

before the lowering of supplies could start. I called for assistance and State Inspectors Thos. Moses of Westville, and Thomas Little of Murphysboro, came and assisted in the rescue work until the bodies were found. After the shaft had been repaired, the Governor, Hon. Charles S. Deneen, sent the ten State inspectors and the mining board to make an inspection of the mine. The following is their report:

"November 30, 1908."

HON. CHARLES S. DENEEN,  
Governor of Illinois,  
Springfield, Illinois.

DEAR SIR—In accordance with your directions, the undersigned inspectors of coal mines and members of the State Mining Board made a thorough examination of the coal mine owned and operated by the W. P. Rend Colliery Company at Rend City, Franklin county, Illinois. The purpose of said special examination was to ascertain the cause of the explosion which occurred in said mine at or about five o'clock, p. m., on the 5th day of November, 1908, in consequence of which George Reed, John Holmes, Patrick Dailey, and Perry Stevens, employed as shot firers, lost their lives. The exploring party was led by Richard Newsam, President of the State Mining Board and a record of observations made by Inspector Thomas Moses; several tests with safety lamps were made on the roadways, at the face of the working places and particularly at the high points where falls of slate had occurred, but no evidence of gas was discovered. After reaching the face of the first northeast entry beginning with room No. 20, we proceeded down until room No. 8 was reached. As we approached that point, indications of serious disturbances increased—falls of slate and coal crushed from pillars—broken timbers—mining machines and pit cars, completely destroyed. From the mouth of room No. 8 and continuing up to the face thereof, evidences of intense heat and fire on the roof and props was observable. At the face of that room we found several shots had been fired on the night of the explosion; in fact, they were the only shots fired in any of the rooms in that entry that evening. It furthermore appeared that the shots had been placed near to the top of coal, and as the seam of coal is much softer near the roof much of it that was blown down was in a badly shattered condition. There is no question but that the direct cause of the explosion originated from these shots in the face of room No. 9, first northeast entry; that the placing of the shots so near the roof and the broken condition of the coal indicated an overcharge of powder resulting in the generation and ignition of excessive quantities of carbon monoxide gas, aggravated by the presence of coal dust. In order to avoid a repetition of such disasters, we recommend that in all cases where coal is undercut with chain machines, the coal be snubbed or blocked down at not more than three, or less than two feet from the bottom of the seam, and that all undercuttings produced by said machines be collected and loaded out before any shots are fired.

Respectfully submitted,

Signed by the State Inspectors of Mines and the Mining Board."

On November 19, 1908, an explosion occurred in the Benton Coal Company's mine at Benton, Franklin county. Six shot firers were in the mine at the time of the accident. Three of them escaped injury but the other three met their death from shooting dead holes in room No. 21 off first east north, being overcome by after damp. The two holes in room 21 were on the right side; they were seven feet on point and two feet dead. The hole on the left side was five feet ten inches on point and two feet six inches dead.

On December 12, 1908, in the W. P. Rend Colliery Company's mine, Rend City, three shot firers were killed. These men met their death from an explosion of carbon monoxide gas. This explosion was from the same cause as reported for the explosion November 5, 1908.

On the night of November 4, 1908, at the Zeigler Coal Company's mine, Franklin county, a trap door caught fire, about 1,200 feet from the bottom

of the shaft; the management fought this fire until 7 a. m., the next day, when the fire had traveled about 900 feet towards the bottom of the shaft, burning out one of the main overcasts, causing them to either seal up both shafts or have one of them consumed by fire. In a conference with Mr. Gordon, General Manager, and Mr. Blanks, Mine Superintendent, we agreed that the mine should be sealed for not less than ninety days, believing that with the air closed off it would extinguish the fire.

I was not called to Zeigler again until January 10, 1909; on that day an explosion occurred killing twenty-six men. On investigation I found that between my visit of November 4, 1908 and January 10, 1909, the management had failed to keep the mine sealed.

Two drill holes five inches in diameter had been put down and water had been pumped into the holes; also live steam forced down the holes at different times.

The steam entering the mine through these drill holes caused the roof to cut and fall for about 30 feet above the top of the coal. The burning of sulphur was then tried and the fumes forced into the mine with a small high speed fan. On this date, January 10, 1909, I found the mine was still on fire below as smoke was coming out of the return airway. The company had, on January 9, 27 men in the mine cleaning up falls, building brattices and driving out gas, that had accumulated in the mine. They were ventilating a pair of entries that had an accumulation of gas and the return air from this pair of entries passed directly over the place where the fire of November 4, 1908, had originated. From the evidence I received, I believe that the air had rekindled the fire and ignited the gas as it passed out over it, causing the explosion whereby 26 men lost their lives, one man escaping. I had sent for assistance, and State Inspectors Thomas Moses, Westville, Thomas Little, Murphysboro, and John Dunlop, Peoria, came to Zeigler, January 11, 1909; after going thoroughly over the conditions knowing there was a fire in the mine, and all of the workings containing gas, we concluded the only thing to do was to seal the two shafts permanently until we were sure the fire was extinguished.

On January 11, 1909, I posted the following notice:

"I have this day inspected the Zeigler Coal Company's mine and find the conditions as follows:

"Dangerous to life on account of fire. For the better protection of the lives and health of the employes, would recommend the following: Both shafts be sealed up and no men be allowed therein until further orders from me."

I left Zeigler and it appears that the notice I had posted did not meet with the approval of the management. The management called me by telephone, and I arranged a meeting with the State Mine Inspectors and the Mining Board for January 13, 1909, at 10:00 a. m. and invited Mr. Leiter and his management and his mining experts to be present. They failed to attend this meeting. The State Inspectors and the Mining Board concurred in the sealing of the shafts. Immediately on returning from our meeting I called the general manager of the Zeigler Coal Company and informed him that we could not prohibit the company from entering the mine to recover the seven dead bodies still remaining in the mine, or keep them from entering to repair the mine for operation, also that it was my opinion that it was dangerous to enter the mine, but if they did enter the mine they would have to assume all risks.

The company left the shafts sealed for a period of twenty-one days, then opened them and proceeded to make an inspection with the Dreager helmets. On February 9th, they had another explosion caused by a body of gas coming in contact with a fire in the mine; three men lost their lives in this explosion.

Sixteen men were in the mine at the time of the explosion. Eight of them were standing on the bottom of hoisting shaft, five were working on

C air course putting in a permanent stopping by the first cross cut. Mr. Wilson, superintendent, Mr. Core, mine manager, Mr. Powell, mine examiner, were on C entry going south. They had found considerable explosive gas and could only go about fifteen feet at one time, their object being to get inside of third west south and place a stopping at that point to seal off south side of mine permanent while exploring the north side. When within about sixty feet of the first west south, they both heard and saw an explosion, which in their judgment had occurred beyond a large fall located inside of the third west south entry. They immediately said, "Run for your lives!" and they had only gone about 40 feet back in C entry when the wind and pressure from the explosion overtook them and they dropped to the bottom clutching the rail. After the explosion had passed back over them, they started to run again, went about 60 or 100 feet when a second explosion, more violent than the first occurred; they lay down again and after this had passed back over them, they groped their way back in the dark towards the main shaft and from that time on it was more of a dream to them as they were almost unconscious. The men stationed on the bottom of shaft saw the flame coming out of B entry south side of shaft. Their statement agreeing with that of the men in C entry is good evidence that the explosion occurred on south side of air shaft and from gas that was driven over top of a fire which had generated after admitting air into the mine. Three men lost their lives in this explosion. All three of them were on the bottom of the main shaft. There has been considerable water pumped into this mine used in fighting the fires, and putting it on falls where they thought fire was located. There was about a foot of water on bottom of main shaft, and none of the thirteen men that got safely out were burned. Two men that were brought out had been knocked into water and drowned. One man is still in the mine. The air shaft had been lately equipped with 120 sq. ft. of explosion doors. At the time of the explosion these doors were released and the black smoke boiled out of the air shaft this being the upcast, the main shaft being the downcast. The explosion was so terrific that the smoke even came up the downcast against the air current. Immediately after the explosion they speeded the fan up to 70 revolutions per minute, and the smoke hovered over the main shaft for a minute before the power could produce ventilation again. The men being so close to the bottom of the main shaft and the restoring of ventilation so soon after accident caused their lives to be saved. If they had been farther back in the working probably all lives would have been lost. The main shafts are at the present time sealed and my advice to the company was to keep the shafts sealed until we are sure that the fires are extinguished.

On the night of February 16, 1909, there was an explosion in the Dering Coal Company's No. 18 mine, West Frankfort, Franklin county. This explosion occurred about 5 p. m. while four shot firers were in the mine, immediately after they had begun to fire shots. They had fired eight or ten shots when the explosion occurred. From the appearance of the explosion, as observed from the top of the shaft, and from information received from parties that were at the mine, it appeared to be an explosion from windy shot igniting carbon mon-oxide gas. The explosion ignited fires in the mine and the burning of fires formed an explosive mixture, causing this mixture, at intervals of about every two hours, to explode, making rescue work impossible. Also the flames in the first two hours had reached the main shaft and were coming up it. The main shaft being the upcast, by 9 p. m. the fire had gained such headway that the flames were shooting 150 feet in the air from the ground landing, melting glass windows in the top of the steel tippie. The company sealed up the air shaft immediately; after sealing of the air shaft the sealing of the main shaft began by using 35 pound steel rails, boards and sand, afterwards placing a concrete cap over the temporary seal. While sealing the shafts they had several small ex-

plosions and not until the shafts were completely sealed did they cease. The shafts were kept sealed for a period of 120 days, when Mr. R. Y. Williams, with the Dreager helmets from the Urbana rescuing station, made a trip down the air shaft in a sinking bucket; he found no evidence of fire and the mine was perfectly cool; but he found the water had accumulated until it was within about two feet of the roof. Then they made an air lock at the main shaft, cut the concrete covering, closed the opening and were preparing to descend. In making these openings it appears that it had admitted enough air to form an explosive mixture and this body of gas coming in contact with a fire that was still burning in the mine, caused an explosion. Not being sure in regard to this, on the following day they allowed air to pass down the escapement and up the main shaft, and in the course of fifteen minutes the volume coming out of main shaft became black and by the odor it was easy to determine that there was a fire in the mine. The shafts then were resealed and the company immediately started to flood the mine until it was filled to a height of 80 feet in shafts. This is the situation on July 1, 1909.

#### FATAL ACCIDENTS.

August 4, 1908, Tom Kachan, miner, aged 37, married, working in the Zeigler Coal Company's mine, Zeigler, Franklin county, was killed instantly. He had just begun loading a car when in some manner the chuck was evidently knocked from under the wheel and Kachan followed the car trying to get it stopped until he came to a place where there was no clearance between the car and rib and in this manner he was crushed.

August 5, 1908, James Scott, top laborer, aged 23 years, married, employed at the Paradise Coal and Coke Company's mine when he was caught between two railroad cars and instantly killed. He leaves a widow and one child.

August 7, 1908, Frank Gossyuski, miner, aged 32, married, working in the Hart-Williams Coal Company's mine, Benton, Franklin county, was instantly killed by falling coal in his room. He was firing off a shot when part of the coal fell on him. He leaves a wife and six children, in Poland.

August 11, 1908, Emil Schrag, driver, aged 26 years, single, working in the Southern Coal and Mining Company's mine No. 9, New Baden, Clinton county, was coming out of room No. 17 on the first north entry when on the switch a large fall of slate caught him and killed him instantly. His home was in Trenton, Ill.

August 25, 1908, Green Cowsart, miner, aged 55 years, widower, working in the O'Gara Coal Company's mine No. 4, Harrisburg, Saline county, was loading car of coal in his room when rock fell on him, causing his death almost instantly. The slab of rock being 8 feet long, 5 feet wide and 4 inches thick crushed him about the head and shoulders. The mine examiner's danger marks and date was on said piece of rock. He leaves two children.

August 31, 1908, Mike Veger, miner, aged 26, married, was working in the Wasson Coal Company's mine No. 1, Harrisburg, Saline county, at his working face when a piece of slate 9 feet long, 5 feet wide and  $\frac{1}{4}$  inches thick fell on him and he was killed instantly. He leaves a wife and two children.

September 9, 1908, Otto E. Wilkerson, track layer, aged 34 years, employed in the Willis Coal and Mining Company's mine at Willisville, Perry county, was sitting in an empty car on parting, waiting for quitting time when a piece of slate fell upon him injuring his spine and he died two days later. He leaves a widow and two children.

September 9, 1908, Ben Sarutis, miner, aged 27 years, single, while on his way from his working place to the shaft bottom, for some unknown reason stopped in an old cross cut through which electric wires were laid, and

December 24, 1908, Otho Graves, aged 23 years, single, was employed in the Zeigler Coal Company's mine at Zeigler, Franklin county. While using a Dreager helmet, fighting a mine fire, he was overcome by the heat and became unconscious. The remainder of the party tried to bring him out but were unable to bring him all the way. A rescue party was formed at once, but when Graves was brought to the top he was dead.

January 4, 1909, Jesse Burch, miner, aged 34 years, married, was employed in the Eldorado Coal and Mining Company's No. 1 mine, Eldorado, Saline county, when he met his death from a blown out shot burning his face, arms and hands; he died the next day; he leaves a widow and three children.

January 10, 1909, there was an explosion in the Zeigler Coal Company's mine at Zeigler, Franklin county. This explosion dates back to a fire in the mine that started November 4, 1908, and the report will come under mine fires. There were twenty-seven men in the mine at the time of the explosion and twenty-six of them lost their lives; nineteen bodies were taken out as follows:

Robert Kerr, aged 39 years, married. He leaves a widow and six children.  
James Patterson, aged 40 years, married. He leaves a widow and three children.

Wallace Warner, aged 57 years, married. He leaves a widow and three children.

Seeber Puckett, aged 20 years, single.

Fred Morgan, aged 25 years, single.

Chas. H. Smothers, aged 34 years, married. He leaves a widow and seven children.

Gilbert Jones, aged 24 years. He leaves a widow.

Frank Norweather, aged 25 years, single.

J. O. Evans, aged 50 years, married. He leaves a widow and six children.

Joe Richardson, aged 38 years, single.

James Phillips, aged 39 years, single.

Jakin Petkoff, aged 28 years, married. He leaves a widow.

Arome Ganeoff, aged 27 years, married. He leaves a widow.

Apostle Andrejoff, aged 24 years, married. He leaves a widow.

Stefane Ivanoff, aged 33 years, married. He leaves a widow.

John Dolena, aged 35 years, single.

Joe Gat, aged 32 years, married. He leaves a widow.

John Kassay, aged 27 years, single.

Joe Olat, aged 35 years, married. He leaves a widow.

Seven bodies are reported in the mine and not recovered July 1, 1909, owing to the dangerous condition of the mine, as it is on fire.

Edwin Elkins, aged 34 years, married. He leaves a widow.

Tom Hubbard, aged 23 years, single.

Finis Woolfolk, aged 24 years, single.

Robert Fuller, aged 24 years, married. He leaves a widow and one child.

Joe Tote, aged 25 years, married. He leaves a widow and one child.

John Phillips, aged 26 years, married. He leaves a widow and one child.

Gaul Magoula, aged 22 years, single.

January 15, 1909, Roy Hunt, driver, aged 20 years, single, was employed in the Moffat Coal Company's mine at Sparta, Randolph county. He was driving a mule and fell off in the middle of the track pit car running upon him. He died the following day. His home was at Odin, Ill.

January 22, 1909, Jackson Adams, top laborer, aged 34 years, married, in the employ of the Majestic Coal and Coke Company's mine at DuQuoin, Perry county, was caught between the draw bars of two railroad cars and injured so badly that he died in about two hours after the accident.

January 27, 1909, Davie Davis, driver, aged 23 years, single, employed in the O'Gara Coal Company's No. 10 mine at Eldorado, Saline county, was

delivering powder and was taking a keg to the face of eighth west entry off north, when it exploded burning him about the face, arms and legs. He died the same day. His home was in Wellston, Ohio.

January 29, 1909, Henry Bucham, Draeger helmet work, aged 23 years, in the employ of the Zeigler Coal Company, Zeigler, Franklin county, had on a helmet and thought it was too tight and he attempted to loosen it thus allowing himself to breath the poisonous gases. He died on February 9, 1909.

February 8, 1909, Frank Roznoski, miner, aged 40, was killed by falling top coal in his working place. He had a shot in the day before and he was in the act of putting a prop under it when it came down. He was in the employ of the Paradise Coal and Coke Company, at DuQuoin, Perry county. He leaves a widow and six children.

February 9, 1909, a gas explosion occurred and the following lost their lives in the Zeigler Coal Company's mine, Zeigler, Franklin county:

Ben S. Kimball, aged 33 years, married. He leaves a widow.

Joe Smith, aged 32 years, married. He leaves a widow. Reported as having gone into the mine and his body not recovered.

Lawson Farmer, aged 38 years, single.

The report of this explosion appears under mine fires.

February 16, 1909, there was an explosion at the Dering Coal Company's No. 18 mine and four shotfirers being in the mine:

Geo. Oliver, aged 30 years, married. He leaves a widow and two children.

Orvie Jones, aged 25 years, single.

Chas. McQuray, aged 45 years, married. He leaves a widow and two children.

Caspar Ambrizat, aged 25 years, single.

This mine caught fire and is still closed and the bodies are in the mine.

March 22, 1909, August Huehne, aged 38 years, machine runner, employed in the Southern Coal Company's mine at New Baden, Clinton county, was injured and then took sick and died about six weeks after the accident. The doctor stated his death was caused from the accident. He leaves a widow and one child.

April 9, 1909, John Palkonis, miner, aged 29 years, married, in the employ of the O'Gara Coal Company's mine No. 3, Harrisburg, Saline county, was working off a shot in his room when a piece of clod about 5 feet by 6 feet and 4 inches thick fell on him injuring him so that he died five hours after the accident. He leaves a widow and one child.

May 29, 1909, Phillip Henson, miner, aged 37 years, married, employed in the Bessemer Washed Coal Company's mine at Pinckneyville, Perry county, was walking out of his room behind a loaded car when a piece of slate fell on him, killing him. He leaves a widow and three children.

June 17, 1909, John Butler, cager and helper, aged 38 years, in the employ of the Willis Coal and Mining Company's mine at Percy, Randolph county, was injured and died later from pneumonia and fever. He leaves a widow and two children.

June 26, 1909, John Lodus, laborer, aged 29 years, in the employ of the Southern Coal Company's mine at New Baden, Clinton county, got slightly scratched on the foot by a sprag. He died later from lock jaw. He was single and his home was at New Baden, Ill.

Respectfully submitted,

W. S. BURRIS.

State Mine Inspector, Ninth District, DuQuoin, Ill.