

Brislane as a precaution. I am quite sure that if Morris thought there had been any quantity of gas there all the men would have had safety-lamps as well as Brislane.

665. In your evidence as to the resultant gas, you said you considered it was carbon non-oxide?—Largely.

666. Assuming that you had a firedamp explosion, that explosion would be accelerated by the coal-dust?—No doubt.

667. And carbon non-oxide would be produced by the coal-dust being ignited?—No doubt to some extent it would.

668. You say you could not suggest any improvements that might be made in the working of a mine such as the Brunner?—Yes; of course, to abolish all blasting-powder would be one.

669. Well, on the subject of blasting-powder, we have heard experts of authority say that blasting-powder is a very dangerous thing to use in a mine—in fact, one of the most dangerous explosives?—Yes; blasting-powder has the greatest flame.

670. What you require in a mine is a flameless explosive, or one almost so?—Yes.

671. I suppose nitro-glycerine would be the best only for other dangers?—Yes.

672. Has a flameless explosive the highest power?—Yes.

673. Have you tried carbonite?—We have tried roburite.

674. Did you find it desirable?—Yes, when you got a uniform result; but the trouble is to get anything like a uniform result. Perhaps we got it in bad condition, and therefore could not get uniform results from it.

675. Have you ever tried roburite in good condition?—We got some excellent shots with roburite.

676. Is that the only other explosive besides blasting-powder you have tried?—Gellanite, in water-cartridges.

677. You would not recommend gellanite?—No.

678. One of the explosions took place through the gellanite not being used with water-cartridges?—Yes. Not one of them is flameless.

679. And dynamite would be altogether out of the question on account of the fumes?—Yes; and the shattering effect on the coal.

680. Do you consider, if you had a good quality of roburite, it would be a good explosive?—Yes.

681. You did not see the roburite tests made here—roburite from the Defence Department?—No.

682. Would you also say from your experience at Brunner that watering is necessary before you fire a shot?—I do not think that watering is necessary, and I never regarded the Brunner Mine as a dry and dusty mine.

683. Still we had experience that, although it is a comparatively wet mine, you had a big explosion of gas or coal-dust?—I think that with fairly reliable flameless explosives, if the cutting and holing is well done by a properly-authorized person, watering is not necessary.

684. You do say that shots ought to be fired by properly-authorized persons?—In the light of those explosions I would not allow any miner to fire the shots.

685. You keep a barometer and thermometer?—Yes, in the outside office.

686. Will you explain where the outside office was?—About a couple of chains from the mine-mouth. It is always open to people.

687. Would that be a better or worse place than the mouth of the mine?—I do not think there is anything to be gained by putting it at the mine-mouth.

690. Do you consider, in view of the way the steam would raise the temperature at the mine-mouth, that they were in a better place?—I should say they were in a better place.

691. And you do not know whether that blown-out shot-hole was put in when the bord was being made or whether it was put in on the morning of the accident?—I do not know. I have a faint recollection of the overman having reported a shot being prohibited to be fired, but whether it was in that bord I do not recollect.

692. When was that?—Some considerable time ago, when that district was being worked.

693. Who was the overman?—Roberts; but I cannot swear whether it was in that bord.

694. If you had a firedamp explosion, accelerated by dust, would it not produce the same effects as this explosion at Brunner?—Yes; I suppose its effects would be practically the same.

695. As a matter of fact, any firedamp explosion now must be carried on by dust, according to authorities. Is not that the fact?—Yes.

696. Were you in the bord when the four miners examined it?—I believe I was; but I cannot be quite certain.

697. Were you there before the miners went in?—No; I had never been in since the explosion.

698. There has been a question about that overcast, or stopping. It is an aperture 6ft. by 18in.?—It is the face of a dam. [Witness indicated on plan the place referred to, and said it was necessary to have such a narrow aperture to regulate the ventilation.] I always tested and found 6,000ft. of air passing over this dam for the men located there.

699. Then, your evidence is to the effect that if you did not have a regulator in that place the air would go in one direction only instead of being divided as required?—Yes. If I enlarged that aperture to a greater size all the air would go through, and would not divide into the two channels. I have had to take it off the one and put it on the other when I thought it was necessary. Of course, everybody acquainted with the mine will admit that the Act is properly complied with, and that the air is quite sufficient for the number of men employed.

700. Do you always have enough ventilation in the mine to clear out the powder-smoke produced by blasting?—I would not like to say that; sometimes when blasting in another mine I had to ventilate all the time to keep it clear.

701. Do you think there could be a coal-dust explosion from a naked light?—Yes; we had one explosion, but it only burnt one man.