

THE BUNKER HILL COAL CO.

This mine is located within the corporate limits of the village of Bunker Hill, on the line of the Indianapolis and St. Louis Railroad. The shaft is 250 feet deep, the coal averaging $5\frac{1}{2}$ feet in thickness. It is hoisted by a single engine 10x20, hoisting drum 5 feet in diameter, ropes 1 inch, one boiler 40"x26". This company has sunk an escapement shaft during the year, and put in ladders from bottom to top. They have erected a Brazil, Ind., fan, 10 feet in diameter, to be worked by rope gearing. The fan is located at the escapement shaft.

Manager, J. Baur; Underground Manager, Peter Neil.

B. L. DORSEY & SON'S SHAFT.

This shaft is located within the corporate limits of Gillespie, and on the line of the Indianapolis and St. Louis Railroad. The shaft is 346 feet deep, the coal having an average thickness of $7\frac{1}{2}$ feet, and the works are opened on the double-entry plan. The air is split for each set of entries. The company employs, on an average, 80 miners. This company has sunk an escapement shaft during the year, and put up a 4-foot Murphy fan for ventilating purposes. The coal is hoisted by twin engines, 16x30, of Litchfield manufacture. The engines are on first motion, the hoisting drum 8 feet in diameter, ropes $1\frac{1}{8}$ inches. Everything is in first-class order around the mine.

B. Dorsey, Manager; Alexander Butters, Underground Manager.

GILLESPIE COAL AND MINING CO.

This shaft is located half a mile east of the village of Gillespie, on the line of the Indianapolis and St. Louis Railroad. The shaft is 345 feet deep, the coal averaging $7\frac{1}{2}$ feet in thickness. The mine is worked on the double-entry plan, and the air split for each set of entries. The mine is ventilated by a 4-foot Murphy fan. The fan is located at the escapement shaft. Ladders are put in the escapement shaft from bottom to top. The fan shaft is 5x5; ladder-way, 5x5. The coal is hoisted by twin engines on the first motion. The engines are 16x30, hoisting drum 8 feet, ropes $1\frac{1}{8}$ inches. There is a powerful brake attached to the hoisting drum on all engines fitted up by the Litchfield machine works. There is also an indicator geared to the drum shaft by worm gearing; foot brake on center of drum, and relief valve. The relief valve is the invention of Wm. Bates, hoisting engineer at this mine. This is one of the best mines in Macoupin county, having a capacity of 1,000 tons per day. Everything around the mine is in good order. The engines are kept very neat and clean, and, in fact, everything about the works is in excellent condition, both above and below.

Manager, O. T. McKinney; Underground Manager, Wm. Opie.

YOCK BROS'. COAL AND MINING CO.

This shaft is located about $1\frac{1}{2}$ miles west of the village of Hornsby, on the line of the Indianapolis and St. Louis Railroad. The shaft is 390 feet deep, the coal averaging $7\frac{1}{2}$ feet in thickness. An escape-

ment shaft has been sunk during the year, and the company has put up a 10-foot Brazil (Ind.) fan for ventilating purposes. The mine is opened on double and single entry plan. The company employs, on an average, 60 miners. The mining is all done by machinery. Yock's compressor and coal cutting machines are used, being the patents of Benjamin Yock, one of the firm. The coal is hoisted by double engines, first motion, 16x30. The hoisting drum is 7 feet in diameter; hoisting ropes $1\frac{1}{4}$ inches. There are 6 cylinder boilers used for making steam, each 42"x24". The screens are $1\frac{1}{2}$ inches in the mesh, and 12 feet long. Revolving screens are used to clean the nut coal. A great deal of timber is used in this mine, as the roof is very poor. The roof of the coal at Staunton, Mt. Olive and Gillespie is a great deal stronger than at Yock's mine.

Benjamin Yock, Manager.

FARRELL & FLINT'S MINES.

Shafts Nos. 1 and 2 are located in and adjoining the city of Carlinville, and on the line of the Chicago, Alton and St. Louis Railroad. No. 1 shaft is 280 feet deep, and No. 2 is 290 feet deep, the coal averaging $6\frac{1}{2}$ feet in thickness. These mines have been stopped since November, 1883, because they have had no escapement shafts.

THE NILWOOD MINE.

Nilwood mine is leased and operated by Dennis Noonan. The shaft is located within the corporate limits of the village of Nilwood, and on the line of the Chicago, Alton and St. Louis Railroad. The shaft is 327 feet deep, the coal having an average of seven feet in thickness. There are twenty-five miners employed on an average during the year. The ventilation is by furnace, $3\frac{1}{2}$ feet grate bar. There has been an escapement shaft sunk at this mine during the year. The coal is hoisted by a single engine 12x24, drum 5 feet, ropes $1\frac{1}{8}$ inches. This mine has originally been worked on the single-entry plan, but the under-ground manager is now opening up the works on the double-entry plan.

Manager, Louis Kortkamp.

GIRARD COAL AND MINING COMPANY'S MINE.

Girard Coal and Mining Company's shaft is located within the corporate limits of the village of Girard, and on the line of the Chicago, Alton and St. Louis Railroad. The shaft is 357 feet deep, and is in the basin of the coal along the line of said railroad. It runs from seven to eight feet in thickness. This mine has a splendid roof, one half of the works being in a solid limestone top, and very little timber needs to be used. The coal seems to be of a better quality than that of the surrounding mines. This company has made great improvements during the year. The hoisting shaft is made larger, the top landing raised, chutes built for coaling the engines on the Chicago and Alton, and Jacksonville Southeastern Railroads; revolving screens have been put up, and it is the intention as soon as it can be done to put in double engines on the

first motion for hoisting, and a 12-foot fan at the escapement shaft for ventilating purposes. The company will work on an average 100 miners during the year. This company has opened offices for the sale of their coal in Chicago. The Girard coal has become quite a favorite in Chicago. A brick and drain tile works is connected with the mine. Shale is mined in a shale seam above the coal. And it is intended to put down a slope to the coal seam, and hoist the shale from the landing of the coal seam. The shale is crushed and used in the making of brick and drain tile. The firm consists of A. K. Young, C. C. Armstrong, Henry Wood.

L. C. Murphy, Secretary, H. Wood, General Manager.

VIRDEN COAL SHAFT.

Virden Coal Shaft, J. W. Utt, proprietor, is located in the village of Virden, on the lines of the Chicago, Alton and St. Louis Railroad, and the Jacksonville and South Eastern Railroad. The shaft is 320 feet deep, the coal averaging $7\frac{1}{2}$ feet in thickness. There is an average of ninety miners employed during the year. A new fan, 10 feet in diameter, has been put in on the air chamber at the hoisting shaft during the year. There is a brick and drain-tile manufactory connected with the mine. A seam of shale is worked and hoisted out of the escapement shaft. The shale is used for making paving-brick and drain-tile. This mine has been greatly troubled with gob-fires, and the east side of the shaft had to be stopped owing to the fire cutting off the return air-course. The manager is now opening up the west side, driving double entries, which will give better ventilation and not so much danger from fire. The coal is hoisted by double engines on the first motion, which are 12x20. Two boilers are used for getting up steam, each 42"x20'.

J. W. Utt, Manager. Owen Garrett, Underground Manager.

MEDORA COAL AND MINING Co.

This shaft is located in the village of Medora, and at the intersection of the Chicago, Burlington and Quincy, and Wabash, St. Louis and Pacific railroads. The shaft is 280 feet deep, the coal being 2 feet 10 inches thick. The mine is worked by long wall, and ventilated by a steam jet. This mine has been greatly troubled with carburetted hydrogen gas (fire-damp). The west side of the workings had a rise of 1 in 10, and at about 400 feet run up to a rise fault, and not having a separate air chamber, the mine could not be properly ventilated. The gas working out of the coal always lay at the face on the rise side of the workings, and the works had to be examined every morning by safety lamp. This company commenced to sink an escapement shaft; put it down 10 feet and stopped, and the mine is at present stopped, owing to some trouble with the stockholders. The coal is hoisted by double engines, 12x24, first motion. The foundations of the engines are elevated to the height of the top landing. The company bored below the present coal for a larger seam, but they went through the coal measures and found none.

CHESTERFIELD COAL AND MINING Co.

This shaft is located adjoining the town of Chesterfield, and on the line of the Wabash, St. Louis and Pacific Railroad. The shaft is 240 feet deep; the coal 2 feet 10 inches in thickness. The mine is worked by long wall. The company employs an average of 30 miners during the year. The coal is hoisted by double engines, 14x30, on first motion; one boiler 48"x30'. There is no escapement shaft at this mine. Notice has been served on the company, and they will commence to sink this fall, and continue until the shaft is finished. This mine has been very successfully worked by long wall, considering the difficulties connected with it.

Manager, James Small.

ABBAY MINE No. 3. MADISON Co.

This shaft is operated by the Abbey Coal and Mining Company, and is located on the St. Louis, Vandalia and Terre Haute Railroad, adjoining the corporate limits of the city of Collinsville. The shaft is 146 feet deep. The seam of coal has an average of $6\frac{1}{2}$ feet. The mining is all done by machinery, an average of seven Harrison machines, worked by compressed air, being in use during the year. A Norwalk compressor is used, with 20-inch cylinder and 24-inch steam cylinder. The reservoir is 20 feet long by 32 inches in diameter. The air is conducted to the face of the workings by cast iron pipes. Small reservoirs are used in the mine for taking the condensation out of the pipes. The seam of coal is well suited for machine mining, having a limestone top in about one-half of the workings. The machine men, loaders, blasters and timber men are all paid by the day. The working is all done by single-entry. This company has put in during the year a 50-ton track scale, and erected a 10x3 $\frac{1}{2}$ foot ventilating fan at the top of the escapement shaft. They are at present putting in a new hoisting engine.

The President of the Abbey Coal Co. is W. J. Crandall; General Manager, W. E. Crandall; Mine Manager, Wm. Fletcher; Underground Manager of No. 3 is Peter Greaves; Mechanical Engineer, John Killinger.

COLLINSVILLE COAL AND MINING COMPANY,

Is located on the St. Louis, Vandalia and Terre Haute Railroad, adjoining the city of Collinsville. The shaft is 150 feet deep. The average thickness of the seam of coal is $6\frac{1}{2}$ feet. They employ on an average 70 miners during the year. The mine is worked on the single-entry plan. This company originally worked two shafts. The machinery has been removed from one, which is now used as an escapement shaft. The mine is ventilated by a furnace, six feet in width of grate bar; the entries are driven 10 feet wide. The furnace will give 20,000 cubic feet of air. The mine being worked on the single-entry plan, it is almost impossible to carry the air up to the working face. There are no scales at this mine. Suit was commenced against the company for not having scales, but the company carried the case to the Appellate Court, and as yet there has been no decision.

The Manager for the Collinsville Coal Company is Joseph Wickliffe; Underground Manager, Martin Fulton.