

rooms with 20 pound steel, opened up on the panel system, coal to be handled with gathering motors, shaft 550 feet deep coal 6 foot 6 inches to 7 foot. This mine will use the No. 2 mine for an escapement shaft.

The Carroll and Franklin Counties Coal Company has sunk and equipped a modern mine at Hanaford, Franklin county. This company began sinking May 28, 1908, and reached coal December 24, 1908. The main shaft is 697 feet to the bottom of the sump; sump 16 feet; the shaft is timbered $9\frac{1}{2}$ by $15\frac{1}{2}$ feet in the clear. Air shaft $9\frac{1}{2}$ by $13\frac{1}{2}$ feet in the clear. Depth of air shaft 675 feet. Both shafts are timbered with 4 by 12 inch hard pine, the main shaft having three rows of 6 by 8 inch buntons set three feet apart while the air shaft has one row of buntons set to give a clearance on the air side of 9 by $9\frac{1}{2}$ feet. The company is now engaged in installing a 16 foot Miller fan similar to those used by the Superior Coal Company at Gillespie, Ill., and when completed will have one of the best ventilated mines in the district. The tippie structure is of steel throughout and consists of a heavy tower strengthened in all directions and supporting the sheaves and house; the latter being also carried by two very heavy vertical columns, arranged so as to go between the tracks and to clear the shaker structure. The shaker structure is also of novel form, and is entirely independent of the main tower, to which it is set at a sharp angle; the hoisting equipment consists of a standard Litchfield pair of direct acting engines 24 by 44 inches connected to an 8 foot drum; the hoisting ropes of $1\frac{3}{8}$ inches in diameter and the mine cars are built to hold three tons of coal. They have two 72 inch by 18 foot boilers, engine house, boiler house, blacksmith shop, supply house and office which comprise the top improvements.

The Southern Illinois Coal Company has sunk a new shaft in Franklin county, 6 miles west from West Frankfort and will be on the C., B. & Q. R. R. They began sinking this mine in July, 1908, and found coal about December 1, 1908. The depth of shaft to top of coal is 347 feet, size of shaft $9\frac{1}{2}$ by 16 feet inside measurement, and is timbered with 6 inch by 12 inch to rock and from there down 4 inch by 12 inch oak; they have two 150 H. P., 72 inch by 18 foot Atlas boilers, and Litchfield 24 inch by 42 inch engine, $1\frac{3}{4}$ inch ropes.

The W. T. Ritchey Coal Company of Pinckneyville, Perry county, the main shaft is 7 feet 6 inches by 16 feet, and is 160 feet deep. Two boilers Wangler make 48 inch by 22 feet and 60 H. P. each. Blakeslee hoisting engine 14 inch by 24 inch, 40 H. P. Ropes $1\frac{1}{8}$ inch. Blakeslee cages.

CHANGES IN LOCAL MINES.

The usual changes in local mines took place this year. About the same number is in operation and about the same amount of coal was mined.

ABANDONED MINES.

The Anchor Coal Company that operated the old Perry county mine have abandoned this mine the past year.

The Orin Coal Company of DuQuoin, Perry county has abandoned its No. 1 mine, known as Jupiter No. 1, and taken the washer and placed it at its No. 5 mine.

MINES CLOSED DOWN TEMPORARILY.

The Orin Coal Company has had its No. 5 mine closed down the past year and operated its No. 1 mine.

The O'Gara Coal Company of Saline county has had its No. 5, 6 and 12 mines closed down the past year owing to the increased tonnage at the other mines. All of those mines are kept up and can be operated on short notice.

The White Ash Coal Company of DuQuoin, Perry county has not hoisted any coal; the mine has been sunk over one year and is standing idle.

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 $1\frac{1}{2}$ tons and they have put in 40 new ones $2\frac{1}{2}$ 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 $\frac{3}{4}$ by 1 inch and $\frac{3}{4}$ 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 $3\frac{1}{2}$ 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 $7\frac{1}{2}$ 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 $\frac{3}{4}$ 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 frers 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