

set of cutters, who would work on through the night; thus forming two gangs called the "day and night shifts;" the horses, drivers and viewers were also changed, so that there was no cessation from the Monday morning to the Saturday night. A watchman went through the works at night, and also on Sundays.

We observed that stout trees supported the roof in many places; so that it appeared, every care and forethought were used to ensure the safety of the workmen. We understood that only one or two deaths had occurred in the last ten years, and very few accidents, which was surprising, considering that from two hundred to three hundred persons are employed in the Mines. Our informant could not tell how many accidents had occurred since the first opening of the Mines, his knowledge only extending back to the time of his coming to the works.

The deputy-viewer now came up, and after handing him the permit; he courteously offered to show us the other parts of the Mines; but as we understood that all the workings were carried on upon the same plan, and therefore, to the eye of a stranger, quite similar, we preferred remaining to see the effect of the "shot" or explosion of gunpowder, which we learned we could do with safety, by retreating round the corner of the gate-road or incline road, up which we had ascended. Having drilled the hole upwards of three feet, and charged it,—the viewer, ourselves and two colliers, retired down the gate-road, and the other one fired the match with his common lamp and then ran and joined us round the corner, occasionally peeping to see that the match was still burning; presently we heard a whiz, and then a loud report like a cannon immediately followed, causing a great concussion in the air. The ventilation being good, the smoke was quickly dissipated, and we went to examine the effect of the "shot;" it had done good execution, for it had blown down a block of coal about seven feet long, and between three and four feet square. This mass had to be broken into smaller lumps before it could be loaded on the Skips, and they estimated that it would yield about one and a half chaldrons of coals.

We now bade our subterranean Cicerone good bye, and accompanied the viewer as he continued his rounds through the upper Boards. He told us the strongest discharge of gas, was from "blowers" in the lowest Boards of the deepest pit, as they were the most in advance in the solid or unwrought coal; and that in them, the gas was continually forcing its way out through the fissures of the coal, and that where it came out under the water in the drain, the gas caused the water to bubble up, as if it were boiling in a pot. He, however, showed us how they detected the presence of the noxious gas, by lighting one of the Davy lamps; and with a depressed wick, and consequently small flame, he raised the lamp slowly up to the highest part of the roof of one of the workings, when instantly the whole of the lamp filled with a blue