

## PIKE COUNTY.

*Borderland Coal Co.*—(1) Ben Charles; age 21. Killed by roof fall in February. Wife.

(2) James Kelly, miner; August 13. Killed by fall of rock. Wife and 5 adult children.

## PULASKI COUNTY.

*Alpine Coal Co.*—Judge Brown (colored), miner; age about 45; April 22. Killed by premature discharge of his shot. Was working for Hemegar & Hallory, contractors. Wife.

## UNION COUNTY.

*Kentucky Coal Mining Co.*—Harry Powell, miner; age 35; February 1. Instantly killed by slate fall in entry. Neck broken. Wife and 3 children.

## WEBSTER COUNTY.

*West Kentucky Coal Co., No. 5 (Baker) Mine.*—On December 11th seven men (colored) were killed as the result of an explosion of gas in the shaft, as noted in Chapter I. (The exploding gas, which ascended from a mine below that in which the deceased were working, converted some of the water in the shaft into steam, and the men were burnt and suffocated by the latter, see Chapter I.) It is not definitely known how the gas was ignited. Following are the names of the men killed: Edd Tapp, age 33. (Wife and 2 children.) Richard Rice, age 24. Robert Tayler, age 40. (Wife.) Alonzo Oats, age 35. (Wife.) Albert Slayden, age 25. Will Bomma, age 21. John Bell, age 26. All were coal loaders, and were working for a contractor after the run for the day was over.

Following is the report of Assistant Inspector Long on the explosion:

An explosion occurred at Mine No. 5 (Baker) of the West Kentucky Coal Co., somewhere near 4.30 P. M. on December 11, 1909, killing 7 men (all colored) which were in the mine at the time of the explosion and were working on the Main South entry. The mine was idle during the afternoon on the date of the explosion, which accounts for the small number of men being inside the mine.

Mine No. 5 is a shaft mine and only 85 ft. from the surface to the landing of the seam of coal that was being worked, this seam was commonly called the No. 11 vein.

The shaft had been originally put down to the No. 9 vein, and this seam worked for a short period and then abandoned, the last posting of the Engineering department, of the No. 9 vein was under date of November 15, 1906.

There was quite a little gas given off in the No. 9 vein.

There is about 120 ft. of vertical distance between the landing at No. 11 and the No. 9 vein, making the shaft about 205 ft. to the No. 9 vein.

The No. 9 workings after being abandoned, were allowed to fill up with water, also the shaft, up to the landing at No. 11 vein. There was only one joint of pipe, down the shaft, from the suction line of the pump stationed at the No. 11 landing. This meant that the water was never lower than 20 ft. below No. 11.

The shaft itself, made considerable water and the No. 11 workings were very wet; drainage in this mine being no small item of expense to the owners.

The explosion set fire to the tippie, burning it, together with two 40 ton West Kentucky Coal Co's., railroad guns, which were loaded and standing under the tippie. The explosion and the secondary explosions that occurred immediately after the original explosion, wrecked the ventilating machinery that was ventilating the No. 11 workings; the fan was a 12 ft. forcing fan, the hoisting shaft being used as upcast or outlet for the return air from the No. 11 workings.

The explosion, evidently a gas explosion, came from the No. 9 vein, lifting an immense amount of water before it, as the testimony of witnesses, given before the Coroner's Jury, states that; first came the water, then the fire and smoke and

the report of several explosions. So quickly did this body of water come out that for the time being it flooded everything around—to illustrate—the boiler-room floor is possibly some 8 or 10 inches lower than the mud sill of the hoisting shaft, the water flooded the boiler room, which is about 50 ft. south of the shaft, and a water-mark showed about 8 inches high on the ash doors of the boilers.

The water that was pumped from under the No. 11 landing was used for boiler purposes, consequently, the reservoir on the surface, which was about 100 yards from the power plant, contained a small amount of water to fight the fire, which had consumed the tipple and was burning the lining of the hoisting shaft.

The writer (Asst. Inspector, Thos. O. Long), arrived on the scene about 8.45 P. M., and immediately took a hand in the work, preparatory to restoring the ventilation in the mine, so as to enter same with a rescuing party.

A pipe line had to be laid from the reservoir to the mine, the ventilating machinery had to be repaired, and the fire of the burning tipple had to be extinguished.

A party was organized for each piece of work, and went to work with willing hands.

The burning debris was first removed from over the top of the hoisting shaft and the fire in the shaft extinguished and a greater portion of the burning debris of the tipple was extinguished. The reason for not entirely extinguishing the fire may be briefly explained as follows:

While the explosion wrecked the ventilating machinery, the fire and heat from the burning tipple produced a good current of air between the air shaft and hoisting shaft; the air entering at the air shaft, in its original course, hence, at no time was the ventilation between these two points changed, only during the immediate time of the explosions, when of course there was, no doubt, a back-lash of the current. This ventilation explained why the fire made little headway down the hoisting shaft.

The ventilating machinery was not in condition to run, until about 4 P. M., Sunday afternoon, although the work on construction of same was kept up without stopping during Saturday night and Sunday.

Before starting the fan, all fire around the hoisting shaft was extinguished, and the fan allowed to run one hour, before the first party entered the mine at 5 P. M. No safety devices other than the safety lamps were at hand, for use. However the Company had a number of the improved Wolf safety-lamps.

Mr. Chas. Strickland, of the West Kentucky Coal Co's. Engineering Dept., Mr. C. H. Bice, mine foreman of Mine No. 1, and Asst. Inspector, Thos. O. Long, composed the first party which explored the route from the air shaft, where they entered, to the hoisting shaft, and found that the hoisting shaft bottom was demolished, timbers blown out of place and into the mine; the road and cars near the shaft were all lifted to the roof of No. 11; this furnished proof that the initial force came from below, or the No. 9 vein. Also the overcast and brattices in the immediate vicinity were demolished. It was found that a greater portion of the ventilating current was going in the direction of the West Dip Level entry and then to the hoisting shaft, this was in opposite direction to where the greatest damage was done and where the men were supposed to be. This entry was bratticed off and the ventilating current turned toward the wrecked portion of the mine so as to permit the cleaning out of the foul air as much as was possible to do so.

Realizing the amount of work it would take to reach the entry where the men were supposed to be, also the way we had to work, i. e., carry the ventilation as we advanced, and the entire working force completely exhausted; work was suspended about 10 P. M. Sunday for a night's rest.

Resuming the operations Monday morning (13th), work of entering and advancing up the Main South Air Course entry progressed steadily, building temporary brattices and repairing those not completely demolished.

On account of poor railroad connections, the State Mine Inspector, Prof. C. J. Norwood, did not reach the scene of disaster until noon, Monday, 13th, when he at once took charge of the rescuing party.

The first body was found about 6.07 P. M., on above date, in the Air Course entry to the Main South entry; after which

the party had to work to the face of this entry and then down the Main entry, searching everywhere for the remaining bodies, which were found in the Main South entry, near where the first body was found in the Air Course entry.

Following is a description of the position of the bodies when found:

1st. Body. Found 6.07 P. M., December 13, 1909. Lying in the Air Course of the Main Rise entry (or the Main South entry) just in by the 10th. Breakthrough, counting from the overcast for this entry, face down, head towards face of entry and alongside the right rib of the Air Course entry.

2nd. Body. Found 10.35 P. M., same date, in the Main South entry opposite the right rib of room No. 24, seemingly, was sitting against the rib of entry (looking south) and body was blown over on left side, face outward, head towards face of entry.

A miner's cap (the only one found at this time) was found lying across west rail about 3 paces south of the frog of the motor track, turnout, into room No. 23.

3rd. Body. Found 10.35 P. M., 6 ft. south of left rib of room No. 21, face down, feet towards face of entry and on room side of entry, i. e., between west rail and right rib of entry, looking south.

4th. Body. Found 6 ft. North of right rib of room No. 21 (1st. body recognized by any of the rescue party), face upward, lying between west rail and right rib of entry.

5th. Body. Found 6 ft. north of right rib of room No. 20, face upward, feet on west rail and lying rather crosswise of entry with head to west.

6th. Body. Found about 15 ft. north of the position of the 5th. body, lying across west rail, face downward, head towards hoisting shaft, evidently was running.

7th. Body. Found 10.50, P. M., about 4 ft. south of left rib of breakthrough to right (to a short run-a-round entry for lyway) and about 75 ft. south of left rib of room No. 13. Face downward, evidently laid down to protect face, as face was buried in left arm and face turned slightly to left. Lying on west side of track, head towards hoisting shaft.

All bodies were outside of mine at 12.50 midnight of above date.

At a conference held on the 14th. between the West Kentucky Coal Co's. officials, engineers and mineforeman and the Chief Mine Inspector of Kentucky, Prof. C. J. Norwood, and his Asst. Inspector, it was suggested by the Chief Inspector, that before any work towards cleaning up the wreck and restoring No. 11 suitable for operation, a number of drill holes be put down to No. 9, at head of each rise entry; this suggestion was carried out by the West Kentucky Coal Co.

The drill holes were cased with an 8 inch pipe through the soil to the solid rock, then inside of this pipe a 6 inch pipe was put down to the solid rock below the No. 11 seam and the space between the two pipes was filled with "grouting." The drill hole was then put down to the No. 9 workings and cased with a 4 inch pipe from the surface to the No. 9 vein. The space around the pipe being filled with "grouting" the 4 inch pipe extending 35 ft. into midair.

There were three such drill holes put down to the No. 9 workings; the first one finished on Jan. 14, '10, which is reported as having released quite a little pressure.

On Jan. 20, 10., Asst. Inspector, Thos. O. Long, accompanied by Mr. Chas. Strickland, Mr. Shenall, Supt. of Mine No. 5, Mr. Henry Sizemore, Mineforeman of Mine No. 5; inspected all the working places on the Main South entry in an effort to find if the unfortunate men could have started the explosion by a blown-out shot or otherwise.

A test was made for gas, using a safety lamp furnished with a Beard-Mackey sight indicator, at top of drill hole that was finished to the No. 9 workings, but not able to register any gas.

Following was the condition of each working place on this entry:

- Face of Air Course entry.—Well shot down.
- Face of Main entry.—Coal well shot down.
- Room 42. Coal well shot down.
- Room 41. Cut, not shot or drilled.
- Room 40. Cut, not shot or drilled.
- Room 39. Cut, not shot or drilled.

A car standing on the entry track about 10 ft. north of this room was not disturbed.

Room 38. Cut, not shot or drilled.

Room 37. Cut, drilled and tamped, fuse in hole ready for shooting. Machine in mouth of room. Shovel on corner of room.

Room 36. Cut, drilled and bradded. Tool box on south rib of room at mouth of same.

Room 35. Cut, drilled and bradded. Right hand and center hole, tamped ready for shooting. Left hand drill hole not tamped. Paper cartridge filled with powder and fuse lying on machine cuttings at face of room near right rib.

Room 34. Loaded car at face. Full of coal. In good order.

Open barrel of black-oil at mouth of this room unmolested.

Room 33. Shop car at mouth. Fallen at first breakthrough to No. 34.

Lamp with wick out on nail keg at mouth. Face cleaned up.

Room 32. Cleaned up and in good shape.

Room 31. Shovel and pick on right and left rib at face. Coal in face, in good condition.

Room 30. Cut, bradded, drilled and tamped ready for shooting. Jacket on left rib at face. Drill tools at breakthrough on right.

Room 29. Loaded car at face. Fallen in. Tools in order.

Room 28. Tool box about 50 ft. from face of room. 3 dinner pails, 2 jackets, 1 drill machine, face of room cleaned up.

Room 27. Full of coal in good order.

Room 26. Coal shovel at mouth on left rib. Loading at face. Tools at face in good order.

Room 25. Roadmans tools at mouth, face in good order, had been loading in this room.

Room 24. Motor lyway in this room in good order.

One shoe and dinner pail found just south of breakthrough No. 10.

One miner's cap found about 16 ft. north of the position of 6th. body, this making only two caps that have been found and not one of the miner's lamps were found.

An empty half-barrel was found in entry opposite right rib of room No. 5, which was blown, the mineforeman states, from the hoisting shaft.

From the above condition of the working places, it will be seen, that all tools and other implements were in order, i. e., in place, as left by the men that came out of the mine at noon; this showing that there was little violence or force in or about the working places; that there was little heat around is shown in room No. 35, by the fact that the paper cartridge filled with black-powder, lying at the face of the room, was not scorched or blackened by the heat, much less being burnt.

That there were several places being prepared to be shot is shown by the drill holes all loaded for shooting and the head of the Main entry, Air Course entry and room No. 42 was, evident, all that the men had shot, before the occurrence of the trouble that caused them to leave their work unfinished and make for the shaft, reaching the neighborhood of rooms No. 20 and 24, when overtaken by that which caused their death.

Just how the gas was forced has not been settled to the entire satisfaction of every one concerned.

(Signed), THOS. O. LONG,

*Assistant Inspector.*

#### WHITLEY COUNTY.

*Burke Hollow Coal Co.*—Will Farmer, miner; age 28; August 12. Killed by slate fall at head of entry, where he was working. Wife and 4 children.

*Mahan Jellico Coal Co.*—George Murphy, miner; age about 40; December 21. Instantly killed by slate fall caused by roll in top. Wife and 8 children and stepchildren.

*Procter Coal Co.*—Murry Moses; age about 26. Instantly killed by slate fall. Wife and 2 children.