

the effect of such gases on the men was at times perceptible. It is said that the object of so constantly pouring water on the fire was not only to quench the fire, but also to so pack the fallen *débris* from the roof as to form an air-tight non-inflammable "gob." The latter object was not attained, as the gob became fiercely on fire, extending gradually in area until on the 20th June it reached a length of about 3 chains. From March to the 20th June there were two working-shifts in the mine—the morning shift from about 7.30 a.m. to 4 p.m., and the afternoon shift from 4 p.m. to midnight. During these two shifts the fan constantly worked, and cleared the mine sufficiently to enable men to work, as it turned out, in safety, though not in comfort. During all this time no safety-lamps were used in the mine, and none were ready for emergencies. The tests relied on were, it appears that, as black-damp will extinguish a naked light as readily as one in a safety-lamp, a naked light was as good a test for black-damp as a safety-lamp; that white-damp cannot be tested by a safety-lamp until the proportion is fatal to life, and that, as fire-damp rises to the roof, the black-damp, which would be on or near the floor, would extinguish the light before it could be raised to the roof. These are the reasons given by the deputies and underviewer as justifying the non-use of the safety-lamp. We deal with the matter later. At midnight the fan ceased working, and two men entered the mine as watchmen, and to do odd jobs when not actually engaged on the fire. During this period the air was so bad near the fire area that the men could not remain more than a short time within it. They suffered in health, and Somerville, the elder of the two, begged for "another job," and, as he says, left the mine because he did not get it. He says he frequently told the underviewer that there was black-damp in the places, and was informed that he knew nothing about it. The fire area had by this time been opened up so that three vents to the air existed. Some of the witnesses described how the live coal fell from the roof and slopes, and hot stones rolled at the feet of the men who were extracting the coal; but the work went on. The last box of coal was taken from the fiery area about noon on the 20th June. At 8 o'clock that morning the manager (John Lloyd) saw that the fire was gaining the mastery, and he ordered stoppings to be erected, so that the fire could be sealed off. A great mass of evidence was adduced to show the character of these stoppings, some of it of a very contradictory character; but one fact is clear—namely, that the stoppings erected were useless, and there was no time to erect effective stoppings. There is a conflict between Lloyd, the manager, and Frame, the underviewer, and others, as to whether Lloyd on the morning of the 20th June ordered the work to proceed continuously or not, but certainly the work ceased at midnight, and we are of opinion that it would have been impossible to make effective stoppings in the time available. Lloyd, the manager, left the mine between 4 and 5 p.m. on the 20th, and proceeded to the house of a miner (Carson, one of the victims); sent Carson for a bottle of whisky, drank some then; went away, but returned about 8 p.m., drank more whisky, and remained at Carson's until 3 a.m. on the morning of the 21st, sleeping, as he (Lloyd) alleges, on the sofa until 3 a.m., when he arose, and was going home, when he met Dixon, a deputy, who told him he was wanted in the mine. It is uncertain what was actually said on this occasion, but no doubt Lloyd was informed that there was a serious aspect of affairs. The afternoon shift of five or six men had gone into the mine at 4 p.m. on the 20th and had worked at the stoppings until midnight, when they were told by Frame (underviewer) they need not stay longer, and they went home. No effectual stoppings had then been erected. The fan was stopped as usual. At midnight the watchman (Somerville) and a youth named Brazier went on duty, and Dixon (deputy), who had been at work since 4 p.m., having gone to his home for about forty minutes for refreshments, returned and remained with them. They occupied themselves in attempting to connect a fresh length of hose, and in various other ways, until 3 a.m., when Dixon went to call the underviewer (Frame); but, as he was on his way to Frame's residence, he met Lloyd, who was then going home from Carson's. He told Lloyd something of the condition of things in the mine, and Lloyd, instead of going at once into the mine, decided to