

8. *Dryness*.—Though damp in parts, the mine may be described as of average dryness compared with mines in the district. It makes an average amount of dry coal-dust.

9. *Method of Working*.—The coal is reached by a main tunnel 1,200 ft. long, cut in sandstone, descending at a gradient of 1 in 2.75 from the surface to the seam. The mine was worked on the panel system. Being a new mine, its chief operations consisted in development by way of driving main headings and dips. The headings, levels, and dips made in the seam at the time of the disaster extended in all to some two miles and a quarter. A plan of the workings is forwarded herewith.

10. *Power*.—The power used throughout is electrical. The main plant above ground consists of the haulage and the main ventilating-fan. Underground are a winch, a ventilating-fan, and two pumps, all electrically driven.

11. *Story of Explosion*.—The explosion occurred during the night shift in the early hours of Friday, the 3rd December, 1926. There were during that shift twelve men at work in the mine, one of them being a deputy in charge of the operations. Three of these men were engaged in taking sleepers and other equipment from the surface into the mine. Shortly before 3 a.m. these three men, being then at the surface, entered a small shed near the entrance to the mine to have their crib there. While there they heard a deep rumble, lasting several seconds, culminating in a violent explosion. This was followed at a few seconds' interval by a smaller explosion. A tongue of flame flashed from the mouth of the mine. To reach this point the flame had travelled 1,200 ft. up a clean sandstone dip from the workings to the surface against a strong air-current. A subsequent examination showed that a similar flame had travelled the length of the return airway and issued from the mine there.

Shortly after the explosion a party consisting of the mine-manager and some miners courageously, and, as we think, at the risk to their lives, entered the mine in an endeavour to rescue their comrades. In the winch-house they found four of the men, three of them dying and one dead, and brought them to the surface. They were unable to reach the others. Some time later another party, consisting of the Mining Inspector for the district, the various mine superintendents and managers in the district, and some selected miners, again at the like risk entered the mine. They found the mine on fire in several places. It was clear to them that the remaining men who had been in the mine at the time of the explosion must have perished and that there was no possibility at that time of recovering the bodies. As the fan had gone out of action the party withdrew, and after a general conference steps were taken to endeavour to choke the fires by stopping up the mine.

At about 3 in the afternoon—just twelve hours after the first explosion—a further explosion occurred, blowing the stoppings out. Six hours later, while efforts were still being made to seal up the mine, a third explosion, more violent than the last, occurred. Steps were then taken to flood the mine.

The bodies of the remaining men were recovered some five months later when the mine was dewatered. The positions where the various men and bodies were found are shown on the plan.

12. *Origin of Explosion*.—The closest investigation by us has failed to disclose with certainty the origin of the explosion. All of the three injured men who were brought to the surface died without recovering consciousness, so that no information was given by them to their rescuers.

Two theories were advanced by witnesses at the hearing. There was in this mine considerable laxity (hereinafter more fully referred to) in the issue and use of oil safety-lamps. It was suggested that a lighted oil safety-lamp may on this occasion have been left behind in the rise workings, and that an accumulation of gas may have reached it and have gradually caused the flame to increase until the lamp became heated and the gas thus became ignited.

The alternative theory was that the explosion originated in the dip workings, at one of the faces where men were working, either by a blown-out shot or a defective lamp, or a naked light igniting a body of gas.