

IMPROVEMENTS.

The Paradise Coal and Coke Company has installed one 100 K. W. dynamo and one 150 K. W. dynamo; two 150 H. P. boilers, 72 inch by 18 feet, 70—4 inch flues, two 10 tons haulage motors; the old pit cars were 1½ tons and they have put in 40 new ones 2½ tons and laid the mine entries with 40 pound rails.

The Tamaroa and Little Muddy Coal Company has put in a new screening plant, shaker screens, and raised the tower.

The Jupiter Coal and Mining Company has moved its washer from mine No. 1 and placed it at mine No. 5. The washer has a capacity of 400 tons per day; No. 5 mine has been closed the past year but as soon as they get the washer installed they will start up again.

During the year the Benton Coal Company has improved its property by installing a re-screening plant; this plant consists of a substantial frame building of neat and durable appearance, with a pan conveyor, and containing a revolving screen 60 inches in diameter by 16 feet long, making the following sizes; 2 by 3 inches and 1 by 2 inches and ¾ by 1 inch and ¾ duff. This screen has a capacity of 125 tons per hour. It has also one more Kewanee boiler, 18 feet by 72 inches, 150 H. P. Another 150 K. W. Morgan-Gardner generator, belt connected to an 18 inch by 19 inch Skinner automatic engine. Underground it has installed a motor haulage, and has in successful operation two eight ton 220 volts, two motor, double end controlled Morgan-Gardner locomotives.

The Hart-Williams Coal Company has improved its property by installing two new Kewanee boilers 150 H. P. 72 inches by 18 feet, 72—4 inch flues also a rescreening plant including revolving screen, electric driven; one new generator, 150 K. W. 250 volts; a new Ottumwa box car loader, electric driven; one drag conveyor for carrying coal to boiler room; one thousand feet new track for loaded storage; 68 new 3½ ton pit cars; one new electric pump on top for pumping water from pond; two DuPont trip hammers for sharpening machine bits; one brick powder house.

The Zeigler Coal Company has made the following improvements at its mine: two Heine water tube boilers, 400 H. P. each; two smoke stacks, 175 feet 6 inches; one Western Electric generator, 500 K. W. 250 volts; one 26 inch by 48 inch Hamilton Corliss engine directly connected to generator; one Standard 50 foot track scale; extensions on buildings to cover new boilers and generator; new concrete fan house; 150 new pit cars; one 13 ton Jeffery haulage locomotive; one 6 ton Jeffery gathering locomotive and one 6 ton Goodman gathering locomotive. Eight Draeger helmets and apparatus for rescue work; one fire fighting and rescue appliance building.

The United Coal Company of Christopher, Franklin county has installed the following machinery; one Goodman 150 K. W. 250 volts, direct connected generator to a McEwing engine 20 inch by 20 inch; 7 Goodman and one Jeffery mining machines; one 7½ ton and one 10 ton haulage motor; two new boilers 150 H. P., 72 inch by 18 feet, 84—4 inch flues and a re-screening plant to take care of fine coal; revolving screen 6 feet by 16 feet making No. 2 nut and ¾ slack, building 24 feet by 40 feet.

The T. C. Keller Coal Company of Sesser, Franklin county, has put in a new Sullivan air compressor 1,620 cubic feet per minute; two new boilers 150 H. P., 72 inch by 18 feet, 72—4 inch flues.

MINE FIRES AND EXPLOSIONS.

On the evening of November 5, 1908, at the W. P. Rend Colliery Company's mine at Rend City, Franklin county, there occurred an explosion while four shot firers were in the mine. The explosion was so terrific that it put the two cages at the main shaft out of commission; shot the explosion cover off of air shaft, igniting several fires in the mine; the shaft being over 600 feet deep it required the installing of a hoist at the air shaft

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