a matter for Your Honor, but I cannot see any evidence myself. If Your Honor wishes me to produce any evidence I will do so.

CLIFFORD JAMES LAKE
Sworn and examined as under:

MR.SULLIVAN: Q.What is your full name? A.Clifford James Lake.

Q.Where do you live? A. 18 Railway Parade, Thirroul.

Q.You are a bricklayer employed by the Australian Iron and Steel Limited, are you not? A.Yes.

Q.And you are employed at the Bulli Colliery? A.Yes.

Q.Your job entails you moving from panel to panel, does it not,a good deal? A.Yes.

Q.And you have no fixed place of work except for the duration of a particular job? A.That is correct.

Q.Were you in the No.8 panel some short time before the disaster? A.Yes.

Q.On that day you were in a panel, where were you working first? A.Approximately two and a half miles from 8 Right near Second North.

Q.That is around the area of western returns, is it? A.More or less.

Q.Did Kenny Mangles, the loco driver, as he was passing you ask you to go somewhere?A.Yes.

Q.Where to? A.He called out and told us to drop everything and go with him to red panel,

Q.Who was working with you? You used the expression "us"? A.Sid Tilby.

Q.He was your labourer, is that right? A.Yes.

Q.What did you and Tilby then do? A. Well, we dropped everything and got on the loco with Ken Mangles, and he took us up to the red turn and there we met Fred Wright.

Q.Who is Fred Wright? A. The assistant under-manager.

Q.Did you say something to Mr.Wright? A.Yes, I asked him what the job was in red panel and he said "oh, not red panel, 8 Right.Get yourself up there as quick as you can."

Q.This is what Mr.Wright, the assistant under-manager, said to you. Did he say something to Mr.Mangles then? A.Yes, he turned to Ken and said "take these fellows to Three 8 phone straight away."

HIS HONOR: Q.To where? A. Three 8 phone. That is the turn-off to 8 Right.

MR.SULLIVAN: Q.Did Mr.Ken Mangles thke you up there? A.Yes.

Q.And then did you walk from there to 8 Right?A.Yes.

Q.What was the set-up when you got to 8 Right? Perhaps I could use the bigger plan underneath the others here (apprcaching Exhibit A) I think you have seen a reproduction of this before, have you not? A.Yes.

Q.You were taken up to Three 8 phone and you walked from there up to 8 Right, did you not? A.Yes.

Q.When you got there were the fans there? A. Yes, the fan was in A heading.

Q.What about this cut-through here that goes down to the working place - how far had that got at the time you were there? A.Approximately 100 feet.

Q.About 100 feet from the intersection of A heading and No.2 cut-through, is that right? A.That is correct.

Q.What did you do when you got there? A.Went to look for the deputy.

Q.And did you find him? A.Yes, I found him in No.2 heading.

Q.Whereabouts? Could you come over here and indicate it? A. (Approaching Exhibit A).A heading I mean.

Q.You found him in A heading? A.Yes, about 30 feet in from this cut-through.

MR.SULLIVAN: The witness indicates 30 feet in from No.2 cut-through in A heading.

Q.That is towards the goaf? A.Yes.

Q.What was his name? A. Charlie Stewart.

Q.What was he doing? A. Charlie Stewart was erecting a brattice stopping across that A heading.

Q.He was erecting a brattice stopping across A heading?A.Yes, he had started to erect it.

Q.Was Tilby with you? A. Yes.

Q.What did you say to Mr.Stewart? A.I said "What's the trouble, Charlie?" and he said "Oh, we have got to put this stopping up and render it with cement."

Q.What did you say? A. And we, Tilby and myself, helped him finish the brattice, the stopping, and Charlie said "It's pretty crook, isn't it?" and I said "Yes."

Q.Did you cement render it? A.We all had a go at it later on.

Q.When you say Charlie Stewart said to you "It's pretty crook, isn't it?" what did you take him to mean by that? (Objected to by Mr.Reynolds.)

HIS HONOR: Q. You answered the question and said you agreed with him. What did you agree was pretty crook? A. ~~Well, the gas that was there~~ - (Objected to by Mr.Reynolds; answer struck out at His Honor's direction).

Q.At the time he said that did you notice anything?

MR.SULLIVAN: Q.In the shunt? A. Did I notice anything - yes , there was something there. It was very hard to breathe. You had to breathe twice as deep and twice as hard, and perspiring, and we could only work in there for about two minutes at a time and we had to go out and get some fresh air. It was terrific.

Q.What about Mr. Stewart whilst he was working with you? A. Yes, he was working in there with us and he came out too from time to time.

Q.To get back to the question I asked you before,what did Mr. Stewart say about that set of circumstances? A. He didn't really say anything about gas but he said "it's pretty crook, Cliff, and when you get back in there, you know, when you feel like it,go out and get some fresh air. Don't stay here and choke sort of thing."

Q.Was this day shift? A.Yes.

Q.What time did you start? A. About 12 o'clock.

Q.Who was the loco driver that day? A.I think Bert Booth.

Q.Whilst you were doing this job did you see Bert Booth at all? A.Yes. There was no cement up there to do the rendering. I went up and saw Bert Booth. He usually goes from 8 Right to Three 8 phone with the full cars and returns with empties and I asked him to pick me a bag of cement up from Three 8 phone and bring it in.

Q.Perhaps I can shorten this. Did Booth bring up any other material whilst you, Mr.Stewart and Mr.Tilby were working on the brattice? A.Yes. There were some various lengths of elephant trunk, different sizes I think, 8 inch and 12 inch, and there was a length of ordinary vent tube brought up. It had a 10 inch fit-well on the centre to attach the elephant trunk to.

Q.Do you know the date on which this happened? A.No, I am not sure of the date.

Q.Did you report to anybody and was it noted when you arrived at 8 Panel? A. Oh yes, the deputy, Charlie Stewart, would have Sid Tilby and myself booked in in that particular panel in his book for that day.

Q.That is because you are a worker who moves around the mine, is that right? A.Yes. I had not been there for approximately a fortnight previous to that, or since that day till the fire.

Q.Was Mr.Murray working in that area that day? A. Yes, Mr.Murray and Fred Hunt and Harry Smith were timbering, they were shift men on the miner.

CROSS_EXAMINATION:

MR.LEE: Q.When you say working in that shunt, what particular area are you talking about? A.Well, it wasn't a shunt,actually. It was A heading where we erected the brattice stopping. That was where the shift men had their timber, had their bars and props.

Q.But it was not being used as a shunt then? A.No, it was not being used as a shunt. The shunt was in B heading.

MR.SULLIVAN: That was my fault.

MR.LEE: Q.You say there was a shunt in B heading? A. It was. That is where the shuttle car was shunting, in B heading.

Q.You said this visit of yours to 8 Right Section was one which would have been recorded in Deputy Stewart's book? A.Yes.

Q.To what book are you referring? A.Well, the time book that books our time in more or less.

Q.What is that? A.The time book - books our time in. The deputy must book each man's time in each day, wherever he is working.

Q.You know that the fire occurred on Tuesday morning? A.Yes.

Q.Can you not help us a little more as to when you think this might have been, whether it was nearer the weekend just before or further away from the weekend just before? A.No, I could not say definitely what day it was. You see, I am -

Q.You could not say definitely? A. Well, approximately a fortnight I said.

Q.A fortnight before the fire? A. Approximately.

Q.Well, if we can narrow it down a little further, was it in your recollection in the week before the fire? A. I don't think so. I think it was perhaps the Friday previous to that.

Q.You have had this information of course since the day it happened; you have had it in your mind, the conversation and what happened? A. I don't understand you.

Q.Perhaps I need not make that point. When did you first tell anybody about this? A. Well, the same day.

Q.Who was present, the same day? A. Oh, I told two or three fellows.

Q.When you went there can you be sure that the cut-through you are referring to - (Approaching witness and showing plan) - was the one shown there or the one -

MR.SULLIVAN: He has not seen that one before. It would need some explanation.

MR.LEE: I withdraw it.

Q.Had you been into 8 Right before? A.Yes, but about a fortnight previous to that I think was the last time I was there.

Q.A fortnight previous, and prior to that had you been in 8 Right? A.On and off.

Q.Were you familiar at all with the development of the workings in 8 Right? A. Oh, I think so.

Q.You think so? A.Yes.

Q.Well, after this incident where you say this conversation took place, have you been in 8 Right since? A. Yes, the next time was the day of the fire.

Q.The day of the fire? A. I went down and started to erect some brick stoppings to seal the place off if necessary.

Q.And since then have you been down there? A.Yes, I have been working there up till last Wednesday for the previous week.

Q.Would you look at this plan (shown to witness) - that is a plan, you see, of the workings in 8 Right? (No answer).

MR.SULLIVAN: I think it should be indicated to the witness what the various areas are there.

HIS HONOR: I think it should be. That certainly would not be clear to me. It may be clear to Mr.Lake as a mining man.

MR.LEE: Q.Do you understand that? A.I think so. I think not clearly, but I should say this would be -

Q.You would say, indicating the extension to No.2 cut-through as we know it, this would be the one? A.I would not be sure though. I mean, the plan, I know precisely the set-up there but -

MR. LEE: Q. You will observe on the plan there are other cut-throughs - other headings - going out. Do you know, for instance, when the one marked No.10 was driven? A. No.

MR. REYNOLDS: Is it No.9?

MR.LEE: I am sorry, No.9.

Q. The one alongside what we have called the extension to No.2 cut-through? A. No,I wouldn't know. Let me see now - say two months previous to the fire - about two months previous.

Q. That is a guess on your part, is it? A. A rough guess.

Q. I am trying to find out whether you are quite certain what you saw being done was being done in this extension or related to the extension to No.2 cut-through? A. I am quite certain about that at the particular time I was there.

Q. Can you tell us why? What is some feature that tells us we are not in No.9 cut-through as shown on this map? A. The time and the setup.

Q. You are posit in your mind No.9 as shown on the small plan could not be the area that you were concerned with? A. No, I am not positive.

Q. There is still room for doubt? A. Not according to that plan, no.

Q. There is room for doubt in your own mind? A. As far as that is concerned, yes, but I know precisely where I was on that day I corrected that brattice stopping.

Q. This was a brattice stopping which you had to put the cement over? A. Yes.

Q. It was not a cement washed brattice you got from somewhere else and put up? A. No, ordinary brattice - it was cement washed.

Q. You have not heard any suggestion that the brattice that was in A Heading on the day of the fire was a cement washed brattice that had been got from somewhere else? A. No.

Q. I think I got you correctly: When Mr. Sullivan said to you "Were the fans there?" your answer was "The fan was in A Heading"? A. Well, that is the only one I saw.

Q. You only saw one fan? A. Beside the cut-through, beside where we put that stopping.

Q. At that point of time was the fan working? A. Yes.

Q. Where was the tube or the pipe from the fan - which direction was it going? A. It ran from the fan down into the cut-through.

Q. Whatever cut-through it was? A. Yes.

Q. There was only the one tube from it? A. That is round --

Q. One vent? A. That is all I noticed round into the working place.

Q. Could you tell us a little more about that fan, where its position was in the heading when you sa it? A. I think it was in the same position as it is now.

Q. Was there anything behind the fan in A Heading? A. I do not think so.

Q. There was no brattice behind it? A. No brattice behind it. There was the brattice stopping, the fan went through a brattice stopping.

Q. Which would be placed across A Heading? A. Yes.

Q. The cut-through at that point of time was only 100 feet in? A. That is correct.

Q. Did you go down? A. No, I didn't go down but where I was working in A Heading I had to keep coming out to get some fresh air and I could see the miner working, the machine working, quite clearly.

Q. One hundred feet down? A. Yes, it was not far in.

Q. When you left, after you had seen Mr. Fred Wright he told you to go to the 8 Right and at that point of time did you know why you were going in there? A. No.

Q. When you arrived in there you say you saw Charlie Stewart there and he himself was erecting brattice? A. Yes.

Q. What do you mean by that, what was he doing? A. He was hanging brattice on the props. He had started to build stopping.

Q. He had brattice there with him? A. Yes.

Q. What was it? A. Six feet and five feet brattice.

Q. Ordinary brattice? A. Yes, it was not cement rendered.

Q. You said that was 30 feet in? A. Yes, approximately 30 feet.

Q. 30 feet in from the intersection? A. Yes.

Q. You then walked into A Heading for 30 feet? A. Yes.

Q. Tell us about the floor, is it even floor, does it slope down or up? A. Slopes down slightly.

Q. You, of course, were in a position to see there was no brattice stopping your view right down the end of A Heading? A.No.

Q. You would describe it as a slight incline? A.Yes, the 30 feet I was in was slightly inclined.

Q. Could you see what was at the end of A Heading? A. At the end, no. The brattice was hanging up. Charlie Stewart had a brattice hung up roughly. All we had to do was seal it at the top, at the bottom and the ribs - hung up like a curtain.

Q. You could not see what the incline was beyond? A. No.

MR. SULLIVAN: He said up to the point of the brattice there was a slight incline down.

MR.LEE: I thought I asked him a few minutes ago.

Q.I thought I asked you a few moments ago whether you could see through to the end of A Heading and I thought you said Yes. A. No, you could not see the end of A Heading.

(At His Honor's direction relevant evidence read by Court Reporter).

WITNESS: I meant I had an unrestricted view of the 30 feet.

MR.LEE: I said "There was no brattice stopping your view to the end of A Heading?"

HIS HONOR: That was the question and the answer was No

MR.LEE: I am not taking sides, I merely want to cross-examine with a view to testing the accuracy.

MR.SULLIVAN: I have not suggested my friend is taking sides yet but if he does --

MR.LEE: If my friend thinks I will be taking sides I think he is very wrong.

HIS HONOR: In this inquiry each party, each counsel, has a client to represent. Some of the clients who are being represented have a vested interest, the Mines Department may have in some sense, I suppose, an interest to protect its reputation but I am certain Mr. Lee, appearing for a Government Department is in the nature of somebody assisting me to arrive as close as I can to a decision and put, so to speak, an official seal on it. He is entitled to test a witness to that end. I do not want, unless it becomes necessary, to have the suggestion that Mr. Lee or somebody else is representing somebody else.

MR. SULLIVAN: That was not the suggestion.

MR.LEE: I am sure YourHonor remembers the evidence of Mr. Stewart at p.116 and that is the purpose of this test and that is all.

HIS HONOR: I have been looking at it.

MR. LEE: Up to this point one would say Mr. Stewart has, in effect, given contrary evidence to this and Your Honor has to work out in due course what the position is.

MR. SULLIVAN: You did not cross-examine Mr. Stewart in this way.

MR. REYNOLDS: He called Mr. Stewart.

MR.LEE: Nor did you say a single word ---

HIS HONOR: There will be enough of this bickering at the Bar table. Would you ask the question.

MR. LEE: Q. Were you at the Court in the early stages of this inquiry? A. No.

Q. When were you brought to the Court, do you know? A. This is the first time, today.

Q. When were you first interviewed with a view to telling somebody connected with this case about this erection of brattice by yourself and Mr. Stewart and others? A. About two days ago.

Q. You have not discussed it with Mr. Stewart then? A. No.

Q. Had it been told to you by anybody that Mr. Stewart had through his evidence nowhere suggested that he had anything to do with this brattice? Did anybody tell you that? A. No, I had no idea at all.

HIS HONOR:Q. Was it put to you that Mr. Stewart said he did not know who was responsible for the decision to erect the brattice? Was that ever put to you by anybody? A. No.

MR. LEE: Q. You helped him put it up? A. Yes.

Q. You were in the vicinity then for some little time? A. Yes.

Q. Would it be an hour? A. We stayed in that panel till knock off time.

Q. I am talking about the erection of the brattice? A. It took till about ten minutes to two to finish.

Q. How long would you have been in A Heading erecting the brattice? A. On and off for an hour and three quarters.

Q. You say Charlie said "It's pretty crook, isn't it"? A. That is correct.

Q. "If you don't feel well get out and get some fresh air" ? A. Well, we had to.

Q. I think in fact you said you did do that? A. Yes.

Q. On one occasion? A. Oh no, very often.

Q. What was it? You tell us? Describe what it was that made you go out and get fresh air? A. It was that hard to breathe, we had to breathe deep and heavy and it hurt our lungs, you know, the excess breathing, or trying to breathe, and made me cough and spit.

Q. Did you get any taste of anything? A. No, I did not get any taste.

Q. You have been a bricklayer in the mines for many years, I suppose? A. Yes.

Q. You have smelt black damp? A. Yes, it was similar. I daresay this contained a lot of blackdamp with this, whatever it was, but I have had the same experience before, that is, twelve months ago - the same type of --

HIS HONOR:Q. The same experience?A. The same type of gas, whatever it was, caught me in the chest.

MR. LEE: Q. In this colliery? A. Yes, not as bad as this, but I only felt that the first time when I knelt down to saw a prop and it got me and felt like tearing the chest out and I had sense enough to get out into some fresh air.

Q. Was this previous occasion in the working area? A.No, it was in a return. WE were forming a return.

Q. In which panel ? A. Northern Returns.

(Witness stood down)

(Further hearing adjourned to 11 a.m. on Monday 20th December 1965.)

461. C.J. Lake, stood down.

IN THE COURT OF)
COAL MINES REGULATION) No. 1 of 1965
HOLDEN AT BULLI)

BEFORE HIS HONOR JUDGE GORAN

ASSESSORS: MESSRS. MAHON and BUCK

MONDAY, 20th DECEMBER, 1965

- - -

IN THE MATTER OF AN INQUIRY IN PURSUANCE OF THE COAL MINES REGULATION ACT INTO AN ACCIDENT WHICH OCCURRED AT THE BULLI COLLIERY ON 9th NOVEMBER 1965 AND ITS CAUSES AND CIRCUMSTANCES.

- - - (PART HEARD)

(By consent the following amendments were made to the transcript:

Page 460 about halfway down, to read "...and put, so to speak, an official view about it ... the suggestion that Mr. Lee or anybody is representing somebody else."

Page 402 in the answer to the fourth question, to read "you can determine the methane in the instrument by first of all testing the gas using absorbents".

Page 402 in the answer to the fourth last question, to read "above two and a half per cent which causes it to be under the Act."

Page 405 about one third down, to read "If you look at the Table at the back it is 99.8% air."

Page 411 third answer to read "the greater part of the volatile matter and the moisture it contains".

Page 411 fourth question to read "Q. You could call it coked wood?"

Page 415 last two lines to read "If it is less than 100 it is so capable and I have designated that in the next line..".

Page 416/7 answer just below middle of page to read "If that is the one that is mentioned there, yes, and they have worked in complete co-operation.").

MR.PARKINSON: Your Honor, you may recall last week after the luncheon adjournment on Tuesday or Wednesday the question for remuneration for witnesses was raised. I have been advised this morning that the witnesses - and I am referring to members of the Miners' Federation here - will be paid £3.10.0 per day. Now this is approximately £1.4.0 per day less than the mechanised unit rate and in view of the fact that the members of Old Bulli Colliery lost consertatively 9 days' work as a direct result of this disaster, and this is Christmas week, I wonder if Your Honor has the power to order that at least classification rate ought to be paid for wages because there are financial circumstances here and I don't think our members should be placed at a financial disadvantage because they are called upon to give evidence before this public inquiry.

HIS HONOR: You are only speaking about members who are witnesses in this inquiry?

MR. PARKINSON: Only the witnesses .

HIS HONOR: I am afraid I am not familiar, Mr.Parkinson, with the nature of these things and I am willing to do anything that is fair so long as I know what I am doing. This morning I discussed the matter with Mr.Bevan here and what I understand is going to be done is this, and I would like to be corrected if I am wrong, that the company is going to pay those men appearance money and the Mines Department is going to make up a sum - do you know what it is, Mr.Lee?

MR.LEE: I understand we are making up the difference between what that money would be and the daily rate, according to figures supplied to me by Mr.Reynolds.

HIS HONOR: What is the loss, if any?

MR.PARKINSON: The losses are that they have not qualified for attendance allowance so there is no attendance allowance being paid by the company. You would not expect them -

HIS HONOR: Why didn't they qualify?

MR.PARKINSON: Because the mine did not work for 10 days, nor have they qualified for pillar allowance because the mine did not work for 10 days. Mr.Reynolds did say -

HIS HONOR: This is immediately after the fire?

MR.PARKINSON: Yes. Mr.Reynolds did say the bonus payments would be made. The bonus payments were not made last Friday. I understand from Mr.Bevan this morning that they are going to be paid £3.10.0 a shift. £3.10. 0 a shift from £4.13.11 a shift would be £1.3.11 a shift these men are losing as a result of being witnesses.

HIS HONOR: Are they losing it by being witnesses?

MR.PARKINSON: They would be getting £4.13.11 plus pillar allowance plus attendance allowance had they qualified. They did not qualify for it so they would be paid £4.13.11 and they are only to get £3.10.0.

HIS HONOR: Because they have been here and did not qualify?

MR.PARKINSON: Yes.

HIS HONOR: What is the Mines Department attitude?

MR.LEE: We took the figures Mr. Reynolds gave us which we understood were the figures for the amounts which, if paid by the Mines Department, with the amounts the company were paying would put the men in exactly the same position as if they had not had to attend the enquiry. Those figures are at this stage with the accountant from the Mines Department. I was not familiar at the time with the way in which the figures were calculated but I understood it brought them to the point after we made our payment, with the company's payments, the men would be, to all intends the purposes in the same position as if they had attended at work. Mr.Parkinson said the situation, if it is as he says it is, can only have come about because the two amounts being paid by the company and that by the Mines Department do not come to £4.13.11 a shift, if that is the proper rate.

HIS HONOR: Assume that the company is paying nothing. In fact, as I see it they are not strictly obliged to do so. I may be

wrong about that but normally speaking if a witness attends Court he is not paid by his employer and the sole money he gets is witnesses' expenses. There is a scale for that. In those cases of course the State bears the expense. This inquiry is somewhat different in two respects because firstly the company has volunteered to pay certain moneys towards the expenses of the witnesses, of those who are not working, and secondly the State, as such, does not pay the expenses for the reason that the Act says I award the witnesses' expenses and the Minister should bear the cost, although I am tied to a certain scale of witnesses' expenses which is the Supreme Court scale. In the event of any dispute I am not the one to decide the matter, the Act says the Prothonotary of the Supreme Court must do so. The Minister is apparently prepared to take a short cut and instead of the matter going on and me ordering witnesses' expenses be paid at the scale, the Minister himself will pay it. My view is that a witness, simply because he is called as a witness, should not lose anything. That is my idea. If in fact these men are losing money simply because they are witnesses then one cannot, as I have said, blame the company for it, but I think their wages should be made up. The order I thought I made was that the witnesses should be paid such moneys as would ensure that they did not lose by being witnesses, which would cover the situation you have spoken of, as I see it, Mr. Parkinson. I do not know about the extra payment forpillar extraction but the full attendance money they would have earned and qualified for but for their attendance at this inquiry should be paid.

I may mention this: Mr. Bevan has in fact been given an advance by the Mines Department to make up these witnesses' expenses and he has it with him. Mr. Bevan saw me this morning and I told him I would endorse such payment as he makes which would save the witnesses from losing that money they are entitled to receive. I think that should meet the situation. I am glad you raised the matter. I want to know what I had in mind is being carried out.

MR. PARKINSON: I do not want to turn this into an industrial inquiry by any stretch of the imagination but by the same token I am only raising it because it is obvious from what Mr. Lee has stated there is a complete underestimation as to what the situation really is. In the first place, the company is not liable for attendance allowance or pillar allowance so our members get nothing but when they are working they get £4.13.11. a shift plus attendance allowance plus pillar allowance, if they qualify. All I am asking under those circumstances is £4.13.11 per shift for their attendance each day and they are going to be paid £3.10.0. It is as simple as that.They are losing £1.3.11 a shift.

HIS HONOR: Unless I am otherwise persuaded I think that is fair. Mr. Bevan tells me he will draw up a formal order in respect of these witnesses and they will be paid the sums I have stated.

Mr. Murray is properly absent today but will be here at two o'clock. I propose, should there be any cross-examination to reserve his rights to cross-examine subject of course to other counsel who may wish to clear up any matter. I will say no more about that at this stage.

CLIFFORD JAMES LAKE
On former oath:

MR.LEE: Q.Over the weekend have you had a chance or opportunity to give any further consideration as to how long before the fire on 9th November it was that you were in this part of the mine to put up the brattice? A. Yes, I have given it quite a considerable thought over the weekend and I still think it was roughly a fortnight I was in there putting that stopping.

Q.You think it was roughly a fortnight? A.Yes.

Q.You don't think it could be as long as October 4th or 5th? A. I don't think so. Approximately a week before I went down to work on that stopping I was sent down to 8 Right again on my own just to generally help out. I think they were short-handed.

HIS HONOR: The witness did say his times are recorded in some note in the deputy's book. Is that book available?

MR.LEE: Only from what I am told by other counsel, Your Honor, I understand there is probably some sort of record which might, I believe, identify the precise time but I have not got it and I think the only people who would have access to it at the moment would be either the deputies or the management.

MR.McNALLY: We have not got access to it.

HIS HONOR:Do you know anything about it, Mr.Reynolds?

MR.REYNOLDS: I only know our searches do not record this man being in 8 Right. We are not suggesting he was not, but they do not record it.

HIS HONOR: Do you know what they do record, if anything?

MR. REYNOLDS : They record many things. It is not disputed that he was separately detatched and was not booked in by the deputy in 8 Right specifically. He was booked in by his own deputy for the day for so many hours but was detatched for so many hours, apparently and that time was apparently not recorded in the book of the deputy of 8 Right. We have made extensive inquiries to try to pin point the date and we believe we have been able to do so but not by a precise written record, Your Honor

HIS HONOR: Q.Did you see any record being made? A.No, I did not see any record being made but as a rule when we do work in 2 or 3 different panels during the shift we usually ask the deputy towards the end of the shift if he has booked us in or not, or , not to forget to book us in. I think we would have done it that day.

Q. The deputy was Mr.Park? A. Mr.Stewart.

Q.The deputy? A. Mr.Stewart.

Q.Mr.Stewart. A. Yes, he was the deputy in 8 Right.Either it could be where we were working in the morning where it was Jack Morgan - both of them could book us in - it would only be recorded once in the time sheet. If we were not sure Jack Morgan had booked us in we would ask Charlie Stewart to book us in.

Q.You would ask him to? A. I think we would have.

Q.What are these entries? Is it on a sheet or a book or what? A.It is a book.

Q.It is a book the deputy has? A. Yes, he books in every man and the time that is worked in that panel.

HIS HONOR: Is Mr.Stewart's book of Mr.Morgan's book available?

MR. REYNOLDS: Yes.

HIS HONOR: Are they here?

MR.REYNOLDS: Not in Court, no.

HIS HONOR: I wonder if they could be obtained. It may help us.

MR.REYNOLDS: As I understand the position he was always booked in by some deputy other than Mr.Stewart and this does not deny the fact that he was seconded or on loan for a short period during the day.

WITNESS: Yes, it is quite possible that Jack Morgan did book us in.

MR.REYNOLDS: I will suggest to the witness precisely what happened if Mr.Lee does not, when my turn comes.

We will get the books but the books will not help Your Honor one way or another. They will show he is booked in every day by someone, generally by Morgan.

HIS HONOR: Do they show where?

MR.REYNOLDS: I suppose they would, Your Honor. I gather Mr. Morgan would be the deputy at that time at one particular place that shift. They would only show where Morgan was working.

MR.PARKINSON: Surely if the witness pointed out that he was told by the deputy to go out and they found it was getting a little bit overpowering on this particular day, surely gas would have been reported on this particular day?

MR.LEE: That is what we want to find out.

HIS HONOR: We want to fix the date when the witness was there.

MR.PARKINSON: We might be able to fix it through that report, Your Honor.

MR.LEE: Q. Is this occasion you are referring to the first time you were in 8 Right? A. No.

Q.How long before this occasion you are referring were you in 8 Right? A. Approximately a week previous.

Q.Was this the only occasion - ? A. No.

Q.Wait a minute - upon which you erected any brattice? A. No.

Q.You had done that in 8 Right previously? A. Yes.

Q.Was this the only occasion you had erected brattice under the supervision, so to speak, of deputy Stewart? A. No, I don't think so. In the past I had been up there erecting brattice stoppings and cement rendering them but they have more or less been outby, away from the face and that.

Q.Was deputy Stewart there on those occasions? A. No, I don't think so.

Q.This was an occasion when he actually worked with you? A. Yes.

Q.Was this the only time that that happened? A.Yes.

MR.LEE: It may be Mr.Stewart can throw some light on it if he is recalled at some stage.

Q.You say that you had these sensations as you have outlined in your evidence when you came into this area. Did you get those sensations when standing upright or only when kneeling down near the floor or what? A. All the time, standing upright and worse when I bent down.

Q.How many other men were working there with you? A. Sid Tilby and Charlie Stewart.

Q.Did Charlie Stewart have his lamp with him, his safety lamp? A.Yes, he had it with him, more or less hanging on the corner of the intersection.

Q.At any time did Stewart say, or make any comment to you, about actual gas being present? A. No.

Q.The word gas was not used? A.No.

Q.Did you say anything to Mr.Stewart - "have you tested this place?" or any words to that effect? A.No.

Q.You say it was quite obvious to you, the sensations you were experiencing ?A.Yes.

Q.Mr.Stewart himself made the statement "It is pretty crook" or words to that effect? A.That is right.

Q.Did Mr.Tilby say anything to you whilst he was working there about how he was feeling? A.Oh I think he would have been - he felt the same way as me.

Q.Did you say he is built the same way? A. No, felt the same way as me about the sensation and that, he was spitting and coughing and spluttering. What we did, when we got organised, I got Sid to go in and do a bit while I was outside, and then vice versa.

Q.Was there anybody else in the area that you can name other than Deputy Stewart and Tilby? A. Three shiftmen were in and out periodically when they were getting timber to the face.

HIS HONOR: Q.Do you know who they were? A.Yes, Jack Murray, Fred Hunt and Harry Smith, they were the three shiftmen working at the face.

MR.LEE: Q.At any time whilst you were there did any of the management, the manager, the assistant manager, the under-manager, come into the vicinity or the area? A.No.

Q.Did you ask Stewart or have any conversation with Stewart along the lines of what he was going to do about this situation? A.No.

Q.He did not say anything to you to indicate he was going to report it or do anything like that? A.No.

Q.It did not occur to you - I am not being critical - it did not occur to you to say to Charlie Stewart "well, what is this stuff that is in here?" A. No, I did not ask him what it was.

Q.You say you could sort of sense there was blackdamp in it? A. Well, I did not know blackdamp but I had that sensation before

and, since the fire, I asked Vic Parkinson what was the effects of blackdamp and apparently that was it, the sensation I was getting.

Q.But you were getting this when you were standing up? A.Yes.

Q.At your full height? A.Yes, I think that must have been because of the brattice screen being partly erected and it was sort of swirling over and around it.

Q.A bit of a draught coming through? A.Yes, over it, where it was not fitting tight against the roof or the ribs.

Q.You had this - you had had similar sensation about twelve months before? A.Yes.

Q.You mentioned the area. You might do that again? A. Northern returns.

Q.Did you report it to anybody? A.Yes, reported it to the deputy.

Q.Was he present when you experienced this sensation or did you have to go and find him and tell him? A.I did not have to actually go and find him but I told him when we met up with him again.

Q.Do you know which deputy that was? A. Phil Browne.

Q.Do you know if that deputy made any tests at the scene? A.I think he would have.

Q.You did not see him? A.No.

Q.You got the impression he was going to? A. He would have tested before we went into this particular area, I think.

Q.When you pointed it out to him can you remember what that deputy said to you? A. I think he said "Yes, I know there is a bit of gas there, it is more or less all over that area". You see, there were two other shiftmen detailed to work with us on that job and more or less there was, I think if I remember rightly, eight stoppings to put up, brattice stoppings, to form a new return. Two shiftmen started at one end and they would put roughly four and we started at the centre and did the other four and they had to clear out too.

Q.Do you know the expression "bottom gas"? A. I know the expression.

Q.Before this inquiry did you know this expression? A.Yes.

Q.Have you ever heard the expression "bottom gas" used amongst the men in this mine? A.Yes.

Q.At the time you experienced the sensations you did at the time you described, what you think is a fortnight before the fire, did you think it might be bottom gas? A. Yes, well, I thought it might be bottom gas. I know nothing about gases but just - -

Q.You thought it might be? A.Yes.

Q.On the previous occasions, 12 months before, was there any reference or mention made by anyone to the effect that what you had sensed then was bottom gas? A.I don't recollect whether it was bottom gas that was mentioned or not but gas was mentioned - that was gas - just gas.

Q. Just gas? A. Yes.

Q. I want to ask you some questions about the particular section or area that you were in. You did say to me on Friday that there was some doubt in your mind as to whether it was the actual extension to No.2 cut-through that we see on the map over there or whether it would be further back into the workings? A. Yes, well --

Q. You remember you said there was some doubt in your mind? A. Yes, the time factor.

Q. I take it that is still the position: You would not like to swear on oath that you were in that extended cut-through or shunt on that plan? A. Well, as near as I can figure out that is where I was. I have been thinking over the weekend and I have thought of another incident that happened last Tuesday when I was working in 8 Right panel.

MR. REYNOLDS: Are we concerned about this?

MR. SULLIVAN: It is only to assist recollection.

HIS HONOR: He may be reminded by an incident last Tuesday of what happened before.

Q. Is that what you mean? A. Yes, it gives me the idea it was in that place. There were three electricians and two fitters, Sid Tilby and myself went down, went down with Fred Wright and he told us to wait at the intersection of A Heading and No.2 cut-through while hemade an inspection. He made quite a thorough inspection before returning and while we were waiting there everyone was talking, you know, and I overheard an electrician say to a fitter - -

MR. REYNOLDS: Your Honor ...

HIS HONOR: It is only of relevance insofar as it may have refreshed his recollection.

MR. McNALLY: Perhaps if we have a name?

WITNESS: It is relevant to this cement-rendered brattice.

HIS HONOR: Q. You tell us? A. The electrician said that just prior to the fire he was in there and he hung up the top part of the brattice in the afternoon and left the bottom half lying on the ground for the afternoon shift to put up.

MR. LEE: Q. Do you know the name of that electrician? A. Phil Clarke. I asked him was it cement-rendered or had it been cement-rendered and he said Yes. Apparently that was one I put up which was the only one in that area. I think it is quite a while since they done any cement-rendering up there and that was the stopping that was down and put up again.

Q. Whether it be that area or further in what you did see was an auxiliary fan in operation? A. One fan.

Q. You actually assisted in the erection of a brattice in an area where you could smell gas? A. Yes.

Q. The bleed tube was brought to that area? A.Yes.

Q. Was it erected whilst you were there? A. No, erected by the afternoon shift.

Q. Did you see it? A. I seen the deputy and the vent tube brought in but I did not see it erected.

Q.You were aware whilst down there, whichever it was, whichever cut-through it was, that at the back of the brattice there was goaf? A.Yes.

MR.CRANE: No question .

MR. PARKINSON: Q.Prior to the erection of this particular brattice stopping which you were sent to cement render what task did you have to perform the week before you said you were in that particular section? A. The first job they gave me when I went up there was to give Fred Hope, that is the shuttle car driver, a hand to shift the anchor point along B heading one pillar length outby.

Q.That was to shift the anchor prop one pillar length further out? A.Yes, in B heading .

Q.When you cement rendered this brattice was it a shunt? A.No, that was a timber bay.

Q.Would you know the length of the shuttle car? A. I would say approximately 30 feet.

Q.Where you cement rendered this particular brattice in A heading would you think there was room for a shuttle car to get into it? A. No, there would not be enough room for a shunt - not quite.

Q.(Goes to large plan) Do you recall if the shunt on that particular occasions was in B heading? A. It was in B heading on the outby side.

Q.Let us assume that it was No.3 cut-through extension - let us assume? A. Yes.

Q.Didn't you say the miner was down the extension about 100 feet? A.Yes, yes.

Q.About 100 feet? A,Yes.

Q.Have you any idea how long it would take the miner to go to the boundary and then extract the whole of the pillars? A.No.

Q.You would understand it would take some time to go 100 feet down to where they had to take the lifts off? A.Yes.

Q.You would recognise it would take some time to expect the pillars? A. Yes.

Q.Then that could have been considerably before November 2nd had it been the No.3 cut-through extension? A. Well, I assume so. It would take a fair while to extract one pillar, wouldn't it? I suppose the miner would travel ahead under normal working conditions about, say, 90 feet a shift.

Q.What I am putting to you is that if it was No.3 cut-through extension it must have been some time early in October when you went to erect your - cement render the brattice stopping? A.Yes, it would be.

Q.In A heading? A.Yes it would be,under those circumstances.

Q.Yet a week prior to this, prior to you going to cement render, you had removed the cable anchor back a pillar length? A.Yes.

Q.When you removed that cable anchor back a pillar length how many pillars were left in that particular section? A. At that particular time the miner was half way through extracting the

pillar between B Heading and the wheeling road, C Heading, I think it would be. That would be about two pillar lengths from where we erected the new anchor point.

Q. You say there was only one fan in operation? A. Only one fan.

Q. Thelast time you were in there, at the time you cement rendered the brattice; is that the situation? A. Yes.

Q. Did you say you were sent down as a matter of urgency? A. More or less.

Q. When you say "more or less", just tell us? A. I was told to get there as quick as I could.

Q. By whom? A. Fred Wright.

Q. You say the only people that were there erecting this brattice stopping and assisting yourself were Sid Tilby and Deputy Stewart? A. Yes.

MR.McNALLY: Q. I think you said on Friday that after the brattice was erected in A heading you did not go back to the area of 8 Right until the day of the fire? A.That is correct.

Q.You did say this morning that you had been in 8 Right Section previously? A.Yes.

Q.I think it is fair to say that although you had been in 8 Right previously, you had never erected a brattice screen in A heading? A. Previously?

Q.Yes. In other words, this was the only time that you had erected, actually erected a brattice screen in A heading? A. Yes.

Q.You have only done it once? A. Yes.

Q.And you say, do you , it was two weeks before the fire? A. Roughly two weeks.

Q.Well, more or less than two weeks? A. Approximately two weeks.

Q.More or less than 2 weeks? A.I think it would be round about two weeks.

Q.Could have been more? A.It could have been more.

Q.Could it have been a week before the fire? A.I suppose it could have.

Q.Well, are you sure? A. No, I am not sure. I am not sure of the time at all.

Q.When you say you are not sure of the time at all, it could have been a week, it could have been two weeks, it could have been longer? A.Not much longer, I don't think, according to the set-up, I mean -

Q.According to what set-up? A. Well, when I went in there to change the anchor point, they must have put that anchor point there where it was so that they could start on No.2 heading.

Q.How long before you erected the brattice screen did you erect the anchor point? A.Approximately a week.

Q.So that would get you back into October some time, is that the position? A. Well, that would be three weeks, wouldn't it?

Q.Yes. Now you say that the only time you erected a brattice in A heading was this one occasion? A.Yes.

Q.Are you sure of that? A. Yes.

Q.Assume you were told that you had actually erected the brattice when the extension of No.3 cut-through was being made, would you be prepared then to agree that you were making an honest mistake and that it was the brattice inby of No.3 cut-through that you had helped to erect? A.Yes,I would.

Q.I mean, your only mistake is as to the cut-through and as to the time? A. The time. The time is the main thing, I think.If it was in No.3 the set-up is exactly the same.

Q. I want you to assume that the set up at No.3 was exactly the same? A. Yes.

Q. As on the plan (indicating Exhibit "A")? A. Yes.

Q. Would you be then prepared to agree that you are quite possibly making an honest mistake? A. Yes.

Q. In any event you are quite sure of three facts, are you - that (a) Mr. Wright told you to go to the section? A. Yes.

Q. (b) That a brattice was erected in A Heading? A. Yes.

Q. And (c) that Mr. Stewart was there helping you? A. Yes.

Q. He was there the whole time, in fact, assisting you; is that the position? A. That is correct, yes.

MR. REYNOLDS: Q. How long have you worked in the mine? A. I worked 9½ years in this mine and 10 years in a mine in New Zealand.

Q. So you are pretty used to conditions? A. Yes.

Q. And would you believe that you should have reasonable working conditions in the mine? A. Yes.

Q. I suppose you have been on strike a few times in your life? A. Oh yes.

Q. AND believed you were standing up for your rights for decent working conditions? A. Yes.

Q. And this day a deputy sent you in to work in a place which was thick with gas? (No answer).

MR. McNALLY: That is not right.

MR. REYNOLDS: I am putting a proposition to him.

WITNESS: The deputy actually didn't send me in. I don't think he would have sent Tilby or myself in if we didn't want to go. We went in there, it seemed -

MR. REYNOLDS: Q. Then you were prepared to go into this place to work? A. Yes.

Q. And the deputy was present? A. Yes.

Q. You say the conditions were terrific? A. Yes, they were terrific, but I thought myself it was more or less an emergency and we had to erect this stopping to keep the gas back in the goaf away from the working face.

Q. Who told you it was an emergency? A. Nobody told me it was an emergency, I just assumed it was.

Q. And you put up with terrific conditions? A. Yes.

Q. Did you see the deputy use a lamp to test these terrific conditions? A. No, not while I was there, but had he taken his lamp in it would have gone out, I think.

Q. ANd why didn't you say to him, as a miner of some nearly 20 years' experience, "I am not going to work in that place until you clear it out"? A. Because someone had to erect this stopping to clear it out.

Q.Did they? A.Yes, and I was prepared to assist in an emergency.

Q.Are you not exaggerating these conditions? A. I don't think so.

Q.You do not think so? A.No.

Q.Do you know anything about gas? A.No

Q.Do you know what blackdamp is? A. CO2 - carbon dioxide.

Q.Do you know what that is, what's its effect is? A. Well, apparently it affects the breathing and respiration.

Q.You had to ask somebody about this afterwards, did you, to find out? A. Well, I had to find out what the effect was, actually.

Q.Who was it you asked? A. Vic Parkinson.

Q.And when did you ask Vic Parkinson? A.Last Thursday.

Q.And was this the first time that you found out what was the effect of blackdamp on a human being? A.No, I had heard previous that if you were overcome you just go to sleep -

Q.No, I am asking you is this the first time you found out the effect of blackdamp on a human being? A. Yes.

Q.And where was it you asked Mr.Vic Parkinson? A.In Wollongong.

Q.Where? A. In Crown Street.

Q.Whereabouts in Crown Street? A.The solicitor's office.

Q.And you asked him there what was the effect of CO2, did you - is that right? A. That is correct.

Q.And he told you? A.Yes.

Q.Was anybody else present? A. Yes, I think Lance Novis was present.

Q.Anybody else? A. There were two or three other chaps there but I can't, -

Q.What - miners or what? A.Yes.

Q.And you had had this experience of these terrific conditions, you say, some time late in October and you did not know what effect it might have on you? A.Well, I knew that if I didn't get out of it, like that it would finish me.

Q.You knew that? A.Yes, but I didn't know precisely it was blackdamp, I didn't know what it was.

Q.Well, you knew it was a mine gas? A.Yes.

Q.And have you been taught to regard all mine gas as dangerous? A.Yes.

Q.Over the weekend did you talk to Mr Tilby? A.No.

Q.Well, you see you have done some thinkgin over the weekend about it? A.Yes.

Q. Did you ask Mr. Tilby what his recollection was? A. I didn't see Mr. Tilby.

Q. Have you seen him since? A. No.

Q. Well, have you ever asked him what he thinks the day was? A. No, I haven't asked him at all.

Q. Have you tried to check it in any other way? A. Well, the only way I could check is from my memory and incidents that I recollect having happened, and the time book. That is the only way I could do it.

Q. The time book - did you look at the time book? A. No.

Q. Well, is there a time book which would have helped you? A. There should have been, I think.

Q. Did you ask to see that? A. No.

Q. So the time book has been no help to you, has it? A. No, not as regards the time, apparently.

Q. Do you remember working on ballasting a new diesel road in October? A. Yes. We were down there from time to time.

Q. Where was that? A. On the way to Second North.

Q. Were you working on that before the day you were sent to do something with the brattice screen in 8 Right? A. No, I was not working on that job. I was very close to it though. We were timbering an intersection in a new intake airway off that area.

Q. Do you remember now that you were doing that precise job on the day you were sent to 8 Right? A. Yes.

Q. Were you sent after crib? A. Yes, straight after crib.

Q. And who gave you the first message? A. Ken Mangles.

Q. When you say it was straight after crib, had you resumed work after crib? A. Yes.

Q. But it was immediately after? A. Yes.

Q. Would you deny that it was on the 5th October you assisted in erecting a brattice screen in 8 Right? A. No, I couldn't deny it.

Q. And did you know what black damp was before this day that you spoke of? A. No, I didn't know what it was. I had struck it fairly often and been told it was black damp. The first time I had a sensation was, as I say, in the northern returns approximately twelve months ago. I had heard it before and hissing out of the ribs, and a particular mine in New Zealand we had naked lights there, carbide lights, and very often we used to hold the light in the rib and lose the light, but I never ever got a sensation from it.

RE-EXAMINATION:

MR. SULLIVAN: Q. At any rate, you erected the brattice stopping, wherever it was, completely in the presence of Mr. Stewart? A. Yes.

Q. Did you rely on him for safety? A. Yes.

HIS HONOR: Q.Subject to Mr.Murray's wanting to cross-examine you, you may step down, but I cannot release you yet; do you understand? A. Thank you, Your Honor.

(Witness stood down)

MR.SULLIVAN: I will call Mr.Victor Parkinson.

MR.LEE: In accordance with a direction Your Honor gave on Friday,we arranged for Mr.Mangles to be at the Court. It is a matter entirely for Your Honor as to when he is called but he is here, and I presume he anticipated he would be not here for very long.

MR.SULLIVAN: I have no objection because Mr.Parkinson will be in the box a fair while, I should think.

THOMAS MICHAEL MANGLES
Re-sworn
Examined as under:

HIS HONOR: Q.Your full name is Thomas Michael Mangles; you have already given evidence in this inquiry? A.Yes.

Q.You drove No.40 shuttle car? A. 40 shuttle car.

Q.Do you recall you gave some evidence about the brake housing and the brakes on this shuttle car? A. Yes.

Q.Are you able to tell me whether there is an inspecton plate on top of that housing? A.No, I would not be able to tell you.

Q.Are you able to say or tell me this -

MR.REYNOLDS: Your Honor, may I say that we at the Bar table , in the acoustics in this room, with traffic constantly passing, find difficulty in hearing what Your Honor says.

HIS HONOR:Q.Would you have a look at this photograph (Exhibit C shown to witness). Do you recognise that? A.No, I couldn't.

Q.You cannot recognise it? A.No. I can recognise the disc.

Q.You can recognise the disc? A.Yes.

Q.Do you see that rectangular area on the top? A. That one there.

Q.You see there is an opening, this rectangular opening here?A. Yes.

Q.When you were driving that shuttle car could you see an open rectangular portion in there, in the area of the brakes, where you can look into ? A. Yes, I would say you could.

Q.Was that ever covered? A. They did have covers on them.

Q.Well, you say you have seen an open area; does that mean you have seen it when the covers have been removed? A. I never took that much notice, Your Honor. They are usually covered.

Q.They are usually? A.Yes.

Q.Are you able to tell me whether you have ever driven this shuttle car without covers, without a cover on any one of those brakes? A. Not on 40 shuttle car, no.

474. C.J.Lake, stood down.
T.M.Mangles, recalled, x.

Q.Do you say you are not able to tell me or that you have not driven one? A.Not open, no.

Q.Do you recall your shuttle car on this particular day, the day of the fire? A. Yes, I would say I recall it.

Q.Did you look at those brake housings on that particular day? Do you specially remember looking at them? A.Not on that particular day, no, Sir.

Q.Have you seen the car since? A. Yes, I have never examined it real closely, but I have seen it.

Q.When was the next time after the fire that you saw the car? A. It would be about the next day we went back to work.

Q.Where was it then? A.In the shunt, in the same position as when it was left.

Q.Did you examine it then when you went back? A.Not real closely, no.

Q.Do you remember whether you looked at the brake area at all where the brake housings were? A. Where this bit of wood was?

Q.Yes. A.Yes.

Q.Could you see the piece of wood? A.No.

Q.You could not see it? A. No, it had been taken out, I think - it had been pulled apart.

Q, It had been pulled apart when you saw it? A.Yes.

Q.Could you tell me this: Were there any special fitter who looked after your shuttle car? A. They had special dog-watch fitters, but Dale Jones was the usual fitter on the day shift.

Q.Dale Jones? A. Yes. If anything was needed to be done he was the man we were to ask.

Q.He did not attend to your car on that shift , did he? A. Not on that shift, no.

Q.But there were fitters on the dog-watch shift who might have attended to it? A.Yes.

Q.It would have been their job to attend to it if it was necessary? A.Yes,that is right.

Q.Do you know who they were? A. Rig Jeffries, I think, was one of the usual ones down there.

Q.What was his name again? A. Rig Jeffries. I wouldn't be sure who the particular fitters were on that dog-watch.

Q.I wondered if you could recollect them? A. Not on that particular shift, no, I couldn't say.

Q.You are not even certain about Mr.Jeffries? A.No - I had seen him in that panel on dog-watch doing work.

HIS HONOR: Has anybody at the Bar table any questions to ask of this witness?

MR.LEE: Yes, but not on that point. It does seem, as Mr.Mangles

is back here, he may be able to throw light on one or two other matters.

MR.SULLIVAN: May I say something: I have seen three fitters and they have told me certain things about these plates and if Your Honor wants more information we will arrange to have one called.

HIS HONOR: I would be obliged to you .

MR.SULLIVAN: I let them go on Friday; I am sorry I did now, but I will get them back. I am appearing for the A.E.U too.

MR.LEE: Q.Do you happen to know, from having worked in Section 8 Right, who it was who put up the brattic in A heading - in the shunt? A. No, I wouldn't -

Q.You did not see it being erected? A. No, I did not see it being erected.

HIS HONOR: Q.Are you able to tell me how long it had been up on the day of the fire? A. Well, I would say that it was put up when the miner first started to drive that long heading but there was no room for a shuttle car to drive in there.

Q.There was no room for a shuttle car to drive into the shunt? A.No, and then it was put further back when we used it for a shunt.

Q.So that means that the brattice had been erected and was later moved? A. Moved back.

Q.For the purpose of allowing a shuttle car to use that heading as a shunt? A.Yes.

MR.LEE: Q.Did you work with your shuttle car in the workings further to the right of the plan there? A. Yes, I had been up there I would say two years.

Q.You had been in that area two years? A. I would say, yes.

Q.Do you know what we call No.3 cut-through, the next one along? A.The next one along to where I was shunting?

Q.Well, the next one along to the one shown on the map which is the area of the fire - the next one along to the right? A.Yes.

Q.Did you work your shuttle car in there? A. Yes, I did work in there.

Q.Could you describe to His Honor the layout there as you recall it? A. Generally, one car shunted to the right and one car shunted to the left.

HIS HONOR: Q.Do you mean two shunting cars? A. Yes. Mostly we used two shunting cars, at times. If we had the two cars we used the two cars.

MR.LEE: Q.And can you remember if in relation to the one we are speaking about, No.3, whether you came straight down the cut-through and into A heading, to do your shunt, or did you go on to B heading? A. I used A heading and B heading.

Q.In A heading was there a brattice erected? A.The one where the loading ramp was - what one is that?

Q. That is C? A. Well, there was a brattice stopping in that one but not in the one further down.

Q. That might be B or A? A. B - what one was I shunting in?

Q. You say the loading ramp has always been in the bottom one, do you? A. We call it the top one - usually class it as the top.

Q. When you worked in this, No.3 cut-through, you say you were shunting in A and in B? A. Yes.

Q. In A Heading was there a brattice? A. No, not in A.

Q. Not in A? A. No.

Q. What do you say is A on that plan? (Indicating Exhibit "A") A. Well, where the loading ramp was -

Q. Would you step across and point out to what you think is A Heading? A. This is A Heading. (indicating on Exhibit "A").

Q. That is A and this is B? A. Yes. There was a brattice stopp-in that heading.

Q. This is A, B, C, and you are over here, you see. The headings continue out like that and you are working in a cut-through off here somewhere, do you follow me? A Yes.

Q. That is right, isn't it? Now what I am seeking to ask about is whether when you were working in the next cut-through, can you remember that you shunted into A Heading or into B heading or what you did? If you can't remember, say so? A. No, I couldn't say, not at that particular - (witness back to box).

Q. Can you remember whether in that No. 3 cut-through before, there was any bleed tube set up at all? A. Not in that particular heading, no.

Q. Can you remember in that No.3 cut-through whether there were two fans or one, or more if you like? A. I think there was one to start off with and then they put another one in.

HIS HONOR: Q. Do you remember whether you felt or smelt any gas in there? A. At the back of the shuttle car I would say there was a strong smell.

Q. MR. LEE: We are referring now to No.3 cut-through? A. Yes.

Q. Not the one where the fire took place? A. Yes, the one where the fire took place.

HIS HONOR: Q. No, this is in the period before you worked in this section where the fire took place; Mr.Lee has shown you the area known as the goaf? A. Yes.

Q. This is the job you were doing there before this new lot was opened up where the fire took place. Did you smell or feel any gas in that area, that is before you come to the area of the fire? A. Not in that area, no.

Q. You did not smell any in that area? A. Not in that area, no.

MR. LEE: Q. Do you remember the last line of pillars you extracted before this extension of the cut-through? A. Yes.

Q. That would have been the area to which you are now referring? A. Yes.

Q. And you say there was no gas anywhere that you were aware of? A.Not that I am aware of, no.

MR.CRANE: No questions.

MR.PARKINSON: No questions.

MR.McNALLY: Q. You mentioned that there was a brattice in A heading near No.2 cut-through which was shifted further back to allow the shuttle car to go in? A.Yes.

Q.You did not actually see that brattice, did you? A. Didn't see it being shifted, no.

Q.You did not see it there before it was shifted, did you? A. Yes, I would say it was there before.

Q.Did you see it? A.Yes.

Q.When did you see it? A.When they first started off driving the place.

Q.They first started driving the place on the 2nd November. Was it there then? (No answer).

MR.SULLIVAN: Well, assume it was the 2nd November.

MR.McNALLY: Q.I think you have already said about the 2nd November? A.When this place first started - I couldn't tell you the date but they drove this long place and the brattice was there then.

Q.Which place are you now referring to - 2 cut-through or A heading? A. This long heading.

HIS HONOR: Q.This long one going up parallel with the goaf?A.Yes.

MR.McNALLY: Q.The one that looks like a golf club? A.Yes.

Q.And the brattice was in A heading then? You say you actually saw it there? A.Yes, I would say I actually saw it there.

Q.And it was shifted? A.It was shifted,yes.

Q.Charlie Stewart is your deputy, I think? A.Yes.

Q.You work with him every day? A.Every day,yes.

Q.And you say he did not shift it? A. No, I wouldn't really know who shifted it, no.

Q.But Charlie Stewart did not shift it? A.No, I wouldn't say Charlie Stewart shifted it, no.

Q.It was done on the dog-watch shift, is that the position? A. I wouldn't know what shift i was done on.

Q.Well, it was not done on your shift? A.No.

Q.Were you in Charlie Stewart's shift when No.3 cut-through was being made - it is not on the map? A.No,3, I would be, yes. I have been there two years. I would say I would be in Charlie Stewart's.

Q.You have worked in 8 Right for some time? A. Two years.

Q. And was that with Charlie Stewart? A. No - not always with Charlie Stewart, no.

Q. Were you with Charlie Stewart when the extension of No.3 cut-through was being made? That is the next cut-through inby No.2? A. I don't know whether I would be with Charlie, whether Charlie would be the deputy or not then.

Q. Are you quite sure there was only one blower there then? A. One exhaust fan?

Q. Yes, one fan? A. Yes.

Q. You are quite sure? A. Yes.

Q. When was the second exhaust fan put in, do you know? A. No, I wouldn't know exactly when it was put in.

Q. Did your shift put it in? A. No, our shift would not put it in.

Q. I think there was a bleed tube there? A. Yes.

Q. That is in No.3 cut-through? A. Yes.

Q. The set up in No.3 is exactly the same as in No.2 cut-through? A. No, there only one bleed tube that I have ever - that I can recall ever being put in. That is the shunt I was shunting in then.

HIS HONOR: Q. There was none there on the day of the fire? A. No.

Q. Never before? A. No.

MR. McNALLY: Q. When you were working in the extension to No.3 - did you work? A. Yes, I would work I would think.

Q. Did you work actually on the extension to No.3? A. I could not recall. I couldn't recall whether I -

Q. You do not recall? A. No.

Q. There may have been a bleed tube there; you would not know? A. The only one I can recall is one they just -

Q. I am putting to you you do not recall working on the extension to No.3 cut-through; there may have been a bleed tube there? A. There could have been, yes.

MR. SULLIVAN: No questions.

MR. LEE: No further questions.

(Witness retired)

HANS PADUCH,
SWORN, examined as under:

MR. SULLIVAN: Q. Is your name Hans Paduch? A. Yes.

Q. You live at 40 Seafoam Avenue, Thirroul? A. Yes.

Q. You are one of the night fitters at the Bulli Colliery? A. Yes.

Q. I show you the Exhibits. Do you know the Joy Shuttle Car? A. Yes, I have worked on them occasionally.

Q. You work on them? A. Yes.

Q.What His Honor wants to know is whether there is an inspection plate covering the brakes? A. There is one made for it.

Q.In your experience are they always on when they come back? A.When they are on they are there - general running round and working I have seen them off.

Q.You have seen them off? A.Yes.

Q.And kept off? A.Yes.

HIS HONOR: Q.Have you ever worked on this No.40 shuttle car? A. Yes, I would have. I was working three months - two or three months before this fire - I was in 8 Right.

Q.Do you remember whether there were inspection plates kept on that at all? A. I could not say.

Q.When was the last time you saw that shuttle car? A.The last time?

Q.Yes. A. Just after the fire I saw it.

Q.Did you have a look at the brake area?A.Yes.

Q.Were there any inspection plates on it? A. No - I would not be sure if the brake had been taken off - I believe the piece of wood had been taken out then.

MR.SULLIVAN: Q.Do they run them sometimes with the inspection plate on and sometimes not on? Is that the position? A. Yes.

HIS HONOR: Q.Are these easily removed? A. Yes, two bolts on them.

Q.You just need a spanner? A.Two spanners,yes. Only one thing: If you want to do any work on them while they are operating it is very hot, you can hardly get in.

Q.They did get very hot? A.Yes.

Q.In the course of ordinary operation they become very hot?A.Yes.

Q.Could you give me your description as to how hot? A. If you put your hand in and touch the brake it would burn - it would singe.

Q.They become as hot as that? A. Yes.

Q.Do they smoke at all? A.If they pick up oil and they are hot they will smoke.

Q.Is it customary for them to pick up oil? A. Sometimes those holes in the bottom pick up coal which will choke those holes and oil coming from the gear box reducer leaks out. I have seen cars with a brake disc actually running in oil.

Q.You say they pick up coal. You mean that coal gets in? A. I presume it is being picked up. There are holes in the bottom and at some time or other those cars hit the floor and I presume they pick it up then.

Q.You have seen coal in this brake area? A. Yes.

HIS HONOR: This is an enlargement is it? (Indicates Exhibit).

MR.LEE: Yes.

HIS HONOR: Is there a smaller version of that? This might mislead the witness. (Handed to His Honor)

Q.Have a look at that. I am told in this inquiry that that represents an accumulation - you have seen the piece of wood?A. Yes.

Q.That that represents an accumulation of coal dust? A.Yes.

Q.Have you ever, looking at these brakes, seen accumulations like that? A. Not the same. I believe this has been burnt but it is coal dust and oily bits of coal, yes.

Q.You have seen that? A.Yes.

Q.Where do you say the car picks up the coal dust from? From what area? A. I would say it was very uneven road and sometime or other the back of the car hits the ground and picks it up and through time I would say it is being thrown around by the disc brake in all different directions.

Q.How often to your knowledge do you clean out the area? A. Usually when we get a report that brakes are not working. When they get a full load of coal the driver sometimes has to stop the car and even if you put the foot hard down it does not stop.

Q.You get a report? A. We get a report that the brakes are crook and we wash them out.

Q.You do not look at these brakes unless you get a report something is wrong? A.Yes, usually, yes.

Q.There is no regular routine of going round, opening up the brakes and inspecting them, whether they are reported or not? A.There are supposed to be preventive maintenances being done on these cars but whether it is being done or not I could not say.

Q. Preventive maintenance?A.Yes.

Q.By whom? By the fitters themselves? A. There is one fitter on night shift to look after the cars in the pit.

Q.You mean he is supposed to inspect these cars every shift, on night shift? A. No, I don't know. I would not like to say, Your Honor. I know he does repairs but I don't know if he does inspections and that, I would not like to say.

Q.You have never been asked to provide a regular inspection service of the brake area? A. No.

MR.SULLIVAN: We have subpoenaed the maintenance books from the Colliery in respect of No. [illegible] I think it is in the room. It might be convenient for me, while we have a fitter here, to have it produced.

HIS HONOR: It has already been produced?

MR.SULLIVAN: Yes. Perhaps we might be able to get it out now and he might be able to tell us something.

HIS HONOR: Yes.

MR. SULLIVAN. Q. I think your leading hand fitter there is Bob Taylor? A. Yes.

MR. SULLIVAN: I think we can get him.

HIS HONOR.Q. Have you ever seen a piece of wood, small or large, in that area before?A. Occasionally - I would not say often- I have seen two or three times - I have picked out bits of wedges and lids, like the small pieces a miner uses for tightening up the props along the headings and cut-throughs.

Q.Wedges of wood? A. Yes, wedges and lids.

Q. What is a lid? A. The wedge is a tapered piece of wood whereas the lid is a piece that is even right through.

Q.You have seen those, actually? A. Yes, Ihave picked them out.

Q. Any size? A. Flat - I suppose some about that long and about that wide (indicates).

Q.About a foot long by something like six inches wide?A.About five inches.

Q.About one foot?A. About ten inches.

Q.You have found pieces as big as that?A. Yes.

Q.Wedged?A.No, just lying in the coal.

Q.In the coal itself in the brake area?A.Yes, in the brake area.

MR. SULLIVAN Q (Approaches witness).This seems to be the card for this shuttle car. Have you seen these cards? A. No.

MR. REYNOLDS: That does not surprise me.

WITNESS: These deal with the break down cars. We don't get those - there is delay in minutes - only if it gets longer.

Q.MR. SULLIVAN: You would not even know whose handwriting this is?A.No, no idea.

HIS HONOR:This is the card for No.40 shuttle car?

MR.SULLIVAN: Yes.

Q.It says "8th November: Traction forward contact burnt"? A. That is electrical.

Q.I think these look as if they are all electrical? The orange card seems to be electrical?A. This particular thing was electrical.

Q.All electrical.It refers to cables?A. I notice one with a flat tyre,that would not be electrical,I don't think.

Q.HIS HONOR: Was that recorded on the orange card? A. I believe it is a breakdown card, we call it. All the breakdowns that occur are booked down as delays. I think that is what it looks like to me.

MR. REYNOLDS: This is not the preventive maintenance card, this is the actual repairs and adjustments and that type of thing. In other words it is a summary taken from these diaries and books. They are the prime documents and these are the summary and that is mechanical,hydraulic and electrical. It is d-issected out.

HIS HONOR: I would like the opportunity to have a look at the relevant card or book. Perhaps they could be tendered.

MR.SULLIVAN: I think I will tender them.

MR.REYNOLDS: It may be there is another card which deals with routine preventive maintenance.

HIS HONOR: That may be so but keep this one in case.

MR.SULLIVAN: This one cuts out on 15th September. Is there one after this?

MR.REYNOLDS: If there is, it is here.

MR.SULLIVAN: I will tender these after.

MR.CRANE: No questions.

MR.PARKINSON: No questions.

MR.LEE: Q.I would like to clear up something. You have referred to hydraulic oil dripping in effect into the area of these disc brakes, is it? A. No, oil from the reducer.

Q.What is the reducer? A. The reducer between the electric motor and the drive shaft.

Q.That is a common thing, is it, for that oil to drip into that area of the disc brake? A. To drop down the bottom.

Q.Yes. A. Yes.

Q.There is no way of preventing that? A. I suppose you could over come it somehow, I would not like to say how.

Q.We have been told here the temperature the disc brake can generator is sufficient to ignite oil? A. Yes.

Q.The shuttle car, you say, is one which, from the very way it is made, means when it is in use some oil will be discharged or introduced into the area of the disc brakes? A. I would not say the way it is made but there is an inch water plug with a hole drilled through the centre of it with a little three sixteenths screw put in loose and with any pressure created through heating up it just lifts and if any oil comes up to it it will just automatically throw out.

Q.You say you cannot do anything about it to avoid this oil being introduced into this hot area of the disc brake? A. I suppose you could.

Q.Just off the cuff, do you imagine it would be a very large technical problem or just some guard or device or whatever it may be? A. I would not like to say on that, I think it would be more or less trial and error. You might devise something you think would work and you might still throw it out.

MR.SULLIVAN: Q.I would like to confirm something about No.40 shuttle car; The brakes are not ventilated, are they? A.I believe the disc brakes - just the small disc brake.

Q.There is no hole to allow the air to cool? A. No, not as far as I know.

(Witness retired)

MR. SULLIVAN: Does Your Honor want another fitter brought along?

HIS HONOR: I will have a look at the book first.

VICTOR PARKINSON:
Sworn, examined as under:

MR.SULLIVAN:Q. Your full name is Victor Parkinson? A.Yes.

Q.Where do you live?A. 16 James Road, Corrimal.

Q.You are the district check inspector for the Southern District are you not? A. Yes.

Q.Are you the holder of a Third Class Deputy's Ticket?A.Yes.

Q.I think your appointment as District Check Inspector is fairly recent, is it not? A. Yes.

Q.When were you actually appointed?A. November of last year, 1964.

Q.Had you had prior experience in the coal mining industry? A. 12 years.

Q.What jobs had you done during that 12 years?A.From wheeling - from the surface first up to wheeling and then locos, shiftwork, and machine work.

Q.Machine work at the face? A. Yes.

Q. You remember 9th November 1965? A. Very well.

Q.You were actually at the Bulli Colliery on that day, were you not?A. Yes.

Q. You had gone to the Colliery in response to a complaint made by some members of the Miners' Federation about gas in the Western Returns? A. Gas and dust.

Q.In the western returns. You went underground about what time? A. 7 o'clock - 7 a.m.

Q. This complaint had been referred to you the previous week, had it not? A. Yes, on the Friday.

Q. Did anyone accompany you underground? A. The Under-Manager.

Q. Who was that? A. Mr. Jack Puddle.

Q. He accompanied you under ground? A. And the local check inspector, Mr. Taylor.

Q.That is Mr. E. Taylor. Did you and these two gentlemen proceed to the western returns? A. That is right.

Q. When you got to the western returns you tested the air there, did you not? A. Yes, at the face.

Q.You found the intake of air satisfactory? A.That is right.

Q.How many cubic feet of air? -

MR. REYNOLDS: Does it matter?

MR.SULLIVAN: It may be of some relevance.

WITNESS: In excess of 15,000 feet.

Q. MRQ SULLIVAN: You then inspected some other headings, C and D Headings? A. Yes.

Q. Which were being driven in advance?A. They had been driven in advance of where the machine was working at the time.

Q. These places were ventilated with the fan and vent tubes? A.That is right.

Q.Did you inspect those places for gas? A. Yes.

Q.What did you find? A. I found in both C and D there was a layering of inflammable gas along the roof.

HIS HONOR: This is still western returns?

MR. SULLIVAN: Yes.

WITNESS: YEs.

MR.SULLIVAN: Q. Did you then say something to the Under-Manager? A.Yes, we spoke about it and I said "This should be cleared out as soon as possible", and if he would make arrangements for it and he said "What do you say about it?" I said "It can be done with hurdles". He said "Oh well". So, we were talking about that at the time we were informed of the fire.

Q. What did you test for the gas with? A. Oil lamp.

Q. You were able to find it ? A. Yes.

Q. Were you carrying a methanometer that day? A. No.

Q. It was at that time one of the men rang and told you and Mr. Puddle that there was a fire in 8 Right Section?A. That is right.

Q. What time was that? A. 9.35.

Q. What did you and Mr. Puddle do? A. He ran out in front of us to the phone at the crib room about 200 yards away, I suppose and we followed him out and there was a loco at the crib room. I don't know whether he rang anyone or not but he had the phone in his hand when we got there. He came out of the crib room.

Q. You know of your own knowledge that Mr. Puddle phoned?A. He was on the phone but whether he rang or not I don't know.

Q. You know Mr.Puddle was on the phone ---

HIS HONOR: Q. Whereabouts is the western returns in relation to 8 Right? A. It is quite a distance away but it is in the same main split.

Q. You mean it is controlled by the same airway? A. Yes.

Q. Quite a distance away, but in what direction? A. It would be on the main plan.

MR.LEE: The small ventilation plan, Your Honor.

WITNESS: (Refers to plan) This is 8 Right. This is western returns.

Q. HIS HONOR: Where is the connecting airway?A.This is the roadway across here.The air comes in here.

Q.Show me where the air comes in? Does it come in - is that western returns? A. It splits here again for second north and this is the airway here.

Q.That is before coming down to 8 Right? A. 8 Right is here. That is outby.

Q.That is outby? A.Yes, this is outby (indicates). It splits again.

MR.REYNOLDS: Q.Where is western returns? A. Here (indicates)

HIS HONOR: He points to an area marked M.P.37.

MR.LEE: Q.Can you get from there over there? A.Yes.

Q.Underground?A.Yes.

MR.SULLIVAN: They went across by loco.

WITNESS: You pass by 8 Right section to get across.

(Luncheon adjournment)

(On resumption).

MR.REYNOLDS: Might I mention the preventive maintenance shedule. I am instructed the system in the mine involves the fitters being issued with documents which are known as preventive maintenance schedules and they are for each machine and they provide for a weekly inspection, fortnightly inspection, monthly inspection and a three monthly inspection. The system is any work which is required to be done as disclosed on these inspections is entered in these books and goes on to the Orange card. These documents are not kept. Your Honor will appreciate that with this amount of paper for the number of machines it would be hopless and they are not in fact kept but I tender to Your Honor a specimen of the document which is issued to the fitters and [illegible] they are expected to carry out at those periodical times.

HIS HONOR: That means the information from the documents is transferred or posted into a book.

MR.REYNOLDS: Any work that is required , but there is no permenent record put into the book that they have looked at the hydraulic system. One has to make the assumption they do carry that out and make the inspection of these things on the particular date when something was to be done. Work done is recorded but the fact of the actual inspection is not permanently recorded.

HIS HONOR: This takes place at regular periods, you say?

MR.REYNOLDS: Weekly,fortnightly, monthly and three monthly. I want to proceed now to the question of deputy's books. The system is that each deputy has two books for the recording of the times of the men who are under his care on the day, that is, to book them in and book them off and record the number of hours they work on the day. He has two books because he uses one in week A and then puts it into the office and uses the other one in week B, so they are used week about. Your Honor will see, if you go through one, they appear to be fortnightly periods, and that is the explanation. I have here the books of Mr.Stewart and Mr.Morgan who were the deputies mainly concerned with the witness Lake over the relevant period of some months before the fire. A search has been made in the office through all the books and these are the main ones to show

who recorded the times of the witness Lake from 6th September to the day of the fire. Perhaps I might make these available to Your Honor.

MR. LEE: Can Mr. Reynolds tell us if they do show anything about Mr. Lake?

MR. REYNOLDS: They just show who booked him on. They do not establish he was or was not in the 8 Right Section on any particular day. For the reason Your Honor will see the witness is obviously not accurate when he says if he was loaned for two hours to another deputy he would expect it to be recorded. This records he worked for 8 hours in the mine, it is recorded by one deputy alone, not if he worked for this one for an hour or that one for two hours. Would Your Honor look at the typescript so that perhaps it can be understood? The 5th October is ringed but that was only for my information and if it is required there is oral evidence available that tends to indicate that was the day about which the witness Lake is speaking.

HIS HONOR: This date in the left-hand margin, is that the end of the week?

MR.REYNOLDS: Yes.

HIS HONOR: What are these names?

MR. REYNOLDS: Chemor (?) and Goldie. They are the other deputies. We have looked at their books. They are available but they do not seen to bear on this problem. This was a problem concerning Morgan and Stewart. If anyone wants to see them they can be obtained.

HIS HONOR: It says on the week ending 24th October on the four days, the fifth day was the Wednesday, a strike, Mr.Lake did work under Mr. Morgan. What about 5th November?

MR.REYNOLDS: Mr. Morgan also.

HIS HONOR: The week ending 12th November, the Monday and the Tuesday, that is the day before and the day of the fire, he worked under Mr. Morgan again. There is more than one sheet. They are not all copies of each other?

MR.REYNOLDS: No, one is weekly. Weekly, fortnightly, monthly and three monthly.

HIS HONOR: It says "Hydraulic hose and hydraulic system", apparently referring to the brake system. Is there any other type of hydraulic mechanism on these cars?

MR.REYNOLDS: Quite a lot, Your Honor.

HIS HONOR: I am looking to see if there is anything here - and I mention it at this stage because you may be able to get some instructions on it - which shows that part of the work is to examine the brake area itself.

MR.REYNOLDS: I could not pinpoint it on a quick look through.

HIS HONOR: I could not see it. I suppose anybody who tried to examine a brake unti for leaks must look into this brake area to do so?

MR.REYNOLDS: I would think so, Your Honor. I would suspect, and I will have this checked, that that is the manufacturer's recommendation as to the amount of maintenance required and when.

HIS HONOR: These may be examined by counsel. You tender them, do you? .

MR.REYNOLDS: Yes.

MR.SULLIVAN: We do not regard the deputy's books as concluding the question by any means.

HIS HONOR: Mr. Reynolds does not regard them as concluding the question.

MR.SULLIVAN: He said "We will call oral evidence if necessary".

HIS HONOR: Two people will determine if it is necessary, one is Mr. Reynolds and the other is yourself.

MR.SULLIVAN:Mr.Reynolds, I think, should be excluded.

HIS HONOR:Mr. Reynolds may consider it part of his own case, surely,to call certain evidence and he may decide it is necessary to do so for that purpose.

MR.SULLIVAN: Those books are not evidence unless they are proved and they are not proved by my learned friend producing them.

HIS HONOR: You mean formal proof?

MR.SULLIVAN: Yes, this may be an occasion when formal proof is required.

HIS HONOR:Do you object to the tender at this stage?

MR.SULLIVAN:Yes, I object to the tender at this stage, as being evidence.

HIS HONOR: They are evidence of something,surely, even if it is only evidence of a system.You may then go on to say I am not entitled to draw the inference that Mr.Lake worked or did not work on a particular day in a particular area, but that is a matter for comment.

MR. SULLIVAN: It is a matter of evidence. Your Honor has been handed a document with a particular date ringed, 5th October. Your Honor drew attention to that and then my friend suggested the date the witness Lake was in the area was that date.

HIS HONOR: He said that had been put around it for his own personal use and he asked me to draw no inference. He had suggested to the witness this was the date.

MR. SULLIVAN: That is so. The position is there are two deputy's books there which may or may not be an exhaustive record of the whereabouts of Mr.Lake.

HIS HONOR: That does not go to admissibility.

MR.SULLIVAN: What I am putting is that they are not admissible at all unless by consent.

MR.REYNOLDS: Of all parties?

MR.SULLIVAN: Yes.

HIS HONOR: You mean because there is no formal proof?

MR. SULLIVAN: It is not a question of formal proof,it is a question of verification of the record by the person who wrote it.

HIS HONOR: You mean the record itself may not be the record of that person?

MR.SULLIVAN: I am just putting it to Your Honor they are not evidence of their contents unless verified by the person who made them.

HIS HONOR: Do you object to counsel seeing them?

MR.SULLIVAN: No. I hope to see them myself, Your Honor.

HIS HONOR: At this stage, if you take the objection that they are not properly proved by the person who has made the record they will not be available to anybody, I will rely solely on the evidence of the witness and the cross examination. I will leave it at that, at this moment. Whatever direction I give with regard to them will come later when I have had time to think about it.

Does that objection go to all the documents?
MR.SULLIVAN: No, I have no objection to the specimen sheets.
HIS HONOR: What about the summary?

MR.SULLIVAN: I would submit without examination I could not commit myself on the summary.

HIS HONOR: You mean an examination to see whether you can test them or otherwise?

MR.SULLIVAN: That is right.

HIS HONOR: In that case they will not be available either for inspection by counsel.

(Samples of sheets of preventive maintenance schedules admitted and marked Exhibit BB).

HIS HONOR: The other documents will not be admitted in evidence and will be returned to Mr.Reynolds.

MR.SULLIVAN: Q. You told us before the adjournment you saw the under-manager use the phone and that the time of the fire was about 9.35? A.That is the time we were notified, yes.

Q.Can you say you saw the under-manager use the phone about 9.35' or a little later? A. It would have been a fraction later, couple of minutes.

Q.You, he and Mr.Taylor got on a locomotive and went to 8 Right? A.Yes, we went first of all to 38 phone, that is where we stopped.

Q.Perhaps you could show us all these positions you are going to mention on the bigger plan. (Approaches large plan) The 38 phone? A. Is outby, that plan doesn't show that there.

Q.It is on this road here, is it? A. It is out of that intersection. The entrance to the section doesn't show on that plan.

Q.It is further outby than this plan? A.Yes.

Q. You were told at three 8 phone that four men were trapped behind the fire, is that right? A. That is right.

Q. And that three other men had just got out, one of them being burned, is that right? A. Yes.

Q. You were also told that brattice was required? A. Yes.

Q. And that was sent for, was it? A. That is right.

Q. Did you then go into 8 Right Section on foot? A. Yes, the Under-Manager and myself walked in.

Q. You went into the 8 Right Section on foot and you say you arrived at the sweeps at the track road. Where was that? A. That is the big sweeps there at point O, I think they call it.

Q. Here - that is the intersection of zero cut-through and the haulage road, C Heading, the corner of C? A. That is right.

Q. You call that the sweeps, do you? A. Yes.

Q. What could you see at that stage? A. There were men there working, attempting to erect a brattice stopping, and there was a lot of smoke in the area.

Q. Where was the smoke coming from? A. It was billowing back along C Heading from the face area.

Q. From the direction of the face, is that right? A. Yes.

Q. The men there were trying to erect a brattice screen when you arrived, were they not? A. Yes.

Q. And was it possible to stop the smoke coming back with the brattice screen? A. It didn't stop it coming right out. It only came as far as the sweeps and then the air was holding against it and forcing it down towards the return.

Q. You say that brattice was being erected here on the corner of C ?A.Yes.

Q. You were told at that time, were you not,that all of the men were still in the mine? A. Yes - it was some time after that.

Q. Were you told something else about coal being produced? A.Yes, I was told by some of the men in the area that coal was being produced - (Objected to by Mr. Reynolds; allowed).

HIS HONOR: Q.What was the answer? A. I was told by some of the men working in the area - they were the shift men in and around the section, they were working in the other sections, they were in the area erecting the stopping or attempting to erect the stopping, and they said they found out from information received from the three 8 phone when they went out to get the brattice for this, that the mine was still working-producing coal.

Q. In 8 Right or elsewhere? A. Elsewhere.

MR. SULLIVAN:Q. Did themanager, Mr. Stone, come along about that time? A. Yes, he came in some time later.

Q. And did you say something to him about the mine still working? A. Yes, I approached him about that and he said that arrangements were starting to get under way to have the men transported out in a normal fashion.

Q.About what time was that? A.It was approximately the time that the rescue brigade arrived.

Q.What time did the rescue brigade arrive at 8 Right? A. Approximately quarter to eleven.

Q.At that stage were you able to get down to the loading point at No.2 cut-through? A.No, you could not get down there at all at that time.

Q.What was the trouble - smoke? A. There was still the smoke - the position was the same.

Q.What did you do after that? A. The rescue team took over then. They attempted to go through the smoke and they couldn't get through because of the density and the heat and they withdrew and then brattice was erected in zero cut-through, I think.

Q.Brattice was used? A. Used for sails and so on.

Q.Was there a fall shortly after that? A.Yes. I am not quite sure what time after, but there was a fall in No.2 cut-through.

Q.And was work started on timbering that fall? A. Well, when they got in there, yes.

Q.Were they using water hoses? A.Yes.

Q.Then they attempted rescue work up till 5 p.m., is that right? A.Yes, about that time.

Q.Then was it decided to attempt to go round the goaf area? A.Yes, I believe that they had access to that back way. I think it was stated in earlier evidence that the inspectors had gone round back and saw there was an opening there.

Q.The general superintendent, Mr.Martin, and yourself and the South Bulli rescue team went in B heading, did you not? A.Yes, that is right.

Q.You went in B heading and did you traverse the area round this pillar? A.Round the goaf edge, yes.

Q.This was about 5 p.m.? A.Approximately, yes.

Q.And did you go to the opening into A heading? A.Yes.

Q.At that stage what was that opening like? Was it easy to get through? A. It was not easy but you could get through. I mean, with a rescue suit on, I could get through.

Q.Was that opening there large enough to let people through? A. Yes, you could get through there.

Q.And did you and Mr.Martin and the rescue team then go into A.heading? A.That is right.

Q.What were conditions like in there? A. Well, it was quite hot and you could see the fire plainly burning right across the intersection and from the back end of the car right through the interesection.

HIS HONOR: Was the fire burning fiercely at that stage? A. Reasonably fiercely.

Q.What time would you say that was? A. It was sometime after 5 but I just could not be sure of the actual time.

Q. Are you able to tell me what type of fire it was? A. It was just like a big coal fire when I saw the fire - just like a big coal fire burning pretty fiercely.

Q. You say the flame was right across the intersection?A.Yes, it was burning along the rib sides - the coal in the shuttle car was alight and you could see the flames in the intersection itself burning.

Q.You have been in Court while the other evidence was given describing the fire when it first broke out? A. Yes.

Q.We have been tolf various descriptions about it being yellow in colour and there were blue fingers of flame?A.Well, when I saw it it was only a coal fire.

Q.You would not have called it something in the nature of a gas fire? A. I wouldn't say that it was.

Q.You mean you say it was not; is that it? A.Yes.

MR.SULLIVAN:Q. Was the coal in the back of the shuttle car burning when you were there?A.Yes, it was alight.

Q.When you got in did you have hoses with you?A.No, not the first time.

Q.You could not take hoses through?A. No.

Q.Did you see any bodies? A. Yes, we saw one body at first when we approached the car, the back end of the car.

Q.Where was the first body lying? A. Right at the back corner of the car on the driver's side.

Q.About how far from the car?A. Two or three feet.

HIS HONOR:Q. At the back of the car? A. Yes, the back end, towards the goaf side of the car.

MR. SULLIVAN:Q. Did you move up then?A. Well, we moved up to the body, yes.

Q. Did you see other bodies at that stage? A. When we moved up we saw the other two bodies in the rib side then.

Q.Will you tell us where those bodies were?A.One was just back a bit but opposite, on the rib side, on our right hand rib side.

Q.Could you come over to Exhibit "A" and indicate the position, using this large plan? A. (Indicating) The first body was right on the back corner of the car. The second one was opposite in behind the prop line, almost opposite him, and back behind him a couple of feet was the other one. He was about in line where the shuttle car was.

Q.Would you go back to the box now. Did you have stretchers with you?A.Yes, we took them with us the first time.

Q.Or did you have to send for them? A. I think we took one with us the first time.

Q.You think you took one with you? Were you able to get the bodies out on that trip?A. We took one, the first one.

Q.Were you able to get that close to the shuttle car? A.Yes, we were right up near it.

Q.And was it still burning? A. Oh yes.

Q.Was the rib still burning? A. Yes.

Q.Did you have any sort of fire proof suit on? A. No. We did have to use a sail in front of us. I think they have been described before.

Q.Did you have respiratory apparatus? A, Yes, we had breathing apparatus.

Q.Goggles? A.No.

Q.You got the first body out first. Did you get the other two bodies out? A. Yes, we took the other body back and we had to bring hoses back because it was still burning pretty fiercely in the rib side where the bodies were and we had to put that out first.

Q.Did you look for the fourth man while you were in there? A.Yes, we looked as far as we could see. We couldn't go any further than the back end of the car because of the fire and could not see anyway.

Q.After you assisted in getting the bodies out, you left the mine, did you not? A.Yes, it was not long after.

Q.You returned to the mine again then on Wednesday 10th November, did you not? A.That is right.

Q.And what time did you get there? A.I think we went in at 7 o'clock again, I am not sure of the time we went in.

Q.In the early morning, was it? A. In the early morning,anyway.

Q.This time you were accompanied by Mines Department Inspectors, were you? A.Yes.

Q.Do you remember who they were? A.Mr.Longworth and Mr. Griffiths.

Q.When you arrived with those two gentlemen, you went to the 8 Right Section, did you not? A.Yes.

Q.And you found that most of the fire was out? A.Yes.

Q.With the exception of burning coal under the fallen stone ,is that right?A.That is right.

Q.Were hoses still being used? A. Yes, on the fallen area and rib sides and so on.

Q.And the fire was kept under control while roof supports were put up,was it not? A.Yes, they were supporting it most of the time.

Q.Where had the roof fallen? A. In the area between A and B headings in No.2 cut-through mainly.

Q.No.2 cut-through between A and B headings (indicating)?A.Yes.

Q.You then decided to look for the other man, the remaining man did you not? A.Yes.

Q.The rescue team tried to go in first, into the face area, did it not? A. There had been a previous attempt, we were told, but they could not see anyone there so we went in, accompanied with a rescue team, on the morning we arrived there.

Q. The smoke was bad at that stage, was it not? A. Well, it was not actually smoke because the air was clear, but we were told that it was CO2, and it was pretty hot.

HIS HONOR: Q. CO2? A. This is what we were told but I don't know -

Q. Who told you that? A. One of the officials, I think. I am not quite sure who it was, but they said it may have been CO2 heated up, but I am not just sure what it was because we never checked. We never had the instruments there.

MR. SULLIVAN: Q. At that stage there were only three pairs of goggles available? A. That is right.

Q. You took one pair of them? A. Yes.

Q. Mr. Griffiths, the inspector, took another? A. That is right.

Q. And the captain of the rescue team took the third pair? A. That is right.

Q. Then did the three of you go in down the heading? A. Yes, down the extension.

Q. Whilst the rest of the team stood by, is that right? A. They stood by just inby the section.

Q. You and Mr. Griffiths and the team captain went down? A. Yes.

Q. Did you check the face area first? A. Yes. We walked, and looked in both rib sides on the way down right to the back end of the corner and then we turned and walked back out.

Q. Did you come to the timber bay? A. Yes.

Q. That was about 30 yards from the face? A. Approximately, yes.

Q. Did you discover the body of Robert Stewart there? A. Yes.

Q. Will you tell His Honor exactly where he was? A. It might be better if I showed you (witness approaches Exhibit "A") he had his head in the end of the vent tube at the back end of the timber bay. There was a T-piece at the back end of the vent line and that is where he was.

Q. So his head was actually in the ventilation? A. Yes, inside there.

Q. Did you take a stretcher in with you? A. Not the first time. We left the stretcher outby and when we found the body we went back out and got it.

Q. I think the three of you removed the body on the stretcher then? A. Yes.

Q. And took it outby. There was testing for gas going on by Mines Department officials all the time? A. Yes.

MR. SULLIVAN: My friends have Mr. Parkinson's report. The rest of it just deals with the set up in the heading which we have had in evidence from other witnesses.

Q. Then you discuss what might have caused the ignition and you mention the finding of the wood found jammed in the brake? A. Yes.

HIS HONOR.Q. Who found the wood jammed in the brake? Was that done while you were there?A. Yes. The Electrical Engineer, I think he is - Bob Young.

Q. How did he come to find it?A. Well, the Electrical Inspector, Mr. James, had asked to have the callipers or the block housing from the brakes removed, and we were in the process of pulling off the second one on the driver's side and Mr. Young was sitting opposite the opening or the inspection plate cover hole where the inspection plate would have been, and apparently his light shone on this piece of wood.

Q. Were the covers removed or were they not on, before you started?A. There were no covers on when we were there.

Q. Did you see the covers lying around anywhere?A. No.

MR. SULLIVAN. Q. It was actually in the shunt at that stage; it had not been brought to the surface, it was in the shunt?A. Yes.

Q. You describe the set-up - you describe it much as is shown on that plan, do you not?A. Yes.

Q. And you knew about the bleed tube; you were told about the bleed tube, were you not?A. Yes.

Q. And you were told it consisted of two sizes: 15" and 12" diameter, is that right?A. That is right, I was told that.

Q. That it was suspended over the roadway into the shunt; you examined the reports by the deputies?A. Yes.

Q. And you were also present at the interviewing of witnesses who have given evidence in this court?A. Yes.

Q. Now, is it your opinion that there was inflammable gas in that shunt, Mr. Parkinson?(Objected to by Mr. Reynolds; pressed; allowed subject to weight)

Q. Was it your opinion that there was inflammable gas in the shunt?A. Yes.

Q.And where do you think it was coming from? A. In the goaf area.

Q.Were you with Mr.Longworth, the inspector , on Monday 15th November when Mr.Longworth conducted some tests? A.Yes

Q.And you heard Mr.Longworth give evidence?A.Yes.

Q.He gave the readings which you saw him get, is that correct?A. Yes.

Q.On Friday 3rd December 1965 did you in company with Sullivan and Bowie, Barristers, a Mr.Ward, Solicitor, and Mr.Taylor, a check inspector, and the mine manager and a Mr.Wright from the mine go underground at the Bulli mine?A.Yes.

Q.And did you traverse the whole area of 8 Right? A.Yes.

Q.What equipment did you have with you? A. Methanometer, volumeter, oil lamp.

Q. Would you show us the method of set-up what was in operation on that day?A. (Approaching Exhibit "A") At the time there was a stopping in No. 2 cut-through between A and B headings.

Q. That is a brattice stopping?A. Yes, between A, and B. heading in no. 2 cut-through.

Q. Was there a stopping in C Heading? A. A stopping in C Heading which was more towards the end of the pillar.

Q.Was that a brattice stopping? A.Yes.

Q.What about B Heading?A. That was open.

Q.Was there any brattice in the direction ofA Headinground the goaf? A. There was a screeningin front of this goaf there and then also a hurdle screen.

Q. What is a hurdle screen?A. It is to force the air into a particular area, to hurdle over air going under.

Q. What was this hurdle screen set up for? A. Well,it was set up to allow the ventilation to pass across to the opposite corner of the goaf, the corner edge there, and also to pass low down.

Q.Low down, under, into A Heading, is that right?a.Yes.

Q. So we had a set up whereC Heading was blocked, No.2 cut-through was blockedbetween B and A Heading, and of course the ventilation was coming up C Headingand B Heading? A. Yes.

Q.It was going, passing through B Heading and around the goaf into the shunt, is that right - into the return airway? A.Yes.

HIS HONOR. Q. Comingdown the intakes? A.Yes, and around this way. There would be some leakage, notmuch, around the edge of the goaf, along, eitheracross to the return or down to the face. The fans were working. There was also brattice into the face area.

MR SULLIVAN Q. But at any rate the main ventilation was directed around the goaf at that stage?A.Yes, that is right.

MR. LEE. Is that in effect the same as Sketch 3? It might help us to follow it, if that is the fact. It looks very much like it.

MR. SULLIVAN: Yes, it is Sketch 3. It was the same condition then as when Mr.Donegan made this sketch or had it made.

Q.There is a stopping here, a bit of brattice there? A.I think the only difference was then that there was a fan blowing the air into the face and returning it to the main body, but at the time we were there I think the fans were set back up.

Q.The fan was working? A. Yes.

Q.It was exhausting at the time? A.Yes.

Q.That is the only difference between what you saw? A.Yes.

Q.Now, did you take some tests? First of all did you use your volumeter to find the velocity of air at the goaf corner? A.Yes. It was240 feet a minute passing there.

Q.240 feet a minute = that was the velocity on your volumeter? A Yes.

Q.Did you use your methanometer to test for methane? A. Yes, outby the stopping, outby the hurdle stopping.

Q.What reading did you get on your methanometer? A. .6.

Q.Did you take any other readings in that area? A. I took a reading just here in the opening on to the goaf.

Q.That is where the air was coming round? A.Yes.

Q. Did you get any registration there? A.No.

Q. No registration? A. No.

Q. So would you agree that the current of air going through at that stage was sufficient to ventilate the goaf gases? A.Yes.

Q. Supposing that that system of bratticing had been used before the fire whilst that heading was being worked, thatis the brattice stopping across the cut-through between A and B headings and most os the ventilation directed up B Heading to take up the goaf gases and take them down through the shunt? A. Well, the position would have been the same.

Q. The position would have been the same; would it have been possible to work the section? A. Yes, providing the percentage was kept under control.

Q.And what would have been done about this brattice stopping between A and B Heading through which the shuttle car would have to go? A. Well, they could run through that.

HIS HONOR.Q. Run through the brattice stopping? A. Well, there are screens that they do pass through.

Q. I beg your pardon? A. They do make screens that you can pass the shuttle car through. It has been done before.

MR. SULLIVAN.Q. You have seen shuttle cars operating through screens? A. Yes, I have seen them go through screens.

Q. As a result of your consideration of this case on the information you have, do you wish to put before His Honor, the Judge presiding at this Inquiry, certain recommendations? A. Yes. I think they are mentioned in my report. The first one was the ventilation set up mainly, for ventilation with fans and vent tubings and a system for ventilating goaf areas and waste workings and so on.

HIS HONOR. What is the suggestion?

MR. SULLIVAN. Q. Did you regard the system of ventilating the goaf fases as satisfactory?A. No, I did not.

Q. Have you anything to comment on in relation to the training of personnel in detecting gas?A. Yes. There should be a system of training men for testing and so on because I have found in quite a number of places that men are just not taught in the correct manner to test for gas.

Q.Are you referring now to an oil safety lamp? A. Oil lamps and so on, yes.

Q.Have you yourself =

HIS HONOR: Q.Before going any further apart from under- managers and people of that kind the deputies are the main men who test for gas? A.Yes.

Q.And also certain of the miners themselves test for gas? A.Yes.

Q.Let us stick to deputies for the time being. Are they not taught to test for gas? A. Well, I had one opportunity when I was going to school to be shown how to test for gas and that was the only opportunity and that was in anold box. They put lighter fluid in the box which showed a cap on the lamp and that

was the only opportunity I had other than what I did myself to make myself familiar with it.

Q.And do you think that is common to many of the deputies, that they only have that? A. Well, I had heard this complaint from quite a few of the chaps going for tickets, that they don't get enough opportunity to see gas, unless they go looking for it themselves in their spare time.

Q.From where do deputies get their training? A. Practically is what they get themselves at the mine in the pit when they go on duty.

Q.In the pit? A.Yes.

Q.But they attend some system of lectures, I take it, do they? A.They go to school to pass their exams. yes.

Q.Where is the school? A. The tech. in Wollongong.

Q.The technical college in Wollongong? A.Yes.

Q.The mining department of it, is that so? A.Yes.

Q.And are they not given practical tests there, apart fromthe type you have mentioned, to find gas? A.Well, I believe it is a bit different in some cases but at the time I went I was going to Bulli, the course at Bulli and the only example we had was once with an old box.

Q.It really depends where you go as to what you learn? A.Yes, apparently.

Q.Are they not taken down to the pits, for example? I would have thought that here was an ideal opportunity in a place like Bulli where deputies could be taken down into a goaf area which is probably gassy and be shown how to find gas and be taken round the fringes of the goaf. Is not that done at all? A. Not that I know of unless they do it themselves and go along to the deputy.

Q.Has the management of any mine anything to do with the education of deputies? A. Some of them do take an interest in them.

Q.I do not know what happens at Bulli and I am not making any suggestion, but I would have thought that all managements would have welcomed the opportunity to educate prospective deputies in the detection of gas, as a matter of mining practise apart from safety. You say that that is not a common thing with deputies? A.Not when I went to school.

Q.How long ago was that? A. Four years, five years.

Q.Do you know of any sudden revolution in the change of education of deputies? A. There are classes that go on in some of the mines.

Q.I beg your pardon? A. Some of the mines do have classes.

Q.Do you know whether that occurs in this Colliery? I am not saying this as a criticism of this colliery because it may be it would have to be a general rule for all collieries, but do you know whether, as an example = A. I don't know if Bulli does it or not, no.

MR.SULLIVAN: Q.You were at Corrimal when you got your ticket, were you? A.Yes.

Q.Were there any classes there for prospective deputies? A.No.

Q. You yourself were shown how to test for bottom gas by an old deputy, were you not?A. Yes.

Q. What is your attitude towards the oil flame safety lamp? Do you think it is a necessity?A. Yes, definitely.

Q. Methanometers?A. Very handy.

Q. You yourself usually carry one?A. Yes, usually. I don't take it all the time.

Q. For instance, you did not have a methanometer in western returns that day?A. No.

Q. But you picked up a layer of gas at the roof with your lamp? A. Yes.

HIS HONOR. Q. Tell me in relation to that: you said you had had complaints from miners working in the western returns as to both gas and dust?A. That is what they reported.

Q. When you had this complaint about gas, I take it the type of gas - something about the gas was described to you?A. Well, it was an inflammable gas.

Q. The complaint was that there was inflammable gas?A. Well, it was not inflammable gas but they just referred it to me as inflammable gas and I took it that it was.

Q. Is that gas you found inflammable gas?A. I had been there to western returns and the reference is usually to inflammable gas.

Q. Who had discovered the gas there?A. I don't know - or just it wasn't reported who found it, but they complained there was a gassy situation there and dust and so on.

Q. Have you access to deputies' reports when these claims are made?A. Yes.

Q. Who was the deputy in charge of that section?A. Doug Harvey on the day shift when I was there.

Q. Did you see any of the deputies' reports as far as gas was concerned?A. Not at that time.

Q. Have you seen them since as to that section, western returns? A. Yes.

Q. And had gas been reported by the deputies?A. Yes, it was.

Q. It had been reported?A. On that day and subsequent days after that. We have made inspections since then.

Q. But you see, this gas had been found some few days before you went there?A. No - well, that is what it said, yes. That is the report I got but it wasn't in the book that I could see.

Q. There had been a complaint of gas some few days before you went to the section, is that right?A. Yes.

Q. And that complaint came from the men themselves?A. Yes.

Q. And did you look at the deputies' reports for those days when gas is alleged to have been found?A. Since, I have, yes.

Q. Since then you have looked at the deputies' reports for the days when gas was alleged to have been found by the men?A. Yes.

Q. Did those reports contain any reference to gas having been discovered by the deputies? If you are unable to remember, tell me?A. I can't remember completely, but on the previous couple of days, I can't remember if they were reported. I don't think they were.

Q. Who were the deputies in charge, can you remember?A. Only Doug Harvey on the day shift - that is the only one I can tell you.

MR. REYNOLDS: Western returns are here, Your Honor. They are on subpoena.

MR. SULLIVAN: I subpoenaed them.

HIS HONOR: Are they easily sorted out?

MR. SULLIVAN: Yes. My junior and I could find the dates there.

HIS HONOR: Mr. Bowie could have a look through those while the evidence is continuing, and let me have a look at them.

Q. The day you went there was the 9th?A. Yes.

Q. When was this reported to you?A. On the Friday - it would be the 5th.

Q. On the Friday before, that was the 5th?A. Yes.

Q. When was the gas alleged to have been discovered - on that day or before?A. I don't know - it was just reported to me on the phone.

Q. Reported to you on the phone on the Friday?A. Yes.

MR. SULLIVAN. Q.You were unable to get there on the Friday, were you?A. Well, it was on the Friday night, Friday afternoon late, I think.

Q. Incidentally, you have to give 24 hours notice before going to the colliery?A. Well, reasonable notice -

Q. What do you usually regard as reasonable?A. I usually give it the day before.

HIS HONOR. Q. So you would have told them on the Monday you were coming on the Tuesday?A. Yes.

MR. SULLIVAN. Q. Perhaps we could go on with some other recommendations of yours. Now, you had something to say about stonedusting in relation to this particular incident, did you not? A. Yes. I always feel there is insufficient stonedusting done throughout the mines.

HIS HONOR. Q. Would that have affected this area?A. Oh, it could have had some effect.

Q. What effect could it have had?A. Well, although it does not stop a fire, it has an effect of stopping it from going any further. Well, it is hard to explain - if you throw stonedust at the fire it will help to put it out, providing it is a small enough fire.

MR. SULLIVAN. Q.Is it possible to erect what are known as stonedust barriers?A. Yes.

Q. What are they?A. Well, it is a type of archway in the tunnel itself and it is built with pieces of wood or lids as they call

them and loose stonedust placed on them, and if there is an explosion, then it has been found that this can stop it from going any further.

HIS HONOR. Q. What is the effect of stonedust upon burning coal? Does it tend to keep the fire at bay?A. Yes.

Q. You have given evidence here that the ribs were burning?A.Yes.

Q. There is no evidence before me as to what the stonedusting was, or how much stonedusting was performed, but assume you had stonedusted them, would that tend to have stopped the ribs from burning?A. It would have assisted.

MR. SULLIVAN. Q. You directed some attention to these machines, particularly the shuttle car, did you not?A. Yes.

Q. And you said that there was satisfactory proofing as far as you could see on this machine, of the electrical flash. Did you have some comments to make about the brakes?A. Just to the effect that - I am not a mechanical expert, but I am sure there could be some mechanical system devised where they could have a thermal type of protection - anything that heats up, any parts liable to be heated, could surely have some thermal protection in some way. I am not an expert in this field.

HIS HONOR: I am not an expert either, but I have been wondering about this since the inquiry started, and perhaps some evidence may be adduced as to why ordinary brakes could not be used in place of disc brakes. I know disc brakes are said to be more efficient and that ordinary brakes may fade with continual use, but if they could still be satisfactory brakes -

MR. REYNOLDS: I am not a mechanical expert either, but I would think they probably would not be more effective with this tremendous load. Loaded they are 20 tons. I would think the Joy Manufacturing Company which made these in America would have given very considerable thought to these problems. I do not know what are the answers, but at the moment the Joy Manufacturing Company is carrying out extensive tests, because this has happened, obviously.

MR. SULLIVAN: I have here the reports. In western returns on the 3rd, no gas at all reported.

HIS HONOR: On the relevant days, what appears on those reports so far as gas is concerned?

MR. SULLIVAN: As regards the 9th when Mr. Parkinson discovered it, they say inflammable gas was detected in the night; Mr. Dumbleton was the deputy. That is reported on the night shift and the remark is that it is being diluted as given off; others clear. On the day shift on the 8th, the day before, there is a remark that inflammable gas was found at D heading and was being diluted.

Q. You found this methane at D heading, did you not?A. C and D headings.

Q. And Mr. Harvey was the deputy on the day shift?A. I think he was. Well, he is the day shift deputy.

MR. SULLIVAN: He has signed the report. On the afternoon shift of the 8th, there was no gas found according to the reports, and Mr. Jordan was the deputy. Mr. Dumbleton found none on the dog-watch on the 8th. C Heading is reported on the 8th too, as Mr. McNally has just drawn my attention to. On the day when Mr. Parkinson got the complaint, which is Friday 5th, there was none

found on the afternoon shift, Mr. Jordan being the deputy. Inflammable gas in C heading was found on the day shift on the 5th; Mr. Harvey was the deputy. On the dog-watch shift on the 5th, none was found; Mr. Dumbleton was the deputy then. In some cases there is a note - these reports here include when the machines are working, the reports by the machinemen on the continuous miner and in respect of the 8th, the Monday day shift, the miner driver found inflammable gas. On the 5th it was found by the miner driver Mr. Reeve, on day shift. The report for the 4th is the afternoon shift when Mr. Jordan was the deputy, and there was no inflammable gas found.

HIS HONOR: Was inflammable gas found by anybody on any of the other shifts on that day, the 4th?

MR. SULLIVAN: Yes, on the dog-watch shift the deputy, Mr. Dumbleton again, found it. He found it in D heading but he said it was being diluted as given off. I think that covers the 4th; there was none detected on the day shift, either the miner driver or the deputy.

I will tender these.

HIS HONOR: Q.You went to the western returns area? A.Yes.

Q.As a result of complaint. Who was there with you? A. The under-manager Jack Puddle and local check inspector Taylor, Ted Taylor.

Q.Did you see a gentleman named Wright at any time that day? A. Only when we went to 8 Right .

Q.That was afterwards? A.Yes.

Q.You did not see him in any area you had inspected or near it?A. No.

Q.Did you see a gentleman named Fear? A.No, only in 8 Right.

Q.Afterwards? A. Yes.

CROSS-EXAMINATION:

MR.LEE: Q.When you found the gas on ninth you detected it with an oil safety lamp? A.Yes.

Q.What reading did you get, do you remember? A. I think it was about 2 - two and a half per cent.

Q.You had no difficulty in detecting it? A. No.

Q.Where you found it, could you give us some description of that as a working place? A. Found in an area about thirty yards back from the face in both C and D. It was pretty near similar findings and it was layering about anything from about a foot to 18 inches down from the roof into the face area.

Q.You got it in C and D headings? A. Yes.

Q.Over what area was the gas thirty yards back from the face? A. Layering about 18 inches or a foot down and just varied.

Q.You would go through it and it would be clear and then you would come upon it again? A. No, not everywhere, we never tested everywhere, but where we put our lamp we could get it so I took it there was a layer of gas in that area.

Q.Can you be more specific in your estimate as to the area covered by the gas in C and D headings? A. It would have been from 30 yards back from the face into the face and it would have been anything from a foot to 18 inches down from the roof and it would have covered the whole of the area, I take it. I measured both sides of the road in different points but I did not put my lamp up everywhere.

Q.You say you detected it at the face? A. Yes.

Q.And that was an area which was being treated? A. It was being ventilated.

Q.Was there a fan operating at the face, or a vent tube? A.Yes, the vent tubes were up.

Q.The auxiliary fan system was in operation? A.Yes.

Q.It was apparent to you the ventilation was not effective to dilute the gas? A.That is right.

Q.One fan or two in operation? A. There were two in the section but C and D headings are ventilated from the one fan.

Q. There was no bleed tube system there, was there? A. No.

Q.When you went there on the 9th you were with Mr. Puddle?A.Yes.

Q.Did he have his safety lamp with him?A.Yes.

Q.Did he check over the same area as yourself?A.Not exactly,no, but he did check and he did find it.

Q.Did you have any discussion with Mr. Puddle as to what had been done in the previous days to increase the ventilation to get rid of gas? A.No,I do not think we had that much time, when we found out we walked back out to where the machine was coming into the place and that is where we spoke that the gas had to be cleared out before the machine came into work.

Q. The situation you found on 9th was one which required immediate attention?A.Yes.

Q. The gas had to be removed before the men should have been permitted to go on working? A. Yes.

Q.What has been your experience of gas: If you find that gas there on the 9th, say, and the ventilation system was unchanged, would you expect to find it there on the 10th? Is that the habit of gas? A.Yes, usually.

Q. That while other things remain the same the gas would be there?A.Yes.

Q. You would have assumed,I suppose, the probability was that the situation was present on the Friday?A. Friday,oh yes.

Q. Is that so?A.It is possible it could have been although I am not sure because I think the machines were just changed into the particular place they were, they had come from either C or D heading.

HIS HONOR:Q. Leaving out the machines, would the gashave been there on the Friday?A. It is possible.

Q.What is the probability? Are you able to tell us?A. There may have been a make.

Q. There may have been a make? A.It is bleeding most of the time, it just doesn't appear from nowhere.

Q. Could you see any signs of gas being diluted in any way? A. Not in the area where I found it.

Q. It was not being diluted where you saw it? A.It could not have been.

Q. You saw it in C and D Headings? A. Yes.

Q. We have a report that on the night of the 9th Mr. Dumbleton reported there was inflammable gas in the area, which was being diluted. On the day of the 8th Mr. Harvey reported inflammable gas there in C and D headings - that was the heading you looked at?A.Yes.

Q. And it was being diluted. Could you see any signs of the gases you saw being diluted?A. No.

MR.LEE: Q. You got your report, I think you told His Honor or Mr. Sullivan,from,I think you used the expression, "From the men" - that is the complaint. How did it come to you? A.The secretary, I think, of the Lodge rang me on the Friday afternoon.

Q.Friday afternoon? A. Friday afternoon late. I am not quite sure of the time he rang.

Q.Does the colliery work on Saturday? A. No - there would be some work but they don't produce.

Q.Would there be work in this area on the Saturday as far as you know? A.Not as far as I know.

Q.Prior to the occasion of this particular complaint which led you down there on the 9th had you had any other complaints in respect of western returns prior to this? A. At this same time or before?

Q.Yes, prior to? A. Some months earlier there had been a complaint - I had been up there,yes.

Q.On that occasion what had you found? A. I could not recall.

Q.Did you find gas? A. I may have, I can't recall. I would have to have a look at the reports.

Q.You say you always give the management, or usually give the management 24 hours notice? A. Well, it is not quite 24, I give him reasonable notice. I let him know the day before I am coming.

Q.There is no offensive criticism in this question, there is no criticism, I just merely want to find out: Do you think it desirable to give that amount of notice when you have got a complaint of gas from your men? A. No, I would say No.

HIS HONOR: Q.Do you think it desirable to give any notice? A. Well, no.

Q.Why do you give notice? A. Because it is so stated in the Act. It is taken out now but it did so state in the Act.

Q."Reasonable notice"? A. It has only been since the new amendment has been cut it has been changed.

MR.LEE: Q.When was that?A. It is worded differently, you may find. It is not there now.

Q.When was it? In 1961? A. It was in the previous Act, previous to that.

Q.In 1961 it was amended - I may be wrong? A. Not as far as I know. It was in the last book I had , that you had to give reasonable notice.

Q.Do you mean October 1964? -

MR.SULLIVAN : That is right, I think it was.

WITNESS: I think you are right there.

HIS HONOR: Mr.Buck tells me the consolidated Act has apparently only been in since October this year.

MR.LEE: Q. The situation is this: You get the complaint from your mendirect, do you not? A. Yes.

Q.In that situation it could be the deputy has not discovered gas; is that a likelihood? A.It is sometimes possible.

Q. What have you found is usually the situation that brings the complaint about? Is it that the deputy has not taken steps to get rid of it or the men are complaining from day to day and then it comes to you that nothing has been done, or what? A. Yes, usually after they have had some time and it comes to me.

HIS HONOR: Q. The men complain to you - whether it is true or not, the suggestion is that they had complained to the deputy and the deputy is not agreeing with them in some way? A. Well, usually.

Q. There may of course be a genuine dispute between the men and the deputy as to whether it is there or not? A. It varies, the type of complaint.

MR. LEE: Q. Of course if the complaint of gas was made to the deputy and he took some action which removed it, or drew the men out, the likelihood is you would not get a complaint of gas?

MR. REYNOLDS: That does not follow at all in this industry.

WITNESS: If there is no complaint I do not get to know about it, certainly.

MR. LEE: Q. If there is no complaint you do not get to know about it? A. Unless I come along in the normal inspection and find it myself.

Q. You got your complaint from the Lodge secretary? A. Yes.

Q. Can you remember what he said to you? A. Not word for word, but he just said there was a complaint by the western returns men about dusty conditions and gas at the intersection.

Q. Are you familiar? You say you are familiar with western returns? A. Oh, somewhat.

Q. Are you able to tell us for instance whether the ventilation situation there, the return airways and the like, are as far as you know satisfactory, or is there some complaint about them? A. No, as far as I know they were working all right that day.

HIS HONOR: Q. Why didn't they get rid of the gas? A. Probably because there was not enough ventilation put into the particular place and it was not ventilated in the right way to overcome the layer of gas. It is possible for an air movement to pass over a layer of gas. It has been so stated earlier on by other inspectors - I am not sure - I think I heard that mentioned.

Q. You mean the stream of air was not directed to the area where the gas was? A. No, it has passed under it.

Q. Is the ventilation system there similar to the one we are dealing with in 8 Right? A. No, the ventilation system is different. They have four headings and the flank ones are the returns - two returns and that's it.

Q. Is the noxious air drawn across the work place? A. No.

Q. No, it is drawn away from it? A. Drawn away from it.

MR. LEE: Q. When you were taken away to the fire in 8 Right your attention was at least distracted from the circumstances in the western returns? A. Yes.

Q.But what was done to your knowledge in the western returns to alleviate the position that had arisen? A. I think I found it again on a later inspection, that there was still some layering of gas there, but I think again, after another inspection, it was cleared out and hurdles were used to direct the flow of air over the screen, the brattice screen put across the place to a certain height to direct air over it and this helps break up any layers of gas.

Q.You were there on the 9th and you saw the condition as you described it. When were you there again after the fire in 8 Right? When were you in the western returns again after the fire in 8 Right to detect gas - without tying you down to the particular day? A.I am not quite sure of the date but it was about 16th or 17th, approximately a week, or a couple of days after the fire.

Q.May I take it no hurdles had been put up at that stage? A. I cannot recollect any in D heading, there may have been in C but I am not quite sure. There was a fall in C. heading and I am not quite sure whether there was a hurdle at that or not.

Q.When was it you are quite sure hurdles were erected and the gas problem had been dealt with? A. On an inspection with the Chief Inspector some time after that.

Q.That was with Mr.Anderson? A.Yes.

Q.Or, Mr.Menzies? A. Mr.Anderson.

Q.How long after would it be? A. That was another - that was approximately a fortnight after - almost a fortnight after the fire - not quite a fortnight.

Q.Can you tell His Honor whether from the 9th, say to during the following week - was the western returns worked? A. No, the pit was idle for some time after the fire.

HIS HONOR: The whole pit?

MR.LEE:QThe whole pit? A. Yes.

Q.You don't know when work resumed in the western returns? A. I do know but I can't tell you offhand. I went round on inspections and made reports on them but I have not got them with me. I am not sure of the dates. I did make reports on that.

MR.REYNOLDS. 22nd, I think.

MR.LEE: Q. Coming to the situation in 8 Right, youdid mention to Mr.Sullivan that the ventilation system as you saw it on 3rd December was the way we see it on sketch plan No.3, and I thought you rather indicated that was a system which was effectively diluting the goaf gases? A.Yes, it appeared to me from what I inspected,yes.

Q.But you are not suggesting that in the circumstances that is a satisfactory system of ventilation? A.No, I don't.

Q.As a check inspector if you had gone down there with the face being worked and with the set-up as you saw it as at the 3rd December and had found inflammable gas at the point here (indicates) the end of A heading where the brattice is erected and found 4% there, what would have been your opinion as to the safety of the area? A. It wouldn't have been.

Q.It wouldn't have been safe? A.That is right.

Q.You are not putting that system forward as a safe system? A. No.

Q.You merely say it is an improvement? A. It is an improvement. If you could dilute the gas it is some improvement.

Q.Did you say you went to the Bulli school? A. Yes.

Q.That is, a mining school? A. I don't think it is going now, it is only the public school. He worked at Bulli Colliery, Joe Corrie was his name and he was apparently something to do with the tech. They put him in as teacher, anyway, and that is how we passed our examinations. It was at Bulli Public School.

Q.You got a deputy certificate through that? A. I had to go through examination.

Q.That was one of the steps to get your certificate? A.Yes.

Q.But he is not there any more? A.I think he would be retired now, he's pretty old.

Q.Bulli isn't now a school ? A. I think so - I have never been back since.

Q.As far as you know you go to Wollongong Tech? A. As far as I know.

Q.You haven't been there? A.No, I have never been to Wollongong.

MR.PARKINSON: Q. After the funeral and the mine resumed work when did they become idle again at Old Bulli? A. They worked one shift and were off again. I think they went to work on the dog-watch shift and then they were off again on the day shift. I am not quite sure of the date.

Q.Was the problem, western intakes, the reason why the men refused to go to work on Tuesday morning? (Objected to by Mr. Reynolds)

HIS HONOR: Is that the same as western returns?

WITNESS: Yes.

(Question allowed)

MR.PARKINSON: Was it western intake? A.Western returns.

Q.Western returns, where the problem was? A.Yes.

Q.What was the problem there on this occasion? A. The complaint was gas, inflammable gas in the returns.

Q.Is this the occasion that resulted in the Chief Government Mines Inspector coming down and making an inspection with you? A.Yes.

Q.Is this an occasion where it was alleged that 60,000 cubic feet of air had been lost somewhere? A.Yes - (Objected to by Mr.Reynolds: Allowed at this stage, subject to being struck out later if not relevant)

Q.Is it possible some of that air could have been sent down 8 Right? -

HIS HONOR: 60,000 cubic feet of air lost from where?

MR. PARKINSON: Q. Where was this 60,000 cubic feet of air supposed to be lost? Where was it lost from and what was the cause? -

HIS HONOR: This is the allegation?

MR.PARKINSON: This is the allegation.

WITNESS: From western returns and 2nd north, apparently. There was a problem with the ventilation in both sections and the reason I don't know, because the management didn't know and they couldn't explain it to me and we couldn't find it and that was the position at that particular time.

HIS HONOR:Q. You say apparently western returns hadn't got anything out of it? A. Western returns, at the time this occurred there was only enough air in there for one fan to operate and 2nd north, I think there was not enough for one fan to operate because it was re-circulated and they had to leave the fan off.

Q. When you went into western returns on that occasion to check the air there you spoke of the velocity?A.Yes, that was the volume, that was the quantity of air in that particular place where the miner was operating. I did not have time to measure the whole of the intake air because we did not get round to it at that time.

MR. PARKINSON: Q. Could it be that some of this air had been diverted to the scene of the disaster in 8 Right? A. It is possible. I don't know if it was.

HIS HONOR:Q.How would you divert air from one place to another? A. In the case of 8 Right if you opened the regulator you would have an increase of air entering.

Q.The regulator. What do you mean? A. There is a regulator for 8 Right.

Q. To allow more air in that place and less air in other sections? A. Yes, go straight to the returns from 8 Right.

Q.Could you do that in reverse?A.If you close the return it would restrict it. It is possible to be done.

Q. You can restrict it in 8 Right by bleeding from another section? A. Yes, if you stop it going into the section then --

MR.PARKINSON:Q. (Approaches large plan). This ventilation system here - intake - intake (indicates) ?A.Yes.

Q. Goaf edge (indicates)?A.Yes.

Q.Would you put a brattice stopping across there? A. For what purpose?

HIS HONOR: Would you name the place you indicate?

MR.PARKINSON:Q.In the shunt heading?A.No.

Q.What would a brattice stopping put across that shunt heading tend to do? Bearing in mind the flow of air? A. I am just not quite with you. Is that with the flow of air in or round B Heading?

Q. This is prior to the fire (indicates)? A.Yes.

Q. There is your intake? A. Yes.

Q. That is your intake?A.Yes - prior to the fire, is it?

Q.(indicates on large plan) Intake - intake? A.Yes.

Q.Are you with me? Under those circumstances would you put a brattice stopping across A heading? A. No.

Q.Why wouldn't you do that? A. It allows anything in the goaf to build up.

Q.Could you say that that brattice stopping could then have been placed there to prevent any emission of gases from the goaf? A. Yes,it could have been.

Q.That in itself would obviously prevent any methane readings down where the miner was working? A.Yes - you would get readings probably down there.

Q.If the emission of gas, the make of gas, was too great for dilution? A. Yes.

Q.And that brattice stopping wasn't there is it possible we could have had readings down there sufficient to stop the miner producing? A. Probably get them all the way along that road,yes, if it was not being diluted.

Q.But it would stop the miner from producing coal? A.Yes.

Q.Have you ever had the experience of a miner being stopped from producing coal where only noxious gases are recorded? A. No, not that I can think of.

MR.McNALLY: There have been certain other deputies mentioned and I do not know if I can take it any further. I will have to make some enquiries.

HIS HONOR: You would like your right of cross-examination deferred?

MR.McNALLY: Yes.

HIS HONOR: Very well.

MR.REYNOLDS: Q. You have made a report from which my learned friend Mr.Sullivan led you through your evidence? A.Yes.

Q.There is one bit here that did not seem to get any importance and I think this is what you said, that when you got down to the scene of the fire many rescue teams, men and offials were used in attempting to contain the fire and all thoughts and efforts were for rescuing the four men trapped behind the fire? A.Yes.

Q.That is what you reported and that is what you saw and observed? A.Yes.

Q.Who is it that issues 3rd Class certificates of competency Mr.Lee's client? A. Who is it?

Q.Who is it issues certificates of competency to deputies and shot firers? A. They are from the examinater.

Q.An official of the Mines Department? A.Yes, the Minister, actually.

Q.You went for the examination, did you? A.Yes.

Q.Did you have to indicate that you were competent in detecting mine gases? A.Yes.

Q.And, were you? A.Yes.

Q. So that we understand what is meant by gas which is detected as being diluted, methane gas is given off generally from the seam? A. Yes.

Q. Somewhere in the seam? A. Yes.

Q. And there is a point or points of emanation? A. Yes.

Q. You can always put your detecting instrument close to the point of emanation? A. Yes.

Q. And get at that point a very high reading?A. Yes, that is possible.

Q. But it, from that point, enters the stream of air and as you go further and further away it disperses until it ultimately gives no measurable registration?A. That is true.

Q. That is the situation which is described generally in reports as being methane detected, being diluted? A. Yes.

Q. I suppose it can happen that sometimes after the point of emanation that it gets up and gets into recesses along the ceiling which are not sufficiently subject to the general flow of air? A. It is possible.

Q. It is not only possible, it seems to happen? A. It does happen,yes.

Q. One of your methods of dispersing a layer of that kind is to use the hurdle type of thing which will send the air up and chase out these gases? A. That is true.

Q. That was what was done in the western returns to deal with the situation you found there on the morning of 9th November? A. After a period of time it was done, yes.

HIS HONOR: Q. You mean sometime after you visited? A. Yes.

MR. REYNOLDS: Q. It was done that morning, wasn't it? A. Not to my knowledge it wasn't.

Q. It wasstill there when you left? A. When we left the section that morning?

Q. Yes? A. Yes it was still there, we went straight along to the fire.

Q. There was not time for you to see that was dispersed before you left? A. No.

Q. But instructions were given before you left, were they? A. They should have been.

Q. Were they? A. I know I was talking to the deputy, I am not sure if it was a deputy or one of the men, but I instructed the men not to go in there till they did put the hurdle up - the bloke I was talking to on the roof bolting.

HIS HONOR: Q. When you say you get inflammable gas being delivered - Mr. Reynolds putit to you there was gas issuing from a particular source in the seam?A. That wasn't on this occasion, no.

MR. REYNOLDS: Q. No one suggested it was? A. I thought that was what you meant.

HIS HONOR:Q.These were pockets, were they? A. No, it just wasn't in a pocket in cavities in the roof, it was below the timber,

lying down just above head height - I suppose you could put your lamp up and get a reading.

Q. Could you see any particular variation of the basic ventilation system that had been instituted to deal with this? A. No, there was no change in the normal ventilation.

Q. Nothing like hurdles or anything like that? A.No, nothing when we went in, no.

MR.REYNOLDS: Q. You have indicated there was a layer found there this morning and this you would expect to be found by a reasonably competent deputy doing his job before he let the men go in? A.Yes.

Q.Had the men gone in this morning? A. Yes.

Q.Past this? A.No, in D heading the operator had driven his machine into the place and he had stopped and was testing at the time we walked into the place and he said he had just found gas.

Q.And that would be the normal drill, to test before going into a place? A. If you have got a lamp you should,yes.

Q.The miner driver always has a lamp, doesn't he? A. He should have,yes.

Q.Is there any doubt about it, that he does have it? A. I did not mention C.heading. They were already in there.

Q.My question is : Is there any doubt in Bulli mine a miner driver is provided with an oil safety lamp? A.No, I am not doubting it.

Q.He did have it and he did test in your presence? A.The roof bolter, not the miner driver.

Q.Was D heading the return? A.Yes, the return air.

Q.One of the layers you found was in the return air way? A. No, not in the return airway. It is in the working place but it is a return heading.

Q.Not in the return air way? A.No.

Q.Was this solid work? A. Solid work.

Q.There were how many headings? A. four.

Q.Which were intake and which return? A. Two centre intakes and two flanks, returns.

Q.So D heading was a return? A. Was a return heading.

HIS HONOR: Q.Where were the other men? A. The machine was operating on the left hand side in A heading, on the intersection of A heading and one of the cut-throughs. It was clear there. There was a good volume of air and it was clear, but the other part, on the right side, which ventilated both C and D headings - -

Q.They were not clear? A.No.

Q.Were any men working there? A. The roof bolter in C heading had started to operate but he had not got into the area where we found the gas, he was almost there.

MR. REYNOLDS: Q. I want to put a version of this to you: That, first of all, after you got there the crew went into the face and started to work? A. Yes, the miner crew, yes.

Q. The deputy, you told us, was Doug Harvey? A. I think it was.

Q. Were you there when Mr. Puddle asked the deputy was everything okay? A. No, I can't recall him saying that.

Q. It is normal drill when the senior mine official comes down that he gets the deputy and says "Is everything okay or have you any troubles?" A. I don't think we saw him that morning.

Q. You don't think you saw whom? A. The deputy. We might have seen, but we never spoke to him at that particular time.

Q. Do you swear that you and Mr. Puddle did not have conversation with the deputy that morning? A. Not that I can recollect - not outby, when we first went into the section.

Q. When you went down? A. When we first went to the section?

Q. Yes? A. I can't recall it.

Q. Do you mean it didn't happen or do you mean it may have happened and you don't remember? A. No, I don't think it happened.

Q. You know Doug Harvey? A. Just to say good day to in the panel, I don't think I would know him in the street.

Q. You wouldn't know him if he didn't have his miner's helmet on? A. Yes.

Q. But you do know him? A. In there I do.

Q. You saw him down there that day? A. I probably saw him but I can't remember talking to him unless I said good day to him. I might have said good day to him but I can't remember talking about work to him.

Q. I suggest that the three of you, Puddle, Harvey and you went into A Heading and watched a couple of cars being filled? A. He wasn't standing with me, I was standing with Mr. Puddle and the local check.

Q. That is Mr. Taylor? A. Yes.

Q. Did you all test for gas in A Heading? A. I don't know whether Mr. Taylor did or not.

Q. Did you test for gas in A Heading? A. Yes.

Q. No gas was found there, was it? A. No.

Q. You agree with me? A. That is right.

Q. Then did you come back to C Heading which was a standing place being roof bolted with the roof bolter? A. Yes.

Q. When the roof of that place was tested with the safety lamp there was no gas detected? A. Where? C Heading?

Q. Don't you remember? A. C Heading we found gas.

Q. Just a moment. You knew I was referring to C Heading, didn't you? A. I couldn't understand the question for the minute. You said did I find it. I have been telling you all along I found gas in C Heading.

Q.I know what you said but please be patient with me and I will be patient with you. What I put to you is when the roof in C heading was tested with an oil lamp no methane was found; that was the question? A. When I tested with the oil lamp I found methane in C heading.

Q.Would you disagree with the proposition that it was only found with a methanometer in the cavities of the roof in C heading? A.I never had a methanometer so I could not say.

Q.I didn't suggest you did: That it was only found with the methanometer by Mr.Puddle who did have one? A. He never checked out where we checked.

Q.Would you get back to my question? A. I could not doubt it was found with a methanometer.

HIS HONOR: Q. The question was: Only found by Mr.Puddle? A.No.

MR.REYNOLDS: Q.You say you found it at C heading? A.Yes.

Q.Did you make a note of the fact in any record or book? A. What book?

Q.Did you make a note of the fact that you found it there in anyrecord or book? A. Probably, I am not sure.

Q.Did you? A. I always keep notes so I probably would be able to check it.

Q. What do you keep them in? A.Little note books.

Q.Where is this note book? A. Probably at home?

Q.Is it at home? A. I don't know.

Q.Is there such a book? A.Yes.

Q.Did you make notes that morning? A.Some.

Q.Did you make notes about your findings of gas and the quantity? A.Yes.

Q.In this book? A. Some of the notes - yes, I made notes.

Q.Did you make notes in this book of the quantity you found in the western return? A.Probably, I just can't think off hand how much I have wrote in the book but I did make notes.

Q.To the best of your recollection did you or didn't you? A. I did.

Q.What do you say you found on your oil flame lamp at the roof level of C heading? A. Probably about 2 %.

Q.Probably about 2%? Is that the best of your recollection?A.Yes.

Q.What do you say you found in D heading at the roof level? A. Two and a half - quite often two and a half would be about as much as I would find because I don't usually go any further.

Q.Was there any methane to be found, to be detectable, in the general body of air in those places? A. I could not say that because I never had a methanometer to detect it - the general body - the only thing-I found it there in this layer of gas at the roof.

Q. Did you ask the gentleman who had a methanometer to test it?
A. I never asked him, no.

Q. You were quite able to if you wished? A. He was making his own tests and I was making mine.

Q. You are a check inspector? A. Yes.

Q. Did you see him testing in the general body? A. I saw him check at the face in and about the general body of the air.

Q. Did you ask him what the reading was, what the finding was?
A. No, I just told him we found it.

Q. Would you bring along your notebook? --

HIS HONOR: Q. Would you bring along any books you have at home in relation to anything you found, any record of the finding of gas there in the last twelve months? A. I will try.
HIS HONOR:
. I would also like produced any book in which - which is kept at the mine in terms of Rule 39, s.54. The section says (Read).

MR.REYNOLDS: May I ask the witness did he make any such report in a book before he left the mine?

WITNESS: No, I didn't.

(Further hearing adjourned to 10a.m. on Tuesday 21st December 1965.)

IN THE COURT OF)
COAL MINES REGULATION)
HOLDEN AT BULLI)

No. 1 of 1965

BEFORE HIS HONOR JUDGE GORAN

ASSESSORS: MESSRS.MAHON and BUCK

TUESDAY, 21st DECEMBER, 1965

IN THE MATTER OF AN INQUIRY IN PURSUANCE OF THE COAL MINES REGULATION ACT INTO AN ACCIDENT WHICH OCCURRED AT THE BULLI COLLIERY ON 9th NOVEMBER 1965 AND ITS CAUSES AND CIRCUMSTANCES.

- - - - (PART HEARD)

(Mr.Murray stated he had read yesterday's transcript and did not wish to cross-examine any witness who was called yesterday).

VICTOR PARKINSON
On former oath
Cross-examination continued:

WITNESS: Do you want my reports, Your Honor?

HIS HONOR: Q. You have the reports there, have you? Would you produce them? A.Yes. (Produces) They are mainly the ones on the coastal mines. There are some smaller mines and some -

Q.Would you take these back and pick out for me any report that relates to this mine, the day of the fire? A.Yes. That is the file on Bulli.

Q.The file on Bulli apparently commences on 19th November 1964? A.Yes.

Q.The next report appears to be 11th February 1965. Can you tell me is there any report relating to the 9th November? A.There is one in there.

Q.I will hand this to you ? A.That is it there.

Q.This is a report you made after this, is it? A.Yes.

Q.There is a report on the 16th and there is one dated the 17th and one dated the 15th? A. I did one on the fire but I didn't do it on that particular day.

Q.You made a report afterwards? A.Yes,afterwards.

Q.Leave that for the time being. Mr.Reynolds and other counsel may be interested in that. This is your note book is it, and there was an entry here for the 9th November? A.Yes.

Q.There are some notes here? A.That was subsequently, after.

Q.This was made on the day itself,was it? A.Yes.

Q.I will hand these down to counsel. It reads "Bulli 9/11/65. 13,000 face more passing," then there are some figures. Would you read that to us as loudly as you can? A. "Bulli 9/11/65. 13,000 face more passing" - that is more air.

Q. Tell us what the phrases mean? A. Well, there was 13,000 cubic feet per minute measured, but there was more passing into the return via the face area.

Q. Does this relate to the western returns area? A. Yes, western returns. The face is where the miner was working at the time. The temperatures were 74, 72. I noted that conditions were good at the time and there was no dust. That was the return heading, A Heading which was a return heading. I went to the track heading place which would have been C Heading and there was 25 feet per second. Then the figures denote - would have represented the amount of air passing through the vent tubes, multiplied together.

Q. What are those figures? A. 25 x 60 x 2½ and I have mentioned goes high up on the rib sides, hurdle put up.

Q. Where is that - in C Heading? A. Yes, in C Heading - track heading they call it - and roof breaking up in places.

Q. You say a hurdle was put up. What does that mean? A. That is what I recommended, to break it up.

Q. You recommended a hurdle? A. Yes. The roof was breaking up in places in this heading and I finished there. I had started to do D Heading and had mentioned 3,000 cubic feet a minute was the amount of air passing but I hadn't got round to doing anything else. That is the time we were notified of the fire.

Q. Have you any note about being notified of the fire? A. Yes, fire report 9.35 a.m. in 8 Right panel. After that I put 11 a.m. the rescue team went in there and then later I went in with the Bulli team into the return behind the crib room. We had to fix the stopping as there was too much smoke coming out. This was during the fire, of course.

HIS HONOR: Hand that book down to Mr. Reynolds.

Q. This other lot of notes - has that anything to do with it? A. No. That is an inspection that was carried out with the Chief Inspector, Mr. Anderson.

Q. That was a subsequent inspection; you may retain that for the time being? A. Yes.

HIS HONOR: Q. You were being cross-examined by Mr. Reynolds as to whether you found gas in C Heading. You said you did? A. Yes.

Q. You were asked whether you had made a note in your book about that. The questions and answers are as follows:

> "Q. Did you make a note of the fact in any record or book? A. What book?
> Q. Did you make a note of the fact that you found it there in any record or book? A. Probably, I am not sure.
> Q. Did you? A. I always keep notes so I probably would be able to check it.
> Q. What do you keep them in? A. Little note books.
> Q. Where is this notebook? A. Probably at home."

Is this the book you are referring to? A. Yes, that is the book.

Q. Does it refer to you having found gas? A. Yes, I just make small notes here and there as I am going along.

MR. REYNOLDS: Q. This book contains notes which you made at the time in the western returns on 9th November? A. Yes.

Q..It was made for the purpose of recording what you found so that you might have permanent reference to it? A. Not permanent, I usually throw the books away when they are full. I usually make a report afterwards.

Q.What was the purpose of recording in this book at the time?A. Well, so I don't forget everything.

Q.Would you regard the finding of inflammable gas and the place in which you found it as being important to the Court?A.Important enough.

Q.You did not record that you found layers of gas along the roof, did you?A,Not in that book.

Q.Did you record it at the time in any book? A. I record it there to show I find gas in the section, that is sufficient.

Q.Did you record it in any book at the time that you found a layer of gas along the route? A. That is the only book I had with me at the time and that is what I wrote it in.

Q.Is the answer No? A. I wrote down "Inflammable gas" in that book, so that is recorded, isn't it?

Q.My question - ? A. I don't understand

Q.If you don't understand my question would you say so; Did you record in any book that you found a layer of inflammable gas along the roof? A. In the main report I havementioned it, I think.

Q.Oh, but you wrote that after the fire, a week later, didn't you? A.Yes.

Q.But did you record it at the time that you found any inflammable gas layering in the roof in western returns? A. I always record in the particular note book that I find gas and I know what position I am in.

Q.The answer to my question is No, isn't it? A. Well I did not write "layer of gas", no, but that is what it was.

Q.But you did write where you said it was, didn't you?A.Yes.

Q.And you said it was high up on the rib side? A. Yes.

Q.And that is all you wrote? A. That was sufficient to put my mind to it when I was writing the report, yes.

Q.Why didn't you say you found it on the roof if you did? A. That is where it was.

Q.High up on the rib side? A.Yes.

Q.That is the same thing? A. It is high up on the rib side just near the roof.

Q.But it is not layering on the roof? A.Yes, it was at that particular time.

Q.But that doesn't mean that? A. Yes, it does in my eye, it does - I wrote it.

Q.You made no reference at all about finding anything in D heading, did you - . Nothing at all? A. I did write the part of the quantity there,yes - I had not got round to writing it.

Q. Show me where you wrote anything about D Heading? A. That was the start of it.

Q. What was it you wrote there?A."3,000 cubic feet a minute".

Q. But you have crossed that out? A. No, that is just how it was written, that is not crossed out.

Q. You say that refers to D Heading? A. That would have been D Heading.

Q. Did it ? A. It would have been but I had not finished writing it out at the time. That was when I was notified of the fire, when I was starting to write that out in the book, I was standing beside the roof bolter and the man ran in at that particular time.

Q. So you have no record of finding gas? A. In my mind I have.

Q. I am asking about a record: You understand the word, don't you?A. It is in my report, yes.

Q. You have no record made at the time of finding gas in D Heading,have you? A. No, I am sorry, I have.

Q. Pardon? A. It is only in my report, that is all.

Q. When you wrote this report you wrote it on the 16th? A. Yes.

Q. One week later? A. Yes.

Q. These were the only notes to which you could refer? A. Yes.

Q. And at that time a fire had happened a week before in 8 Right? A. That is right.

Q. You tell His Honor and this Court that "hurdle put up" meant a hurdle was not put up? A. To me that would have been a hurdle was to be put up because that was what was recommended at the time and that was what the Under Manager said would be done.

Q. Let me ask you this again: Was any step taken to clear the gas high on the rib side whilst you were there? A. Not while I was there, no.

Q. But you wrote down "hurdle put up"? A. Yes.

Q. You say that was to convey to you that you recommended a hurdle be put up? A. Yes.

Q. That would be a common every day way to disperse gas high on the rib side, wouldn't it? A. No, it is not common every day.

Q. But you would not have to recommend so simple a matter as that to Mr. Puddle the Under-Manager, would you? A. Well I don't know, he never mentioned anything at the time I said it had to be cleared out and I just gave a reason how it could be done.

Q. You were telling Mr. Puddle the Under-Manager how he could-? A. Yes.

Q. Your way of recording that was to write the word "Hurdle put up" ? A. Um.

Q. You did not, of course, record any note of the amount of concentration of methane? A. No.

MR.REYNOLDS: No further questions, Your Honor.

HIS HONOR: I intend to ask the witness some questions. You may wish to ask him further questions after that.

MR.REYNOLDS: Your Honor asked for the book kept under Rule 39 to be produced and it is here. It contains a number of carbon copies of reports by Mr.Parkinson.

HIS HONOR: Would that contain this report of 16th November 1965?

MR.REYNOLDS: No.

HIS HONOR: Q. When you went back on that inspection it was with the Chief Inspector, wasn't it? A.Yes.

Q.When was that, do you say? A. It was the Friday week after the fire, it would have been about 22nd.

MR.LEE: I think that would be the 19th, Your Honor.

HIS HONOR: Q. Were the conditions in the western returns section the same when you came back as they had been on the 9th or had they been changed? A. In western returns?

Q.Yes. A. There was some change, yes. After we had finished the inspection it had all been cleared out, the gas had been cleared out and hurdles had been put up.

Q.Hurdles had been put up? A.Yes, that was when the inspection was finished.

Q.Did you find any gas at all when you returned ? A. On the last inspection, no.

Q.What do you mean by the last inspection? A. On 22nd we went back into western returns again to check.

Q.What about on 19th? A.There was gas found,yes.

Q.Where was it found? A.At the face in C heading,also there was some detected on the methanometer but it was below the required quantity, it was below one and a quarter, it was about 0.6 I think, in C heading and I think there was a higher quantity found in D heading, but it was detected with the methanometer because I think it was layering close to the roof at that time.

Q.In D heading? A.Yes.

Q.Had hurdles been put up at that time? A.Yes.

Q.Despite the hurdles you say there was still gas? A.Yes, but it was later cleared on the Monday, on the 22nd when we went back.

Q.In the report of 16th November 1965 you say, and I will read this on to the notes, "In C and D heading which was driven in advance roof bolting machines were ready to start. These places were ventilated with a fan and vent tubes and was exhausting into D heading return. On inspection of these places -" What does that mean? C and D headings? A.Yes.

Q."Inflammable gas was detected high up in the roof and along the rib sides approximately 30 yards out from the face end"? A.Yes.

Q."The gas appeared to be layering along the roof. I advised the under-manager that it should be cleared before the places were

roof bolted and recommended that brattice hurdles be erected to break up the layering gas and clear it as required. The air quantity entering both places was approximately 3,000 c.f. p.m." A. Cubic feet a minute.

Q."At this time one of the men ran in and informed us there was a fire in 8 Right Section so we immediately left and went to the phone at the crib room." You then go on to talk about the fire? A. Yes.

Q. This report of which you produced a typewritten copy, is this sent to anybody at all? A. The manager, and also the Lodge, the Members of the Miners' Federation.

Q. When did you send this report to the management? A. I am not sure of the date. It was after that.

Q. Obviously it would be, but, how long after this? Are you able to tell us roughly within days or weeks? A. Within a week, round about a week I suppose.

HIS HONOR: Mr. Reynolds, is there anything further you wish to ask on that?

MR. REYNOLDS: May I see the notebook?

HIS HONOR: The small notebook?

MR. REYNOLDS: Yes.(Handed to Mr. Reynolds).

Q.You told me the "3,000" referred to D Heading? A. Yes.

Q. What you said in your report was that the air quantity entering both places was approximately 3,000 cubic feet per minute? A. That is right.

Q. That is the only place you have got it recorded there, that 3,000? A. Yes, but the figure in the other book would work out exactly the same.

Q. "13,000"? A. No, the figure below that, the 25 feet per second, is it? I am not quite sure of that.

Q. "25 feet per second, 60 multiplied by $2\frac{1}{2}$"? A. Yes, multiply them together and you will probably get close to 3,000.

Q. Would you? I see. -

MR. REYNOLDS: I have no further questions.

MR. MURRAY: I have no questions of this witness.

HIS HONOR: Mr. McNally, I reserved your rights.

The notebook may be made available to all counsel should they desire to see it.

MR. SULLIVAN: I may want Your Honor's permission to take him through that file recording where gas was reported in the Bulli pit.

HIS HONOR: We will deal with that later. You are just giving notice.

MR.McNALLY: Q. I think on 9th November you went down into the western returns section on the train with the panel that was to work that section? A. Yes.

Q.With that panel was the deputy?A.Yes.

Q.That was approximately seven in the morning? A. That is what time we left the surface.

Q.I think the deputy on the dog watch shift previous who would have been just coming out of the mine had in fact reported inflammable gas in C heading? A.Yes.

Q.There had been a number of reports during the previous week by deputies of inflammable gas? A.So it was mentioned.

Q.The position you ascertained was that the gas was coming from the seam or the face area of C and D headings and was being detected by miner drivers. Did you ascertain that to be the position? A. It was given off the coal, yes.

Q.And that this gas was diluting in a matter of minutes after it was given off and it could not be found with the lamp? A. No, you could still find it in the lamp.

Q.Well, do you know? A. Yes, I found it when I was in there.

Q.Do you know what the position had been before? A. I don't know the position before.

Q.Is it a fact that C and D headings had gone further, had been cut further than A and B headings? A.Yes.

Q.On this day you went down there was no work being done in C and D headings? A. Roof bolting.

Q.The miner was actually working in A heading? A. Starting to go into A heading,yes.

Q.I suppose there was nothing you were able to ascertain that men had been required to work whilst inflammable gas was detected in any of these headings? A. The question again?

Q.Men had not been required to work in the presence of inflammable gas in these western returns? A.There is always a presence of inflammable gas but it is the quantity.

Q.As long as this inflammable gas was detected the work was stopped? A. I don't know the position at the time.

HIS HONOR: Q.Do you know whether work had been stopped because of the quantity, sufficient inflammable gas preventing them working? A. Do I know?

Q.Do you know one way or the other? A. I don't know whether they had previously.

Y:

Q.You say these roof bolters were in fact working? A. They were working their way into the face in C and D heading, so they would have been.

Q.What time did that shift start? A. As soon as they arrived on the seven o'clock shift, they arrived in the section at eight or it may have been a bit after.

Q.What time did they detect inflammable gas? A. Round about nine o'clock.

Q.Do you know whether any move had been made to stop these roof bolters going in? A. I only know when we went in advance of the roof bolters, when we found the gas we told them they were not to go in until it was clear.

Q. Did any deputy - you had a deputy in charge of the place - had he said to you "There is inflammable gas ahead of the roof bolter"or something like that? A. No, no one said anything.

Q. Did anybody tell you a check had been made and inflammable gas found? A. No, no one told us. When we went into D Heading the operator of the roof bolter had just got down - on the top of the machine - still on the machine - and testedat the roof level. He said after that he had found gas there where he was about to roof bolt.

Q. In the beginning of the shift is the deputy required to make a test for the gas? A. He usually goes to his places first thing.

MR.McNALLY: These tests and the routines of deputies are covered by the rules.

HIS HONOR: I realise that. I was trying to refresh my memory.

MR.McNALLY: If there is one shift following another it does not require a pre-shift inspection. It is General Rule 4.

HIS HONOR: Q. There is nothing in the rules to say when the inspection is to start. They are supposed to be every four hours, and the deputy being one of the persons appointed by the owner for the purpose "shall within such time before the commencement of each shift ... inspect." It does not say how long before? A. It does somewhere, your Honor.

Q. Does that mean the deputy goes down before the work starts and then inspects? A. Not in the circumstances that they use now. The dog-watch deputy usually - the deputy from the night shift inspection usually covers the early part of the morning or the day shift. They do go round and make inspections, or they should.

Q.If there are two shifts without interval the rules say that is to be considered as one shift for this purpose? A. Yes.

Q.You say that the deputy on the previous shift would inspect and then after that it would have to be at certain intervals? A.Yes.

MR.McNALLY: Rule 36 provides within four hours. As I understand it, the previous deputy has an inspection before he goes out.

HIS HONOR: Then how long after that is it the next deputy is required to inspect - within four hours? There are similar inspections which shall be made during the course of the shift at intervals of not more than two hours.

MR.McNALLY: Q.I think it is usual that when the deputy on day shift arrives in a place he goes straight to the mining face and tests for gas upon arriving there, is that correct?A. He should do.

Q.I think in this case the roof bolter, as in all cases,had his own lamp? A. I don't think they have it in all cases, but in this particular case the fellow in D Heading did. I don't think the roof bolter in C Heading had one.

Q.IN any event, before work, before roof bolting was to commence, tests would be made on the roof bolter's lamp to detect the presence of inflammable gas? A.It should have been.

HIS HONOR: But tests should also have been made by the deputy.

MR.McNALLY: That is so.

HIS HONOR: Should not he go right in before the roof bolters go in and see whether there is gas? Speaking of deputies at the moment - and you are representing the deputies - should not the deputies go in there and test? What I am interested in is assuming I accept this evidence, here is inflammable gas in the place just ahead of the roof bolters and it is discovered by the check inspector. I want to know whether it ought to have been discovered by the deputy.

MR.McNALLY: The work had not commenced yet; everyone is going in together.

HIS HONOR: What about the previous shift?

MR.McNALLY: It was detected and reported - this is General Rule 4 - it is the 9th November report which was tendered.

HIS HONOR: Mr. Mahon has drawn my attention to p.176 of the Act under "deputies", Rule 38 (read). I think that is categorical. This is a report dated the 9th, and it is Mr. Dumbleton. The General Rule 4 Report: 12.10 a.m. inspection concluded 3.a.m. inflammable gas detected C Heading is being diluted as given off. Others clear. Then there is the 3.40 to 5.50 inspection: Inflammable gas detected C Heading is being diluted as given off. Others clear. That inspection was completed at 5.50 so assuming that that particular area was tested somewhere between 4 and 5 o'clock, here we find it is something like 8 o'clock in the morning and there is a layer of gas still there, being diluted or not being diluted? A. A certain percentage of it probably was being, but there was still a layer of gas.

HIS HONOR: If I accept that report, does it mean it is safe for the workmen to go in to work? If it does not, why does not the deputy do his job under Rule 38 and tell the workmen what is the state of their working place?

MR.McNALLY: Surely the answer to that must have been - I think the Under-Manager, the Check Inspector and the Deputy arrived and tests were being carried out by the deputy at this very moment when the Check Inspector went into C Heading. He starts at the line of the face and works around to the various working places, as I understand it. The Check Inspector went in before the deputy had had an opportunity of checking around this working face.

HIS HONOR: Q. Is that the position, Mr. Parkinson? A. No, that was not quite the position. We had gone to the working face and I stood there for quite some time watching them fill the cars because one of the complaints was dust and the dust was mainly from the miner itself, so I stood watching the working of the machine to ascertain whether it was dusty or not and I found it was all right, so then we continued on round to the other places. I didn't see the deputy go - I don't know whether he went in front of me or not, but it was quite some time after we entered the section that we went round to the C and D Heading and in C Heading the roof bolter did not have a lamp and he had started work, but he hadn't got to the point where we found gas.

Q. Had anybody warned him about it up to that stage, do you know? A. He couldn't have been, otherwise he would have known. He didn't know until we told him.

MR.McNALLY: Q. The position is that you don't know just what the deputy did on this day? A. No. I was with the Under-Manager, I wasn't with the deputy.

Q.Did you speak to the deputy? A. I probably said good day to him but I don't know -

Q.Did you know where and what areas he tested? A. No, I don't know.

Q.You do not know?A.No.

Q.You did not actually see ? Did you see the roof bolter carrying out tests? A. I did see him getting down from the roof bolter in D heading. There were two roof bolters, one in C heading and one in D heading, and as we entered D heading he was just climbing down from his machine and said he had tested it and he told me later he had found gas there.

Q.So all you know, the deputy on the shift previously had found inflammable gas in C heading but you do not know what the deputy on this shift had in fact done? A.No.

Q.I think the procedure is that if any miners in the Bulli area have trouble with noxious gas or any gas at all, or dust, it is reported to you? A. Oh, not always.

Q.Not always? A.No, I don't think so.

Q.Did you ever have a report of any noxious gas or inflammable gas in 8 Right section? A. No.

HIS HONOR: Q. What does gas being diluted mean? A. It is being diluted, it is being rendered harmless.

Q.Does that mean it is issuing, it is there? A.Yes.

Q.But as it issues it is being rendered harmless by sufficient ventilation ? A. Sufficient ventilation.

Q.It does not mean you have a concentration of gas at one area and it is being diluted at the edges - it does not mean that, does it? A.No.

MR.LEE: May I ask is this book in evidence?

HIS HONOR: It has not been tendered.

MR.LEE: I think there is something Your Honor ought to look at at this stage and perhaps Your Honor may direct questions to the witness in relation to it.

MR.MURRAY: Before that is done, there are only two questions I would like to put to the witness, - (Permission granted).

Q.It is not in Australian Iron and Steel Mines including this mine, Bulli, the practice for roof bolters to be equipped with a flame safety lamp, is it? A.It is not the practice?

Q.Yes, in your experience it is not the general practice; am I right or wrong? A. Well, it varies from place to place.

Q.I will ask you about Bulli only then? A. I am not sure how many roof bolters are issued with oil lamps. I am not sure.

Q.To your knowledge does the machine man, the miner operator, receive any instruction in the use of the flame safety lamp at all? I am asking this in the light, for instance, of your evidence yesterday about the training of deputies? A. No. The general run of miner drivers have always complained that they don't get enough tuition when they are first issued with oil

lamps and it is only through experience that they gain in the workings that they get enough experience.

Q. To your knowledge at Bulli had they received any instruction prior to the November date we are dealing with? A. Not that I know of.

MR. LEE: Q. Instruction as to what, are you referring to? A. Detection of gas.

Q. But they have to sit for an examination, don't they? A. Yes.

Q. Before they get their certificate? A. Deputies, yes. We are on machine operators.

MR. LEE: I am sorry. This is a section which Your Honor can readily decipher and it may provoke Your Honor's inquiry (Shown to His Honor). Perhaps it would be better coming from Your Honor. That is a statement from Mr. Mangles in Mr. Parkinson's book.

HIS HONOR: Do you mean the area that appears to be crossed out?

MR. LEE: Yes. Your Honor will see certain very significant things there and you may wonder ~~why they were put in~~ and then crossed out and the thing apparently re-cast a little later on in the statement.

HIS HONOR: Q. Mr. Parkinson, this is your handwriting? A. Yes.

Q. And apparently your crossing out. Would you please read to us slowly what has been crossed out there? See whether you can decipher it. This refers to 8 Right Section, this report, does it not? A. 8 Right, yes.

Q. 8 Right Section and concerning the fire? A. Yes. Mr. Mangles said this, "During the previous week ~~or so~~ I was aware that there was inflammable gas behind the shunt as the deputy had mentioned the fact. This was the reason the bleed tube was put in the shunt to bleed the gas off. There has been a peculiar odour at the brattice for some time." Now this was taken from what Mr. Mangles said and when it was read back to him he said that that didn't seem right to him because he didn't know what Charlie Stewart had done and he said he couldn't say there was inflammable gas there because he never tested.

Q. Just one moment; Mr. Mangles said that to whom? A. To me.

Q. When did he say it? A. The day after the fire.

Q. And as he said it did you write it down? A. Yes.

Q. Did you try to make a verbatim report, a word for word report of what he said? A. I wrote down just what he said and then when I read it back to him he said that was not how it was, he said he couldn't determine that there was inflammable gas there so he said "Cross that out because I don't know if it was inflammable gas or not," and he said "I don't know because I never tested."

Q. What else did he say? A. "The bleed tube was put in. This was the reason the bleed tube was put in the shunt to bleed the gas off."

Q. And does he say something that Charlie Stewart had said? A. Well, this is what he said to me. He said he doesn't know what Charlie Stewart reported or whether he reported it or not, so he said he couldn't say there was any particular type of

gas but there was a peculiar smell at the back of the shunt, on and off, for some time before.

Q.Did he withdraw that last bit too, that there was a peculiar smell? A. No.

Q.You have crossed that out, haven't you? A. He crossed that out and later he said "There was a peculiar odour near the screen in my shunt for some time and I thought that it was gas and this is the reason for the bleed tube being in the shunt."

Q.Where were you when this statement was made? A. I was talking to him.

Q.Whereabouts? A. At his place.

Q.At his home? A.Yes.

Q.Just a couple of days after the fire? A.Yes - the day after.

Q.The day after the fire? A. Yes.

HIS HONOR: Does any counsel want to ask questions about that?

MR.LEE: Q. There is one question I would like to ask. May I just have the book. What he has got here is "During the previous week or so I was aware that there was inflammable gas behind the shunt and the deputy had notice of the fact " - is that what you have written there? Have I read it correctly? (Approaching witness) A."Behind the shunt as the deputy had mentioned the fact."

Q.Did he tell you what deputy it was? A.Yes, he mentioned his name.

Q.Then he asked you to cross all that out? A. Yes. When I read it back to him he said that was not right. He said he couldn't say it was inflammable gas because he didn't know, he didn't test, he didn't have an oil lamp.

Q.But did he explain to you why he wanted you to cross out that the deputy had mentioned the fact? A. He said "Cross out the whole section" because he didn't know whether it was inflammable gas or what it was, but he said later, as it says at the bottom, it was a peculiar odour.

HIS HONOR: I think that book ought to be tendered.

MR.REYNOLDS: I will tender it if no one else will. I called for it.

(Book marked Exhibit DD)

MR.PARKINSON: Q.You say you originally took a statement from Mr. Mangles' home the day after the fire? A.Yes.

Q.Do you say that that statement that has been crossed out was made to you by Mr.Mangles at Mr.Mangles' home the day after the fire? A.Yes.

Q.Was there anyone else present with you when that statement was made? A.Yes, the local check inspector, Mr.Taylor.

Q.The local check inspector? A.Yes.

MR.McNALLY: Q. (By leave) What time - this is going back to the western front - did you actually arrive in the western returns? A.It must have been some time after eight.

Q. What, ten past ten? A. I am not sure of the time the transport arrived now.

Q. And you say you stood at the miner in A. Heading for some time? A.Yes.

Q.How long?A. I would not know for sure the exact time we stood there.

Q.Well, ten minutes, five minutes, half an hour? A. No, it would be more than that.

Q.Three quarters of an hour? A. No, it would not have been that. It would have been somewhere about half an hour.

Q.Then you moved around searching for gas? A. Not actually searching for gas, but going around inspecting the area.

Q.Would you agree with this, that the roof bolters had not commenced work before about half past nine?A.One of them hadn't, one of them had.

Q.What time did he start? A. I don't know. He had started when we were there.

HIS HONOR:Q.You say he had started?A. Yes, the roof bolter in C. Heading was bolting by the time we arrived.

MR.McNALLY:Q.WHereabouts was he operating?A. He was in the place and he was back at the place a fair way, but I am not sure of the area.

Q.There is a cut-through, I think; the last cut-through inby? A. He was in the heading, he was in C Heading.

Q.But was he outby the cut-through or inby the cut-through? A. He was inby the cut-through.

Q.What time did he start work?A. I don't know.

Q.He came in with you? A. Yes.

Q.You do not know what time he had started? A. They went to the face before us. We stopped and looked at the plan for some time.

Q. You do not know what time he started? A. No.

Q.You do not know whether that was before or after a deputy's inspection? A. Well,there would have been inspection before from the night shift deputy, but I don't know whether the day shift deputy had been in or not. We stayed at the crib room and looked at the plan of the section.

Q. You do not know whether the day shift deputy had been there before or not? A. No, I don't know.

Q. What did you see the roof bolter actually doing? A. Boring a hole in the roof for a roof bolt.

MR.McNALLY: Perhaps the report of Deputy Harvey could be added to Exhibit "CC" They are all the reports of the western returns.

(Report of Deputy Harvey added to Exhibit "CC").

HIS HONOR: Where are the reports for Mr. Deputy Stewart for 8 Right Section for days before and after the fire?

MR. McNALLY: We are sorting them out here.

MR.SULLIVAN: I thought I had tendered those. My friend Mr.Mc Nally has them.

HIS HONOR: There is a report from Mr.Stewart here made out two days after the fire but it is the reports for the days before the fire I am interested in. I am informed they have not been tendered.

MR.SULLIVAN: My friend has them apparently. Incidentally, I have the western return ones here running from 8th November to 25th November. That should give a sufficient coverage. Your Honor has some of them, but I think this is a complete set. I think they are supplementary. These small ones are put in when the place is not working. I will tender those now.

MR.REYNOLDS: I do not object but I do not wish to be taken as conceding the western returns have any relevance to the present matter.

(Reports admitted and marked Exhibit EE).

RE-EXAMINATION:

MR.SULLIVAN: Q.You have been asked about visits with the Chief Inspector?A.Yes.

Q.Did the first of those visits with the Chief Inspector take place on 19th November? A.Yes.

Q.And then subsequently did you return again on the 22nd? A.Yes, that was the Monday.

Q.Did you make out a report in respect of your 19th November visit? A. Yes, I made them, the report of the fall inspections , together. It was part of the one inspection.

Q.And that is dated the 22nd, is that right?A.Yes.

Q.That does not appear to have gone into this book yet, has it? A.No, that has been typewritten.

Q.Have you sent a copy to the management yet? A. Yes, it should have been.

Q.You have sent a copy to the management?A.Yes.

MR.REYNOLDS: We have a copy.

MR.SULLIVAN:QBut it has not yet gone into this book? A. Well, they usually attach them to the books but I don't know whether this particular mine does or not. They usually attach them.

Q.Is this (indicating) your copy of your report dated 22nd November? A.Yes.

Q.Which is the first document in this file? A. Yes, that would be the one, if it is dated the 22nd that is it.

Q.Can you see it from there? (document shown to witness) That is your report, is it? A.Yes.

(Report tendered; objected to by Mr.Reynolds; objection withdrawn; admitted and marked Exhibit FF).

Q.You were asked some questions,and they seem to have gone in without objection, about the loss of 60,000 cubic feet of air.

Do you remember being asked that question? A. Yes. We made an inspection on about a week after the fire. The men had resumed work and when they got there they found conditions they didn't think were satisfactory so they wanted an inspection and we made this inspection. We met the manager and the Under-Manager. They were in the area around western returns and 2nd north and we said there was a particular ventilation problem and it was mentioned in that conversation by the Under-Manager - I don't know whether at that specific time or later on - that there was about 60,000 cubic feet of air missing and they didn't know where it was and at that particular time they were still looking for it and hadn't found it. This is what was said.

Q.This is what was said to you: They had lost 60,000 cubic feet of air? A. Yes.

Q.Did that apply to 1 north and western returns? A. 2nd north and western returns.

Q. I am sorry; and was 2nd north part of the split which contained 8 Right? A. Oh well, it is inby western returns. I think it is the last bit.

HIS HONOR:Q.Do you mean this: 60,000 cubic feet of air was missing from the western returns and someof that air was probably missing from 8 Right? A. It is possible. I don't know where they lost it at all. I don't think the management knew at the time. That is what he said anyway.

MR. SULLIVAN:Q. That is what he said to you?A. Yes.

HIS HONOR.Q. Let us take it a little further. Western returns is connected to the same ventilation system - it is a split off the same ventilation system as 8 Right? A. Yes.

Q.Yesterday Mr. Buck and Mr. Mahon and I were looking at this ventilation plan during the luncheon adjournment and resumed late because of it. Western returns is designated on this map as an area adjacent to M.V.37. 8 Right is designated as an area adjacent to M.V.18. Are you familiar with this plan?A. Yes.

Q.At any rate, you can check on this later on. They are obviously connected to the one ventilation system.They are marked as the western intakes and the western returns in the area between these two points.There is apparently a split off to the right in an area known as M.L.C., or marked here as M.L.C. Do you mean this: Assuming there is 60,000 cubic feet of air missing from the western returns? A. In that area. The 2nd north was the worst affected.

Q. Where is 2nd north on this? A. M.V.13 here.

Q.That was worst affected?A.Yes. There was re-circulation in 2nd north.

Q.Was it checked on these various splits to see how much,if any, was missing? A. They were checking the possible points where the ventilation was lost.

Q.When was this time you are speaking about?A.About the 16th or 17th,about a week after the fire.

MR.REYNOLDS:There is a full report of it here, Mr.Parkinson's own report, Your Honor.

HIS HONOR: Q.That is your report? A.Yes.

HIS HONOR: May I have a look at it?

MR.REYNOLDS: That is the book in evidence and the relevant part starts at the foot of the first page, "the under-manager stated ...".

HIS HONOR: Q.It is a report dated 17th November, "The under-manager stated at present there was a ventilation problem which was affecting both 2nd North and western returns panels and they were still in the process of finding and overcoming the problem. The manager stated until this has been fixed 2nd North will not be ready for work as it has been found recirculation occurs when the fan is started and this has been pulling gas around from the goaf." This report does not say when the air was first detected as having been lost, but was this made out on the day when you inspected? It must have, mustn't it? A. Yes .

Q.So the report is made out some eight days after the fire? A. Yes.

Q.What I am interested in finding out is whether tests were made for volumes of air in any routine way or any special way around the time of the fire.- that is up to and including the day of the fire. You did not make such tests, but I am. wondering whether the manager made such tests. Mr.Buck tells me that the under-manager must make a monthly report on ventilation. That may be a report which of course is out of date by the time the fire comes on; on the other hand it may not be. I wonder whether I can get some assistance from you, Mr.Reynolds?

MR.REYNOLDS: We will try, Your Honor.

HIS HONOR: Q.If there is air missing in one of these sections it may well be that there is a shortage of air in the whole area - the whole area of the intake and return? A.There was a shortage in two sections, western returns and second north.

Q.This is after the fire, of course? A.Yes. That was on the day of the inspection when we were there.

Q.It depends of course on how long the shortage had been in existence and that would depend on when the test was made to find that out. My problem is to consider whether there was any possibility that on the day of this fire there was a shortage of air in 8 Right section. That is a matter I am interested in? A.Yes.

MR.SULLIVAN: Q.And you were there because there was a stoppage of work on that day?A.Yes.

Q.Because of the lack of ventilation, is that right? A.Yes.

Q.(By leave) Just to assist with this ventilation matter which I raised earlier with you: I want you to assume the shunt as it was at the time of the fire, that is with the bleed tube and the brattice stopping? A.Yes.

Q.And with the air going through B heading and being stopped by the brattice of course and C heading blocked off. Now, apart from what was being drawn into the shunt by the operation of the bleed tube - do you follow that? A.Yes.

Q.(Approaching Exhibit A) Would any other air have gone into the shunt at A heading? A. Probably not, except for anything bled from the goaf, that was all.

Q.Only what was coming from the goaf? A.Yes.

HIS HONOR: Mr. Lee, have you any technical officers in the nature of physicists? I am wondering whether there is anybody who might work out a calculation for us which will show what fall in the barometer there would be as a result of the operation of these two particular fans in 8 Right Section. Obviously if you have fans which are in the nature of exhaust fans and you have a reduction of pressure, there is a fall in the barometer near the mouth of the bleed tube. You have fans of certain strength and you could work out from that what is the fall in the barometer. For instance, Mr. Buck has been advising me in this matter and I think at the moment we have come to a rough conclusion that at the moment the fans were put on there would be a fall in the barometer and it could be at the mouth of the bleed tube from the moment they are switched on, with fans of this size, but it may be or it is suggested that figure may be even higher. You may be able to have that worked out for us, given of course the data as to the type of fans.

MR.LEE: If it has not already been done I think we could. I know the inspectors are of the opinion and I think it is clear from their evidence that there is a fall in pressure by virtue of the use of these fans and they have all expressed that opinion. I shall endeavour, however, to get the precise figure for Your Honor.

HIS HONOR: Perhaps something else also: They may turn their mind at the same time to the direction from which the air would come into the bleed tube when it was operating. Without any practical knowledge of these things one would assume that the air, like a vacuum cleaner, sucks over the area in which it is, but of course when it draws air the air has to come from various points. I have received information from Mr. Buck that the air does in fact come from a sort of circle around it, curving in to the bleed tube itself. That could become quite important in this matter.

MR. LEE: We will check that too, Your Honor. On this point Mr. Parkinson is speaking about and the possible ventilation in 8 Right on the day of the fire, I have just checked Mr. Longworth's report and I am pretty sure it appeared in his evidence, that he gave the actual figures of the intake of air. I remember there is a reference here, total quantity 51,000 cumins and I remember him saying that, and so on. It should be possible by looking at Mr. Longworth's evidence to see whether there is any reflection there of any loss of air elsewhere. The point I am making is that by taking those figures, and Mr. Longworth did not comment on them or suggest they indicated any shortage, one should be able to ascertain whether there was any shortage. I shall have that turned up. This is after the fire - if it was right then one could assume it was right the day before. My impression is that if these figures are proper figures, what you would expect to have in the ventilation system, that would be at least some guide.

MR.REYNOLDS: I think the effect of his evidence was that there was nothing abnormal about the general ventilation of the section.

MR.LEE: In any event we will have that looked up. It may solve the problem if any problem exists.

(Witness retired.)

MR.REYNOLDS: Your Honor will recollect I indicated I was going to have the statements of the witnesses I will produce roneoed and distributed. May I have marked for identification the statement of Mr.P-uddle. Why I want to do that is so that

we have it established that it exists to-day in view of what was in the last witnesses note book and that he has not had the benefit of what is sometimes called hindsight and knowing what was in that note book before he made this statement.

(Statement of Mr.Puddle, m.f.i.l).

I want to tell Your Honor that I believe I have evidence available that the auxiliary fans do not cause any pressure differential throughout the section, that the only differential is in the intake and exhausting of it and that in the general pressure of the section there is no measurable difference in barometer pressure. I have available the man who made and designed this fan and that is the result of his findings and our observations. Your Honor will recall I asked Mr.Longworth that the tests were carried out in the mine, and they could find only a minimal difference,I think was the word. We say it is nil and if it is a difference it is very very tiny,hardly measurable.

HIS HONOR: I am talking about what one might call the localised fall in the barometer. The locale is right there at the mouth of the tube. Of course in front of that it may also cause some kind of a drop because if air flows into the tube it must be replaced by something else. If you say my idea may be wrong, I would be very interested to hear why.

(Short adjournment)

MR.LEE: Your Honor asked about the evidence of ventilation. Mr. Longworth did give it at pp. 163, 167 and 168.He gave the precise quantities and my clear impression was that Mr. Longworth's evidence led only to the conclusion that the ventilation system at the time he was in there after the fire was quite adequate. That is my conclusion and I think that is borne out by what he said.

MR. SULLIVAN: Mr. Murray did not want Mr. Lake this morning. Might he be released subject to being recalled if necessary?

HIS HONOR: Yes.

MR.SULLIVAN: Would Your Honor make the usual order as to his expenses?

HIS HONOR: Yes.

WILLIAM CHARLES HALL,
Sworn, examined as under:

MR. SULLIVAN: Q. Is your name William Charles Hall? A. It is.

Q.Do you live at 20 Harbord Street, Thirroul? A.Yes.

Q.Are you a machine man employed by the Bulli Colliery?A.Yes.

Q.How long have you been working at that colliery?A. Approximately 2½ years.

Q.Did you have any mining experience before that? A. Been in the mines since 1941.

Q.Doing all classes of mining work to the grade of machine man? A.Yes, I have done everything from trapping to contract mining.

Q.You were working in 1 North about twelve months ago?A.No, on the 1 North side of the pit where we broke through from 4 north.

Q.You were making a heading for the material - a transport road; is that right?A.That is correct.

Q.What was the system of ventilation of that place? (Objected to by Mr. Reynolds. Mr. Sullivan informed His Honor that the question went to the issue of safety).

HIS HONOR: Since the issue has been raised you are entitled to ask it.

MR.SULLIVAN: Q.What was the system of ventilation that was being used?(Objection pressed by Mr. Reynolds: Question rejected in this form).

MR. SULLIVAN: I have evidence of specific complaint on the part of this witness and two other witnesses about the ventilation and dust and the adoption of a certain course of action by the company, I am instructed, against the complainers.

HIS HONOR: I will hear the questions and I will listen to any specific objections to certain questions.

MR. SULLIVAN: Q. You were working with the Joy continuous miner in this place, were you not? A. Yes.

Q. Air intake was on the right of the miner, your air intake was on the right of the miner? A. Yes.

Q.It was coming from the direction of 1 North? A. Yes.

Q.What was happening about dust there? (Objected to by Mr. Reynolds: Allowed) A.The position we were in,we were in like an L shape. Our intake was on our right hand side coming across the place where the continuous miner was . We had to continue that heading from down there, which the air was coming directly ahead, that was directly to our left. The vent tubes were on the left hand side of the miner and the air, the pull of air coming over my place on the loader was much stronger than the pull coming from the vent tubes and the air was short-circuiting across the corner of the pillar and across the miner and bringing all the dust on to the operator of the miner and myself and the shuttle car driver. In normal practice the air should have been coming from behind us.-(Objected to by Mr. Reynolds.)

Q.Was the miner stopped several times by the crew? A. Quite often,yes.

Q.Did the assistant under-manager, Mr.Wright , see you? A.Yes he did.

Q.What did you say to him ? (Objected to by Mr.Reynolds)

HIS HONOR: I will allow the evidence as to the complaint insofar as the answer but not the complaint itself.

MR.SULLIVAN: Q. You said something to Mr.Wright, did you? A.Yes.

Q.What did he say? (Objected to by Mr.Reynolds; allowed).

HIS HONOR: I take it you object to all these questions, Mr. Reynolds.

MR.SULLIVAN: Q. You said something to Mr.Wright about it, did you? A.Yes.

Q.What did he say to you? A.Mr.Wright said "I want you to stay with that machine at all times", to which I replied "Well I can't see there is any sense in me swallowing dust while the miner is cutting coal and discharging on the floor - I was to pick it up with the loader and discharge into the shuttle car.

HIS HONOR: Q.What was Mr.Wright's position? A. Assistant under-manager. While the car was away - there is only one shuttle car in this section - while the shuttle car was away delivering it to the conveyor belt the miner was cutting coal there and I was just standing in the dust while he was cutting the coal and the car was away, and I used to walk to the intake side, only a matter of a few yards.

MR.SULLIVAN: Q. What did Mr.Wright say to you following on your complaint? A. I said "I'm not going to stand in that dust when I can get out of it and there will be no drop in production". He said "Well you won't last ten minutes in this section".

Q.Did he go away then? A. I don't actually know whether he went away or not.

Q.Did something happen to you next day? A.Oh yes, next day I was pulled out of the transport at 4 North which is some miles away and I was put on general underground duties.

Q.Coming to the Monday the day before the fire, that is Monday 8th, you were working as a replacement at the face in western returns? A.Yes.

Q.Your deputy was Mr.Doug Harvey? A.Yes.

Q. Did you notice something about the ventilation there? A. Yes, the ventilation was very poor and the dusty conditions were very bad.

Q. What about the bricklayers putting up stoppings, ventilation stoppings? A. Well, for the last, I would say four or five days previously the bricklayers had been working with myself laying track and they were at least, I would say at least 4 stoppings back from the face. The stoppings that should have been put up on the return were merely brattice, a very leaky brattice stopping to say the least.

Q. Did you complain to Mr.Harvey about this? A. I did speak to him on several occasions about it.

Q. What did he say? A. He just said it was out of his hands sort of thing and he could not do much about it.

Q. Did he say something about the manager? A. He said 'The manager has told us to stop all overtime".

Q. Was anything said about the bonus? A. I said "If that is the case then if we are going to work in discomfort owing to lack of ventilation," I said, "The best plan for us would be to slow down a bit and cut down on production".

Q. What did he say about that? A. He said, "You are going to lose a couple of shillings on bonuses". He said, "You don't cut off your nose to spite your face".

Q. What happened to you after that on the next day? A. The next day I was called out of the transport at 1 north.

Q. Who called you out? A. Fred Wright, the Assistant Under-Manager.

Q.You were called off the transport at 1 North and what happened to you? A. I was placed on general underground duties again up at the marshalling yards.

Q. Did you see the Under-Manager about this? A. Yes, when I stepped out of the transport I called out to a couple of chaps-earlier in the morning I said "Something is going to happen to me again, I suppose I'll be shifted". I yelled out to this chap, "Well there you go I told you." He said, "Yes, you were pretty right".

Q. Did you see the Under-Manager? A. The Under-Manager said "What's up with you?" or something to that effect. I said, "I was chased out of the panel before when I complained about dusty conditions and ventilation and on thing and another and its happened again".

Q. What did he say? A. He said "You must have a guilty conscience about something".

Q. Who was the Under-Manager? A. Jack Puddle.

MR. CRANE: No questions.

MR.MURRAY: No questions.

MR. PARKINSON: Q. Are you suggesting because you made complaints about dust and complaints about ventilation that you were almost immediately taken away from that particular job and put on to some other job? A. The very next day, twice, yes.

MR.McNALLY: Q. Was it you who set the machinery in motion that caused the Check Inspector to come into that area? A. No.

MR.LEE:I would like to make this observation: This is a matter upon which I am quite unable to cross-examine. I have no knowledge of it and no means of knowing and I thought I ought to make that clear. My inability to cross-examine is due to the fact that I have nothing to cross-examine on.

MR.REYNOLDS: We would all be in the same boat, I would think, Mr.Lee.

Q.Are you happy in the service of the Bulli Colliery? A.I mean to say, it's close to home - (interrupted).

Q.Are you happy in the service of the Bulli Colliery? A.I am as happy as anybody, I suppose.

Q.You are free to go and work at another colliery if you want to? A.Yes, I am. Oh yes.

HIS HONOR: Q. You have spoken about a complaint which you made. If you had not been called out, assuming what you said is right, you would have gone on working there, would you not? You only left that area in which you were working because you say you were ordered to leave? You were pulled out, as it were, and put somewhere else? A.That is right.

Q.You would have gone on working? A.Oh yes.

Q.Would you do that knowing conditions are dangerous? A.Yes, I would say so.

Q.You would go on working in a position of danger. Having reported it, say to a deputy or to an under-manager and having nothing apparently done about it except for the order to continue, what is your next step? What do you do there? A.The next step would be to see the lodge officials.

Q.Did you, in these cases? A.No.

Q.Why not? A. Well, I was ordered out of the section, I was no longer employed in the section.

Q.Why did not you complain to somebody about it, some Miners representative? A. Actually in this particular instance it was just sprung on us, we had just broken through from this other section as we turned into this heading.

Q.You had been done a double injustice, hadn't you: Firstly you had been ordered to stay there and keep quite about it. That is what it really meant? A.More or less.

Q.Then, having made your complaint you were pulled out and sent somewhere else. You did not deserve that? A.I did not think so.

Q.That is two injustices? A.Yes.

Q.What did you do about such injustice, just bury it in your bosom? A. Well, that is all I did do.

Q.Why? A. There really wasn't much could be done about it.

Q.Isn't there any machinery whereby you can do something about it with your own Federation ? A. I suppose so, if victimisation could be proven.

Q.Won't a complaint to the Federation bring some response? A. Possibly.

Q.You knew this at the time, didn't you? A.Oh yes, I have known it all the time.

Q.You have been working in Bulli colliery for two and a half years? A.Yes.

Q.It is rather well paid? A. Yes, I know.

Q.With bonuses and so on? A. Yes, that is true.

Q.I suppose you have worked in areas where in addition to dust gas has been discovered? A. I have, yes.

Q.Have the men - never mind about whether deputies have done anything about it or not, I am not interested in that at the moment, do the men continue to work in such an area without complaint? A. Well, not the roof bolters, Your Honor.

Q.What about the others? A. We have stopped the miner in western returns until such times as it has been bled off.

Q.You have stopped? A. The operator, yes.

Q.The men? A.Yes, the operators.

Q.Without the deputy's insistence and on their own? A. On their own bat.

Q.How often do the men take action of this kind? A.Not very often. There has not been till just lately, I would say, a great deal of attention given to gas, really,

Q.The suggestion has come to my mind by the evidence in this case that there are occasions when men, knowing of the danger, are content to take the risk and work there because of the lucrative payment they get from working there, in other words, they do not want to lose money, lose fairly good pay - I do not say it is the best in the world - but fairly good. What do you say about that? Do you think there might be any basis for that feeling in my mind? A.I would not say if they thought there was any danger to life, I don't think the bonus would be any great incentive to them.

Q.Do you think they might be inclined to discount the danger under those circumstances, think it is not as straight as it is or as it may be? A. They might be inclined to minimise it a little.

Q.Are the men reluctant to leave work in circumstances where there is some detection of gas? A.Not so much gas but I know the miner, the continuous miner, is continually stopped in the western returns till the dust clears and the men are erecting timber and such.

Q.Dust? A. Yes, dust - not gas.

Q.You can see dust? A.Quite clearly,yes.

Q.You cannot see gas? A.No, you cannot see gas, no.

MR.SULLIVAN: I have no further questions, Your Honor.

(Witness retired)

HIS HONOR: I will make the same order as to his costs.

HENRY VANAMEN
Sworn, examined as under:

MR. SULLIVAN: Q. Is your name Henry Vanamen? A.Yes.

Q.Are you a machine man employed at the Bulli colliery? A.That is correct.

Q.You have been there since 1952? A.Yes.

Q.You live at 44 Point Street,Bulli?A.Yes.

Q.About three months ago you were working in the main western returns? A.Yes.

Q.You were on the vent tube side of the left hand side of a Joy continuous miner at the face? A.That is correct.

Q.The miner at that stage was depositing the coal on the ground behind it where it was being picked up by a 14BU.loader?A.That is correct.

Q.Was there dust being created by the miner? A.Yes, there was dust created by the miner, and, at the same time, the 14 B.U. - very bad.

Q.Was that affecting you? A. It was affecting me very bad because it was drawing towards the fan.

Q.Did it have any effect on you? A.Yes it did.

Q.Who was the deputy in charge ? A. Doug Harvey.

Q.Did you complain to the deputy about it? A.Yes I did.

QWhat did you say to him? A. He said there was no dust there.

Q.What did you say to him first? A. I said "I would not work in that dust", I said "there is too much there".

Q.What did he say? A. He said "There is no dust there". I walked outside, like, to the intake airway out of the dust.

Q.Did something happen to you a few days after that? A. Two days after,yes, I got shifted about ten o'clock one morning.

Q.Who came to see you? A. Mr.Amos, Terry Amos.

Q.Is Terry Amos the overman? A. Yes, he said he needed a loco driver.

Q.You were put on loco driving then? A. Yes.

Q.Away from the face? A.Yes, away from the face, that's right.

Q.Did you complain to the lodge officials ? A.Yes I did.

Q.After about a month were you put back on the same continuous miner? A. That is correct.

Q.What happened? A. Same thing happened again, the dust was there. I was timbering and the dust was very bad again and I complained.

Q.Who was the deputy? A. Doug Harvey. He said "I will see something about it" I got shifted next day again.

Q.You got shifted next day? A.Yes.

Q.Was Mr.Puddle connected with this at all? A.Mr.Puddle came in right on knock-off time, 2 o'clock, and I was really heaving at that time, in the rib side.

Q.In the dust? A. In the dust. I said "I would not work in it no more, I have finished." He never said nothing, Mr.Puddle never said nothing to me but he had a word with Mr.Wright.

Q.Thereafter you were shifted? A. That is correct.

CROSS-EXAMINATION:

MR.CRANE: No questions.

MR.PARKINSON: Q.When you made these complaints and you were removed from that particular job were you told at all by any official as to why you were being removed? A. No, I wasn't. I asked why and I never got no reason. I said "Why was I shifted"? And they said "We need you on the job."

Q.Under your award conditions the management have that particular right to remove you, have they not? A.Yes, I think so.

Q.Providing they do not reduce your wages? A. That is correct.

Q.Do you think it would be very difficult for you to prove that you had been removed as a result of your complaint about certain conditions? (No answer)

HIS HONOR: I d o not think I can allow that question,Mr.Parkinson.

MR.PARKINSON: Q.How long have you worked at Bulli Colliery? A.Well, I started in 1952 and I left and came back in 1954 and I have been thereever since.

Q.1954? A. I was at Keira for two years. From 1954 to 1956 I was at Keira.

Q.And is it most convenient for you personally to work at this particular colliery? A.Yes, I think so.

MR. MURRAY: No questions.

MR.McNALLY: No questions.

MR.LEE: Q.You might be able to throw some light on something that is relevant to this inquiry. You made the remark that the dust was being drawn towards the fan? A.That is correct.

Q.How far was the fan away from where the miner was working? A. I would say about 30 yards.

Q.30 yards? A. That's all, yes.

Q.And it was just one fan, was it? A. One fan, that is correct.

Q.And did it have a bleed tube on it? A. Bleed tube, no, not at that time.

Q.It was just operating as a fan in that area? A. Oh yes, you mean tube lengths?

Q.What is that? A. The tubes, the lengths, you mean?

Q.Well, the fan was 30 yards away from the miner? A. Yes. Fan tubes you mean?

Q.Was there any tube from the fan into the face at all? A.Oh yes.

Q.How far was the mouth of that tube from the miner? A. About two or three feet from the inby to the prop, like to the face.

Q.So it was fairly close to the miner? A.That is correct.

Q.You say the dust was going across where? A. Opposite - over from the back end of the miner towards me like where we put the pop up.

Q.Could you see this dust actually moving towards the fan? A. Yes.

Q.You could see that quite plainly, could you? A.Yes, that is true.

Q.So what you are saying is this, is it, that although the fan was some distance from where the dust was being created, it was pulling it across towards the fan? A.Yes.

HIS HONOR: Q.Are you able to tell me whether there were two fans or one? A. Always worked with one.

Q.There was one fan? A.Yes.

Q.Do you know what recirculation means? A.Yes, I know what recirculation means.

Q.MR.REYNOLDS: And 30 yards - 90 feet - you could see dust going towards the fan? A. 30 feet, I am sorry.

Q.Which is it, 30 yards or 30 feet? A. 30 feet, I am sorry.

Q.Are you sure of that? A.Yes, definitely sure of that.

Q.And you could see what - a cloud of dust being drawn by the suction? A.You could see suction from the fan.

Q.You could see suction from the fan? A. Yes, you could see it drawn towards the fan. You see, when you start a new place it is very strong and starts with dust.

HIS HONOR: Q.How do you see this dust? A.Well, the fan is very close -

Q.No, by what light? A. By your own light, by the miner's light and from the continuous miner you can see dust all over you.

Q.Is it dust travelling in a beam of light or is it travelling in a widely illuminated area? A. Widely, towards the fan. You can see it widely coming over.

MR.REYNOLDS: Q. But do you say it was being sucked into the fan? A.I would say so, yes.

Q.And you said you would not work there? A.I said I wouldn't work it, not in the dust. We stopped the machine.

Q.And they took you at your word and put you to work somewhere else two days later, did they? A.Yes.

Q.You got the same money? A.Yes.

Q.And somebody else drove the miner? A.Yes, somebody else worked it.

Q.And this happened twice,did it? A.Three times.

Q.That you asked to be taken off the miner? A. I haven't been asked to be taken off.

Q.No, you yourself asked? A. No, not while the dust was there, I wouldn't work in the dust.

Q. When was it you complained to your Lodge official?A .About the next day when I was shifted.

Q.But on one occasion or more than one occasion?A. Three occasions.

Q.You complained to him on three occasions? A. Yes.

Q.Was anything done? A. I don't know1 I just reported it.

Q.Did you ask whether anything was done?A.Yes,I think I did.

Q.You think you did?A.I think they did - I went to see them.

Q.What did they tell you?A. I don't know - I reported it to them.

Q.WHAT did they tell you when you asked what had been done? A. What have they done to me?

Q. No; you complained to a Lodge official?A. That is correct.

Q.And I asked you did you ask him what they had done about it afterwards. Did you? A.Yes, I did, and they said "Nothing happens."

Q.Nothing happened?A. No.

MR. SULLIVAN: No further questions.

(Witness retired and excused)

ROBERT EDWIN WITTY,
Sworn and examined as under:

MR. SULLIVAN:Q.Is your name Robert Edwin Witty?A. That is right.

Q.You live at 24 Light HORSE Drive, Woonona? A. That is correct.

Q.You first started in the Bulli Pit in May of 1964, is that right? A. That is right.

Q.Had you had mining experience before?A.No, this is the first time in a coal mine.

Q.You worked about seven months as member of a continuous miner crew in western returns up till February of 1965, is that right? A. That is right.

Q.This was another case of a continuous miner which dropped the coal behind it, where it was picked up by a 14 B.U., is that right?A. That is correct.

Q.What were the conditions like working on the miner?A. Well, timbering at the face they are very very dusty. At times you couldn't see your way out past the 14 B.U., it would choke you, like the dust would get in your throat and choke you.

Q.Did you complain to anyone about the dusty conditions? A. Continual complaints to the Lodge officers and the deputies.

Q.Who was your deputy there?A. Ray Waring.

Q.Then were the District Check Inspectors called in?A. Yes, Vic Parkinson came in on a couple of occasions, I think it was.

Q.Anyone else, the Fields Check Inspector?A. Clarrie Packham was there at one stage.

Q.For a while the conditions were improved, were they not? A. Only while you were close to the fan like.

Q.And what happened after that? A. Well, once you got away further from the fan the conditions worsened.

Q.Did you complain again? A.I did.

Q.And what happened to you in February? A.I was informed by the overman, Terry Amos, that I would start the following Monday on afternoon shift.

Q.In what section? A. Like no general section - he just said to report on afternoon shift on the following Monday.

Q.As a shiftman? A. No, as a machine man.

Q.Are you still working on that? A.I am now working on dogwatch.

Q.And you have not been back on to the continuous miner since? A. No.

CROSS-EXAMINATION:

MR.MUURAY: No questions.

MR.PARKINSON: Q.These dusty conditions when you made complaints - were ever any dust counts taken? A. Yes, the dust counters were in there on four or five occasions.

Q.Have you any idea whether the persons who took the dust counts were from the Government Mines Department? A.I think so. The results were never revealed to us, like the management would not reveal the results to us.

Q.When you say you think so, are you aware that the Australian Iron and Steel have their own dust counters? A.Yes.

Q.Now, are you sure that they were the Mines Department dust counters, or the Australian Iron and Steel dust counters? A.Well, on one occasion we were discussing this before work with Mr. Puddle and he wasn't happy to believe the dust counters, so I take it from that they were from the Mines Department.

Q.Mr.Puddle said that he did not believe them? A.No, well, one of the men there brought it up that at times they had brought their own dust counters in when they wouldn't believe the Mines Department reading.

Q.Well, that is not uncommon. You have worked at this particular colliery approximately 1[illegible] months? A.Yes, round about 18 months.

Q.Has there been any disputes at this particular colliery in the last 18 months on dusty conditions? (No answer)

MR.REYNOLDS: Are we worried about this, Your Honor.

HIS HONOR: No, I do not think so, Mr.Parkinson.

MR. McNALLY: No questions.

MR.LEE: Q.Would you tell us what you observed was the effect of the fan upon the movement of the dust, if any? A. Well, like, as I said before, depending on how close you were to the fan on some occasions you might have been anywhere up to 120 yards away from the fan,which the further you get away the weaker the pull of the fan gets. You have all the tubes but if you

get close to the fan, you can definitely like see the fan sucking the dust in a cloud like smoke.

Q.You mean the fan itself, not just the bledd tube?A.Well, you station your fan in one heading and while you are driving your three headings the fan stops there and you just keep adding tubes on as far as you go.

Q.You were in Court when the last witness gave his evidence, were you not? A. Yes.

QYou heard him talk about a cloud of dust going over to the actual fan, the actual unit? A.Yes,well, when you cut the coal they drop it on the floor. You have air coming behind these machines and naturally it must push it back.

Q. Did you see the actual cloud of dust going back towards the actual unit of the fan? A. Yes. You couldn't see sometimes, you had to close your eyes it was so thick.

HIS HONOR:Q.Let us get this clear. Did you see the dust going over to the fan or to the tube? A. The tube, like the bleed tube.

Q. And how far do you say it travelled? A. Well, depending on how many headings and the length of the pillars you are driving.

Q. I do not mean how far the tube travelled, but how far the dust travelled from the mouth of the tube? A. Well, the width of the heading from behind the miner.

Q.How far would that be?A.Oh, 30 feet probably.Something like that, about 30 feet.

MR.REYNOLDS:Q. Not 30 yards? A. Not 30 yards.

Q.Were you the only one who complained in that crew about the dust?A. No, there was continual complaint from all the crew.

Q. But you were the only one who was shifted? A. No, Warwick Hall was shifted - Mr. Hall was shifted.

Q. Was he on your crew? A. Yes.

Q. But was he shifted at the sime time as you were? A. Previously, before me he was shifted.

Q.And you were shifted in February 1965?A.Yes,that is true.

Q.You say he was shifted before you?A. That is right.

Q.And at this time though that you were complaining, he was not there?A. That is right.

Q. He had gone? A. Yes.

Q. But what I was asking you was this: At that time was all the crew complaining? A. Yes.

Q.But you were the only one of that crew who was shifted?A.Yes.

Q.Somebody else took over your duty, did they?A. Possibly,yes. They must have done.

MR.SULLIVAN: No further questions.

(Witness retired and excused).

541. R.E. Witty, retired.

MR.SULLIVAN: The last thing I will have to do in my case is the tender of a document. I have spoken to my learned friend Mr. Reynolds about it. I am instructed that on the morning of the fire a statement was issued by someone representing the Australian Iron and Steel to the press and union officials. I have a copy which was issued to the Miners' Federation. My friend does not insist on strict proof of it and I would like to tender it.

(Document admitted and marked Exhibit GG).

MR.SULLIVAN: I have no further evidence.

MR.LEE: It might be helpful to Your Honor and all counsel to know what the writing on the bottom of this document means. There is "11 a.m. Thursday " written there with a pencil tick against it. Perhaps Mr.Sullivan could tell us?

MR.SULLIVAN: It is in the condition in which it was handed to me with the instructions that it had been handed out. I am not aware who wrote the "11 a.m. Thursday" or what the situation is about that. I will not ask Your Honor to draw any inference at all from that, nor from the addresses and the statement contained in the first two paragraphs.

MR.REYNOLDS: I am prepared to put the evidence from the mine officials if no one else has any evidence.

MR.LEE: I remind Your Honor that you did want to hear from Mr. Cambourne . From the point of view of proper sequence, if there is a proper sequence, Your Honor may wish to hear from him at this point of time.

MR.McNALLY: He is here.

HIS HONOR: I did indicate I wanted to hear from Mr.Fears and Mr. Wright. Do you propose to call them, Mr.Reynolds?

MR.REYNOLDS: Yes. I have deliberately not dealt with them at this stage because I deemed it wise that Your Honor should hear from the senior men first to avoid duplication of cross-examination. If Mr.Wright, assistant under-manager, goes into the box there may be a temptation from the Bar table to go into things whereas I would prefer to put Mr.Stone , the manager, and Mr. Puddle, under-manager,in as they are better qualified to answer questions, and then for Your Honor to hear from Mr.Wright.

HIS HONOR: I think that is a proper course.

WILLIAM GEORGE CAMBOURN
Sworn, and examined as under:

HIS HONOR: Q.What is your full name? A. William George Cambourn.

Q.Where do you live? A. 46 Owen Street, Bulli.

Q.What is your occupation? A. I am employed as a deputy at Old Bulli colliery.

Q.Were you employed as a deputy in the period before this fire on 9th November last? A.Yes I was.

Q.In 8 Right section? A. On afternoon shift.

Q.How long had you been employed there? A.Approximately 12 years.

Q.On the days up to the fire did you detect on your testing any gas of any sort? A.Yes.

Q.Where did you detect gas? A. Mostly on the goaf edge.

Q.On the goaf edge? A. On the goaf edge.

Q.Are you familiar with the plan of the section? A. I haven't seen that plan before but I am familiar with the section.

Q.When you say on the goaf edge, on any particular heading, A, B or C? Take the few days before the fire? A. No, no particular headings.

Q.No particular headings? A. I would say B heading.

Q.Mainly B heading? A.Yes.

Q.There are some cross-sticks in B heading, are there not?A.Yes.

Q.Do you know how they came to be placed there? Did you have them placed there or did somebody else? A. No, I didn't have them placed there - one of the other deputies.

Q.What about in A heading? Was there any gas that you detected in A heading in the goaf area? A. In A heading?

Q.That is the topmost of those (indicating Exhibit A) nearer to the extension? A. I think the first day the miner started to drive No.2 heading down, there was gas detected there.

Q.What kind of gas was that? A. Noxious gas.

Q.Noxious gas - carbon dioxide? A. Carbon dioxide.

Q.You were still working there of course on your evidence when the car used A heading on the goaf side as a shunt? A.Yes.

Q.Did you at any time detect gas in the area then - that is in A heading? A. Not after it was used as a shunt.

Q.Did you test for gas there? A. Every night.

Q.Do you recall there was a brattice stopping erected across?A.Yes.

Q.Do you know who had that stopping erected? A. I know who erected it. I don't know -

Q. Who was that? A. The dog-watch shift before. It was erected on the Monday night dog-watch shift which would be Tuesday morning early.

Q.In other words, the shift before the one in which the fire occurred - the Monday night? A. The week before that. When No.2 was driven down off A heading.

Q.You realise it was erected because gas had been detected there in that area? A. No, It was erected - that eventually would have been a shuttle car shunt and it was erected to bring fresh air into the shuttle car shunt.

Q.To bring fresh air into the shuttle car shunt, you say? Would you go over to the chart (witness approaches Exhibit A) and perhaps if you stood on this side so that we can all see. Would you explain how by the erection of that stopping there you brought air into

the shuttle car shunt? I do not mean you, but how the stopping did it, whoever erected the stopping? A. Well, by putting the stopping across there, the flexible vent tube would draw fresh air into the shuttle car shunt.

Q.Is the flexible vent tube the same as the vent tube we have been hearing about? A.Yes.

Q.You say that draws air into the shuttle car shunt? A.Yes.

Q.We are close to lunch time now, with about 2 minutes to go. I would like you to think over that during the luncheon adjournment and see whether that really works out in your mind. Would you please do that? A. I do not understand Your Honor.

Q.Would you think over that answer and see whether you care to alter it after the luncheon adjournment? A.Yes.

(Luncheon adjournment)

HIS HONOR: There was the Check Inspector's book which was kept at the colliery and which I understood was tendered this morning but it apparently has not been marked.

(Abovementioned book marked Exhibit HH).

HIS HONOR: Q. Have you thought about this matter of the brattice and its purpose in the shunt? A. Yes.

Q. What do you say now? Do you wish to add to what you said this morning? A. I still say that was to ventilate the shuttle car shunt.

Q. BY drawing fresh air into the shuttle car shunt. You do not think its purpose was to seal off the goaf and contain the gases and keep them away from the shunt? A. I don't think so.

Q. In your opinion would it have had the effect of doing that? A. Yes, I think so.

Q. It would have the effect of sealing off the goaf gas; is that right? A. I think so, yes.

Q. When I say "Have the effect", it might not be successful, but it would have a tendency to do so. Did you test around that brattice? A. I did.

Q. Did you find any gas? A. I found noxious gas.

Q. When did you find that? Are you able to recall? A. It was the first night the miner started to drive No. 2 cut-through.

Q. When was it? How long before the fire? A. That was on the Tuesday before the fire.

Q. That is a week before? A. Yes.

Q. Did you test for gases on your shift around that area? A. I did.

Q. Afterwards? A. Yes.

Q. Did you find any gas at all? A. I found it when the machine first started, when I first went in after that.

Q. What day was that? A. Tuesday.

Q. That was the week before? A. Yes.

Q. But after that Tuesday you say you tested for gases around that area? A. Yes.

Q. Did you find any gas at all? A. Not in A Heading.

Q. Not in A Heading at all? A. No.

Q. Did you find gas anywhere else? A. I think one night on the goaf edge I did find noxious gas again.

Q. In what heading? A. I would say B Heading.

Q. You say you tested on every shift? A. Yes.

Q. That is, every shift you were on? A. Yes.

Q. How many shifts would that be? How many different days? A. This is before the incident?

Q.Yes, after you had first discovered gas there? A.I would say five shifts after that.

Q.Five after that, and there was just no sign of gas? A. There was no sign of gas.

Q.Did you test around the mouth of the bleed tube? A.Yes.

Q.you could detect no gas around the mouth of the bleed tube? A. No gas at all.

Q.Did you test for inflammable gas anywhere? A. I did.

Q.Did you at any stage find any - the only inflammable gas you were concerned with was gas that was methane, or contained methane? A.Yes.

Q.Did you find any sign of methane anywhere? A. Not in that particular week.

Q.Had you in that section found methane? A. Yes. It is quite a while back. I found it on the goaf edge may be once or twice.

Q.I suppose at that stage the goaf would not be precisely where it is now? A.No.

Q.Did you report the finding of gas on the Tuesday? A.Yes.

Q.How did you test for gas? What with? A. A safety light.

Q.The oil safety lamp? A. The oil flame safety lamp.

Q.How do you test for noxious gas using the oil flame safety Lamp? How did you use it to make the test around the brattice area? A. Firstly when I went in I reduced the height of the flame and I went up around the roof area which is about the middle of the place and I found nothing. I brought my lamp down and increased the wick height possibly quarter inch, maybe a little bit more and then slowly went down towards the floor.

Q.There was no reaction at all from the flame? A.No reaction at all.

Q.In the period after that Tuesday in that week? A.Yes.

Q.(Exhibit Y shown to witness) Have you seen that document before? A.Not this document.

Q.Have you seen a copy of it? A.I have seen one like it,yes.

Q.Was it issued to you as a deputy? A. No.

Q.Where have you seen it? A.On the wall of the Mines Rescue station at Belambi.

Q.Have you made yourself familiar with it particularly with regard to gases? A.I think so, pretty well.

Q. Do you notice the section down below that deals with blackdamp? A. Yes

Q.Have you read all the relevant material in regard to blackdamp on that charg? A.I had most of this when I was going to school for my deputy's dertificate.

Q.You had most of it? A. I have not had time to read this but - -

Q. I will ask you: Having had this chart on the wall for you to read and having learnt your job at school whether you recall reading this about blackdamp under "Remarks""In coal issues or outbursts consist mainly of carbon dioxide and may be accompanied by methane" -

MR. McNALLY: Your Honor -

HIS HONOR: I would like the witness to answer the question. Are you objecting?

MR.McNALLY: Yes, with respect.The witness said he had only seen that on the wall of the Mines Rescue Station. Your Honor has assumed it was there for him to read. That is the only time he has seen it.

HIS HONOR:Q. Was it anywhere in the mine for you to read? A. Never seen one at the mine, no.

Q.Had you seen one elsewhere apart from that at the Rescue Station?A.I have an idea there was one at the Technical College in Wollongong on the wall.

HIS HONOR: I understood this was a chart issued to deputies. You produced it ,

MR.McNALLY: I was under a misapprehension at one stage about that, Your Honor. I think Your Honor asked the Gas Inspector whether that was the position and he said Yes, but I understand it is not the position.

HIS HONOR: MR. Donegan was the witness I asked and he said he had a hand in the preparation of it and understood it was to be issued to mine officials. I took it it was not just the manager of the mine or the Under-Manager. Are you telling me your instructions are that deputies were not required to read them or they were not issued to deputies?

MR.McNALLY: They were not issued to deputies at Bulli. I don't know whether they were ever issued to deputies at all.

HIS HONOR: That they are stuck on a wall in a Mines Rescue Station telling the people in charge of the Rescue Station where these things are and what they comprise and they do not go to the deputy and the deputies at Bulli Mine apparently do not know very much about them.

MR. McNALLY: I am instructed they are not issued to Deputies.

HIS HONOR: I don't know what that means: I suppose it means they do not get a copy individually. Does it mean they are not required to read it and familiarise themselves with the contents? Is that what you are saying happens at Bulli? I am not cross-examining you, Mr. McNally, I just want to know.

MR. McNALLY: My understanding is the only time Mr. Cambourne has seen this is at the Mine Rescue Station and he thinks there was one at the Technical College on the wall.

HIS HONOR: I was making the mistake of thinking the Mines Rescue Station is some part of the mine itself. That was what he said.

Q. Apart from this were you ever told carbon dioxide may be accompanied by methane? Were you ever told by anybody or in any course of instruction or in any document? A. Yes, we have been told,

Q.Then you knew that at the time? A. Yes.

Q. When you say "We have been told" who is "We"? A. The deputies class that I attended was told this.

Q. Did you know such a mixture when found at the floor level in certain mines of the Illawarra District was known as bottom gas or Illawarra bottom gas? A. Yes.

Q. You knew that? A. Yes.

Q. When you were testing for noxious gas, as you call it, blackdamp, did you have in mind that there might be methane there at floor level? A. Yes. I always suspected this.

Q. You always suspect it. I suppose you are not isolated as a deputy, you discuss these matters with other deputies? A. Yes, each deputy talks to one another every afternoon. We work together.

Q. I suppose you are able to tell me whether or not it is your impression that other deputies are familiar with the existence of bottom gas? A. I believe so.

Q. Familiar with the existence of methane, or that carbon dioxide may be accompanied by methane? A. I think every deputy should know this.

Q. You mean you think from your impression every deputy does know? A. Well, I know, yes.

HIS HONOR: Can counsel assist me on the witnesses who dealt with this?

MR. LEE: Mr. McGarrity and Mr. Ackerman and Mr. Robinson. Pp. 126, 125, 131 and, Robinson, 227. It may even start earlier than p.125, Your Honor.

MR. MURRAY: P.123, Your Honor.

HIS HONOR: Q. Mr. McGarrity gave evidence to the effect that in the week before 9th November he tasted blackdamp, what he believed was blackdamp in A Heading, and he was pointing to the intersection of A Heading and No.2 cut-through, that is the entrance to the shunt area? A. Yes.

Q. Then he said he asked the deputy, that is yourself? A. Yes.

Q. He and the man named Phil Clarke, Clem Robinson, one of them at any rate asked you or told you they could taste blackdamp. Do you recall any such incident? A. I remember one of them bending down to pick up a water hose which was tangled in the miner cable or something to that effect and they said to me "Taste this". It was very low on the floor. This is when I detected blackdamp.

Q. You detected it? A. Yes.

Q. He goes on to say you replied "Well, we will put a brattice screen to drag, to force air into the shunt"? A. Yes.

Q. He then goes on to say he asked you, or you asked him, I'm sorry, to go and get some brattice and start the screen? A. Yes.

Q. Does that mean you in fact caused a screen to be erected? A. Yes.

Q. Where was that screen, was that the one we are talking about? A. No.

MR. REYNOLDS: No.

HIS HONOR: Q. Where was this screen? A. May I show you on the plan?

Q. Yes, please do?(A. (Witness goes to plan). I had a brattice screen erected across the prop line on the right hand side looking at the shuttle car shunt. It came out onto the roadway only a couple of yards.

Q. That is the roadway in No.2 cut-through? A. No. 2 cut-through.

Q. This witness said that after that brattice screen was put up he got the taste again on the continuation of No.2 cut-through. That would be -? A. Going down here (indicates).

Q.That is right: About two barsinby of the cut-through, two to three bars. He said when he got that taste he mentioned it to another chap and the deputy and he said he had seen the elephant's trunk previously and he asked you whether they could use it on this occasion again. Did that happen? A. I don't remember him asking me this but we did put it in.

Q. You put the elephant's trunk in? A. Yes.

Q. Then he said he had a recollection that Clem Robinson on the Friday before the 9th, which was the day of the fire, said he felt squeamish from the gas in there, that is the shuttle car driver. Did you have any further report about gas being there after the elephant's trunk had been placed there? A. No.

Q. None at all? A. No.

Q. Did any man tell you he felt off colour in some way? A. They could have. There is hardly a night goes past without somebody has got a headache or something, I could not remember this.

Q. When you erected the brattice to drive air into the shunt and when you say the bleeder tube was erected, on each of those occasions or either of them did you make a report about the matter? A. About the bleeder tube or the brattice?

Q. Yes? A. No.

Q. Are you required to do so? A. No.

Q. Did you consult anybody before you did it? A. No.

Q. You did not go to the Under-Manager or any man like that and say "There has been some gas there, this is what I have done to get rid of it"? A. No, I did not.

Q. Apart from the General Rule 4 reports that you make, that you are required to make, do you communicate any of these things to the officials above you, of gas being there or steps taken to get rid of it? A. Not really, when our shift finishes our boss on afternoon shift countersigns everything. If there is anything of importance he sees it.

Q. That is, if it is reported? A. Yes.

Q. But you have just told me you do not report or did not report the erection of brattice or the use of the elephant's trunk? A. That is right.

Q. So there is nothing inthat regard for him to countersign? A. No, that afternoon, actually he is the overman, Charlie Taylor, he came in the section this afternoon and I can't remember whether I said anything to him or not.

Q. He would have seen it for himself? A. He should have. I don't know if he did. He should have.

Q. What is the purpose of the overman, to come in and to supervise your work? A. No, he does not supervise our work, he just sees what is going on. This particular time the day shift had gone in for their full shift and the face had run out of coal, actually started to dip down which only left about six feet of coal at the face. When we came in we had to start brushing the floor to get enough height for the machine to work. I think by crib time we filled two skips or something and this is why I say the overman did come in, he knew there was no coal going out so he must have thought there was something wrong. (Witness returned to the witness box).

Q. The witness Mr. Robinson, that, I take it is Clem Robinson, referred to before, said that when the extension of the bleeder tube was put in he noticed a big improvement. He was asked this: "As far as you were concerned on the shift you were on, the three till eleven, after the extension was put on did you ever detect or be aware of gas in that shunt again?" He said, "Oh, at times I did think there was a little bit of a taste of gas in there, yes". "Did you draw that to the deputy's attention?" He said "Yes". "Which deputy?A. The same deputy,Mr. Cambourn". This is after the bleeder tube was put on. Mr. Robinson said that he tasted gas again and drew it to your attention. Did that happen? A. I can't remember it happening. It could have.

Q. You say it could have happened? A. Yes.

Q. When asked whether he saw you do anything further about the matter his reply was "He had come to the shunt and when I told him I still tasted it he had walked past me. While I am sitting in the shunt I face away from the brattice and what he did behind me I could not tell you". Do you recall whether you did anything further about gas in the shunt area? A. I never found gas in there again. I never detected gas in the shunt.

Q. You did not detect gas again? A. No.

Q. Did you ever notice the braking system on the shuttle car smoking? A. I have seen it very hot. I could not say I have seen it smoking.

Q. You have seen them very hot? A. Yes.

Q. What do you do about that? Anything at all? A. It is reported to the fitter to see if he can do anything about it.

Q. Have you done that? A. Yes.

Q. Do you see whether the fitters do something about it, to use your phrase? A. On odd occasions I have seen him checking the brake fluid in the brake cylinders. One particular night I saw him, the brakes faded on one shuttle car altogether and he repaired this. I have seen them doing certain things to the brakes, I could not tell you just what.

Q. Did the brakes get hot again soon after he had done something to the brakes, do you know? A. I couldn't say.

Q. It would be your job to see, wouldn't it, whether what the fitter had done had remedied the trouble, wouldn't that be your job? A. I asked the fitter was the shuttle car all right and he said Yes, and that satisfied me.

Q. So the brakes would get hot again and that would be the end of the matter because the fitter had attended to it; is that the position? A. That actually is the fitter's job, if there is something wrong with any of the machinery he repairs it.

Q. Yes, I am not suggesting you repair the brakes, I agree it is the fitter's job to do so, but it is your job to see there is no condition of danger in the area? A. Yes.

Q. Do you regard hot brakes as a condition of danger? A. On the grade we were working in there the brakes were worked I would say all the time.

Q. They would get hot all the time because of the grade?A.Yes.

Q. Do you regard that as a condition of danger? A. The motors on the machine and everything like this, they all get hot.

Q. Do you regard the overheating of any part of the equipment, the mechanical equipment, a condition of danger? -

MR. REYNOLDS: Your Honor said "overheating".

HIS HONOR: I am conscious of that. I have not tied the witness down to it.

Q. Do you regard the overheating of the mechanical equipment, any part of the mechanical equipment, as a condition of danger? A. Excessive hot, yes.

Q. I suppose that is the same thing as overheating. Did you think the brakes were overheating when they were getting hot? A.No.

Q.You did not think they were overheating? A. No.

Q. You expected them to get hot on the grade? A. I did not exactly expect them to but they used to.

Q. You put it down to the grade; is that right? A. Yes.

Q. Yet you drew the attention of the fitter to them in respect of the amount of heat in them? -

MR. McNALLY: I am sorry, Your Honor, I must object. Your Honor is referring to the grade in No.2. The witness has not said he drew the fitter's attention to it at all.

HIS HONOR: Thank you, Mr. McNally.

Q. You mean you have never drawn the fitter's attention to the brakes getting hot when you thought the heating of them was due to the grade? A. Would you phrase that again? I do not understand.

Q. Tell us the occasion, the occasion or occasions that caused you to inform the fitter that the brakes were getting hot? A. One particular night I walked past the shuttle car and I could feel the heat coming from the disc brake this one particular night. I told the shuttle car driver to shunt this car which he did and the fitter - I think he said something like "The brakes are binding", or something to this effect.

Q. You did not put that down to the grade? A. Well, no. It would not - if the brakes were binding it would not matter if it was steep or flat.

Q. You yourself volunteered to me the brakes always get hot because of the grade? A. Yes, we were not always working on the grade but.

Q. You put that to me as a reason why you would not report such a matter to the deputy, didn't you? A. What was that?

Q. Did not you give that to me as the reason why you would not report the heating of the brakes to the deputy, because you expected the brakes to always get hot on the grade? A. I am the deputy.

Q. I am sorry, the fitter? A. When we get in on afternoon shift after day shift has used these cars in particular places the whole of the machinery, everything, not only shuttle cars, was always pretty warm.

Q. What do you mean by "pretty warm" could you put your hand on it? A. Well, you could put your hand on it.

Q. You could? A. Yes.

Q. What I have been told here is that the brakes got so hot that from time to time the men would put some kind of liquid, whatever form it was, not necessarily to cool them but as a sort of prank to watch it sizzle. You know how hot brakes have to be before that happens? A. Yes.

Q. In other words, they have to be able to at least cause water to boil. Did the brakes ever get as hot as that? A. Yes, I can remember the incident you are talking about. They were that hot.

Q. They were that hot on that particular night? A. Yes.

Q. Does that happen on more than one occasion? A. Going to the dip, yes.

Q. It did. Did it happen frequently? A. When we were going to the dip, I would say every night.

Q. That is not a condition where you can put your hand in comfort on the brakes? A. No, you would burn your fingers.

Q. Did you regard that as overheating? A. NO, not really.

Q. What means have you to test whether it is overheating or not? A. I have no means at all.

Q. Did it cross your mind the brakes might be becoming overheated when it reached that stage? A. If ever I thought they were overheated I would have shunted the shuttle car.

Q. Did it ever cross your mind the brakes might be becoming overheated and you had no means to tell whether they were or not? A. No, not really.

Q. You see, it has been suggested to me, abundantly suggested to me in this Inquiry that the ignition point of the inflammable gas which it is claimed burnt on this night came from an area of heat in the brake area of the shuttle car which was sufficient to ignite the gas, and it was put to me that caused a piece of wood to heat so much that it ignited the gas. It has also been put to me that some fluid oil had dropped from the brake drum and that was the ignition point. Whichever one it is obviously, you will see the significance of the fact that the place must have become so hot to cause this substance to ignite and, in turn, the gas ignite and you say to me that you had no means of telling whether those brakes were coming to

such a heat where it would do one of those things? A. I had no means of testing, no.

Q. You never thought that they might become so hot - it never crossed your mind? A. No, they seemed to get to a certain temperature and that is about where they stayed.

Q. What temperature is it? A. No idea.

Q. Just enough temperature to boil water? -

MR. REYNOLDS: That is not fair.

HIS HONOR: You don't think so?

MR. REYNOLDS: No.

HIS HONOR: The witness said he doesn't know.

MR. REYNOLDS: It does appear to me, with great respect, that this shuttle car had probably been designed specifically for use in a mine and I think it is probable that we shall have evidence about this. These brakes have been designed having regard to the fact that it is specifically for use underground. There is no evidence at all that these brakes ever did malfunction and I say, with great respect, it is a bit harsh on the witness to suggest to him he ought to have made the assumption that this equipment which is under the direct supervision of the fitter was malfunctioning, when there is no evidence it was.

CROSS-EXAMINATION:

MR.LEE: Q,Mr.Cambourn, when you were in Section 8 and the extension to No.2 cut-through was started, was there a brattice in A heading? A.This is the first day we started?

Q.Yes? A.Yes.

Q.Was that put up that day? A.It was put up the night before.

Q.What sort of a brattice was it? A. It was just an ordinary brattice stopping.

Q.Not a cement washed brattice? A.No.

Q.Who gave instructions for that to be put up, do you know? A.Well, actually, me, sir.

Q.And your object in putting that up? A. Because this was exactly the same set-up as in No.3. We just repeated this same set-up exactly.

Q.In No.3 you had gases from the goaf coming in, hadn't you? A. No.3?

Q.Yes. A. I wouldn't think so. There was a cement stopping in No.3.

Q.Perhaps it is a very wide question, but in No.3 first of all you had appreciated that gases might come in from the goaf? A. That is possible.

Q.And you had put up a brattice to stop them? A. It would have a tendency to stop them.

Q.I am suggesting to you you put the brattice up in No.3 to stop the gases? A.No, I wouldn't think so.

Q.Was the brattice in No.3 not a cement washed brattice? A.In No.3 it was a cement washed brattice.

Q.What is the purpose of a cement washed brattice as distinct from an ordinary brattice? A. The purpose ?

Q.Yes. A. It would be a better seal, I would think.

Q.You are not trying to seal good air from getting into the goaf, are you, when you use a cement washed brattice? A. No, that would be right.

Q.You are trying to stop gases in the goaf from getting out, is that so? A. Stay there.

Q.Do I understand that you are the gentleman who , so to speak, set up the arrangement in No.3 cut-through? A.No, No.2.

Q.Only No.2? A.Yes.

Q.But you saw the set-up in No.3? A.Yes.

Q.And in No.3 there was a bleed tube used? A.Yes.

Q.And it was used , the mouth of it, in the vicinity of the brattice? A.Actually it was not looking at the brattice. It was looking to the opposite rib.

Q.This is No.3 we are talking about? A. No.3, exactly the same as No.2.

Q.Did you know that before the brattice was put up in No.3 the accumulation of gas, whatever it might be, was sufficient, so it has been said, to bring about the situation that a man working there could only work for a few minutes and then went outside to get fresh air? A.No, I wouldn't know this.

Q.You heard Mr.Lake give evidence? (No answer).

MR.REYNOLDS: That should not be put, Your Honor. He should not be put in conflict with another witness. (Question allowed).

MR.LEE: Q.You heard Mr.Lake give his evidence, did you not? A. I heard part of his evidence. I was here yesterday.

Q.You heard that Mr.Lake was a bricklayer? A.Yes.

Q.And he went in to help erect a brattice in No.3, which he thought was No.2, but which looks at any rate as though it may have been No.3? A.Yes.

Q.You heard his description of the conditions there? A.Yes.

Q.Now at any time at all did the situation as he described it in this Court ever come to your knowledge? A.No.

Q.You never heard talk at any stage of any serious condition, for want of better words, at the brattice in No.3 heading? A.No.

Q.Just coming back to No.2, you arranged for the ordinary brattice to be put up in A heading? A.Yes.

Q.And that was put up the night before the cut-through started? A.No. 2 started,yes.

Q.What night was that we are speaking about? A. The brattice was put up on, I would say, early Tuesday morning.

Q.And when did the cut-through start, the extension? A.Tuesday day shift.

Q.So men were working in the area then? A. They would be working there when the machine started, yes.

Q.Did you test at the brattice or near the brattice in A heading for gas before the men started? Was it your job to do that? A.On afternoon shift I did.

Q.At the time you went on the afternoon shift would some deputy have tested prior to you? A. Yes, the day shift deputy.

Q.Did you have any notice or knowledge of gas having been found there - in the afternoon shift when you went on, on Tuesday afternoon shift? A.Did I have any knowledge?

Q. Yes, any knowledge of any gas having been found prior to your going on? A. Not as far as I can remember.

Q.Just to divert to No.3 cut-through for the moment, were you satisfied, in view of the fact that you knew a cement washed brattice had been used in No.3 cut-through, with an ordinary brattice in No.2 cut-through? A. Was I satisfied?

Q.Yes, A.Yes.

Q.You appreciated the significance in No.3 of the cement washed brattice, namely a better seal against goaf gases? A. I seen it there,yes.

Q.And that was the purpose, a better seal. You, however, did not think or consider it necessary in No.2 for a cement washed brattice from the beginning? A.No, I didn't consider that,sir.

Q.Well, did you think about the matter at all as to the efficacy of the brattice in A heading, No.2 cut-through? A. Did I think about it?

Q.Yes. A. Not really, sir.

Q.It did not occur to you, "well, we used a cement washed brattice in No.3, now we will use one here"? A. No, it never occurred to me.

Q.It did not occur to you? Well, who decides on the type of brattice that will be used? (No answer).

MR.McNALLY: This witness did not put up the brattice. (Question allowed)

WITNESS: Who decides on what type of brattice - I would say the mine management. They buy it.

MR.LEE: Q. The mine management? A. Yes.

Q.I am just trying to find out -

MR.REYNOLDS: I think he is talking about the quality of the stuff they buy.

MR.LEE: Q. Who decides on the type of brattice to be put up in a particular place - the type of stopping? A. I would say either the assistant manager of the under-manager.

Q.Are we to conclude from that answer that as far as your knowledge goes, either the assistant manager or the under-manager would have decided that a cement washed brattice was desirable in No.3 cut-through whereas an ordinary brattice was adequate in No.2 cut-through? Is that really what you are saying? (Objected to by Mr.Reynolds; allowed)

Q.What do you say? A. What was the question again?

Q.The question was: Was it, according to your knowledge, that if a cement washed brattice went up in No.3 and an ordinary brattice went up in No.2, that that placing of those respective brattices was a decision of either the assistant manager or the under-manager? (Objected to by Mr.Reynolds; question pressed; allowed) A.This stopping was put up on the shift before the place was even started. If they had considered it wanted cement washing it could have been done on the Monday, on the Tuesday.

Q.When you say "if they," put yourself in that position? A. The mine officials then.

Q.Well, do you class yourself in that category? A. I suppose in a sense,yes.

Q.What we are trying to find out, to make it perfectly clear so that nobody can be in doubt is who decided that an ordinary brattice was sufficient in those circumstances? (No answer)

MR.REYNOLDS: If he knows.

MR.LEE: Q.Exactly? A. Who decided?

Q.Yes. You didn't? A. No, I didn't.

Q.Do you know who decided that an ordinary brattice would be sufficient? A. Well, I told them to put it up.

HIS HONOR: Q.Does that mean you decided on an ordinary brattice rather than a cement washed brattice? A. They had had time to have it cement rendered. It never entered my head to have it cement washed.

Q.You see, you did select or you did put up an ordinary brattice yourself? A.Yes.

Q.Not a cement washed brattice. Who decided - you or somebody else? Did you do that on somebody else's instructions or did you make the decision yourself? A. The system was just being followed from No.3 back to No.2.

Q.In other words, you decided to follow a pattern, is that what you say? A.Yes, a pattern.

Q.Did anybody else tell you to follow that pattern? A.Not really, sir.

Q.Does that mean then that the decision was yours? A. To have this stopping up?

Q.Yes, and to use this type of stopping? A. Yes.

Q.Mr.Lee is asking you what the system is. For example, say a piece of cement washed brattice was to be used across a heading, as one was. What is the system? Does the deputy decide that or does somebody else say "use a piece of cement washed brattice"? You have worked there - what happens? A. Any stoppings that I have seen cement washed have been done on day shift by day shift. They carry the men to do this job. Afternoon shift doesn't.

Q.You mean that if you were suddenly transferred to day shift and there was a question of whether a piece of cement washed brattice stopping was to go across or an ordinary brattice used, you would not know whether to make the decision yourself or whether to get instructions from somebody else; is that what you mean? A. I would erect temporary stoppings and get permission from the under-manager or somebody higher up to have it cement washed.

Q.Do you mean it is part of the system - you might tell me whether you know or not - before you have cement washed brattice, you get permission from somebody to do it? A. Somebody must give you authority to have it done.

Q.Who is that somebody? A. Assistant manger, under-manager.

Q.Any official higher than yourself? A.Yes.

MR.LEE: Q.In order to get cement washed brattice, taking the matter one step further, from your experience what information do you need to put before the management to justify the use of cement washed brattice? Do you simply say "I want it" or "I have found gas" or "the ordinary brattice is not good enough", or what is the position? A. I wouldn't know. I have had nothing to do with it.

Q.Anyway, an ordinary brattice went up? A.Yes.

Q.On the right, the Tuesday morning, you say? A. Yes.