

The company has installed a Smith gravity box car loader, to handle coal for the northern trade, this trade being mostly confined to box cars. The arrangement seems to give the best of satisfaction for handling the egg coal, which can be loaded in box cars. The company has an Ottumwa box car loader. A large shaker screen is used to grade the coal. The mine track is forty-two inch gauge, with forty pound steel rails on the main and cross entries. The cars are of three and one-half ton capacity and when loaded to their extreme capacity hold four and one-fourth tons. The bottom of the shaft on the loaded track side has a fall of $1\frac{1}{2}$ per cent for 400 feet, giving a splendid action for loaded cars. The company is undecided in the matter of installing an empty car lift of the Danville manufacture or to blast up the bottom and make a gravity for the empty cars, both plans having their respective advantages.

The United Coal Company's new mine is located on the C., B. & Q. and Illinois Central Railroads, at Christopher, Franklin county. This shaft is 500 feet deep, with a seam of coal 9 feet and 7 inches. The main shaft is 10 feet by 16 feet. The air shaft is 9 by $13\frac{1}{2}$ feet, the air way being 9 by 9 feet. The engine is of the Danville make, first motion, 24 by 42 inches. There are four boilers installed of the Erie, Pa., make, 72 inches by 18 feet, with seventy-two four-inch flues. The fan is of the Capell make, 6 by $13\frac{1}{2}$ feet. The dynamo is of the Morgan-Gardner make, 150 K. W. The fan house is built of brick and concrete, standing twenty feet from air shaft, with a tunnel running to the air chamber equipped with a pair of relief doors, in case of an explosion. The blacksmith shop, boiler and engine rooms are constructed of brick. The main office is at the mine and is also built of brick, steam heated, with bath room in connection. The tippie is constructed of steel, with a large shaker screen and two box car loaders, one a Christy, the other of the Ottumwa make. The scales for weighing the coal into railroad flat cars are placed, one above the mine switches to weigh the empty cars and one below the switches to weigh the loaded cars. This is one of the up-to-date mines in southern Illinois.

The Zeigler District Colliery Company has sunk a new mine, on the C., B. & Q. Railroad, Christopher, Franklin county. The shaft is 517 feet deep, with a 10-foot vein of coal. The main shaft is 10 by 16 feet; the air shaft 8 by $12\frac{1}{2}$ feet. The engines are the Litchfield make, first motion, 24 by 42 inches. There are four Erie, Pa., boilers, 18 feet by 72 inches. The boiler room, blacksmith shop and engine houses are built of brick and are fire proof. The tippie is constructed of steel, with shaker screens. The pit cars have a capacity of three tons. This mine when fully developed should produce a large tonnage with its modern equipments.

The W. P. Rend Coal Company has opened a new mine on the C., B. & Q. Railroad, four miles northwest of Benton, Franklin county, and is now in operation. The mine is 575 feet deep, with a good 10 foot 9 inch seam of coal. The main shaft is 10 by 18 feet; the air shaft 10 by 13 feet, with $\frac{1}{2}$ mainway 4 by 10 feet. The hoisting engine is 24 by 42 inches; the hoisting rope is steel, $1\frac{3}{8}$ inches. Five boilers are installed, size 17 feet 11 inches by 72 inches, with seventy-eight four-inch flues; also one dynamo, 100 K. W. and one 150 K. W. The coal is mined with two electric Morgan-Gardner machines. The buildings, consisting of blacksmith shop, boiler and engine rooms, are constructed of brick and are fire proof. The tippie is steel, with shaker screens. This mine is equipped with sufficient machinery, when developed, to insure a large tonnage.

The Coöperative Coal Company, Breese, Clinton county, is now in active operation. The mine is situated on the B. & O. Railroad, one mile east of Breese. The depth to the coal is 390 feet to a seam of 7 feet and 6 inches. The main shaft is 9 by 18 feet in the clear, timbered with 6 by 8 inch yellow pine. The air shaft is 10 by 16 feet, also timbered with 6 by 8 inch yellow pine for the first thirty feet; the remaining distance is timbered with 4 by 8 inch yellow pine. At this mine there is a pair of 34 by 60 inch Danville engines and four 72 inch by 20 feet, Erie boilers. The fan is eighteen feet in diameter; fan engine is St. Louis make, 12 by 18 inches. Coal is hoisted

in the Fletcher skip, the coal being dumped at the bottom of the shaft into a large hopper. The pit cars hold three tons of coal. The bottom is laid out on the plan of the three-entry system to the second pair of cross entries. The boiler, engine and blacksmith buildings are built of brick. The tippie is a wood structure with shaker screens. This mine is laid out to handle a very large tonnage.

IMPROVEMENTS IN MINES.

The Moffat Coal Company, Sparta, Randolph county, has installed a Sullivan compressor and ten Sullivan machines, the company believing that it will attain better results in the quality of coal at its mine.

The Odin Coal Company, Odin, Marion county, has installed a high speed fan, run by a small generator at the face of the workings. The fan is placed one and one-half miles from the bottom of the shaft, running at a speed of 250 revolutions a minute, producing 40,000 cubic feet of air. This relieves all pressure on stoppings. Before this fan was installed 5,000 cubic feet of air was all that could be forced to the face of the workings.

ABANDONED MINES.

The Great Central Coal Company, Duquoin, Perry county, has abandoned its mine, known as the old Mifflin mine, four miles west of Duquoin. The machinery has not been removed and operations may be resumed some time.

The Greenwood Davis Coal Company, Duquoin, abandoned its mine March 16, 1907. The expense of handling the water and the haulage became so great that the mine was not on a paying basis. Water had to be pumped and the coal hauled up a 4 per cent grade.

April 1, 1907, the slope known as the Old Hallidayboro slope was abandoned.

PROSPECTIVE MINES.

The Dering Coal Company will open a new mine, to be known as No. 18, two and one-half miles northeast of West Frankfort, Franklin county.

The Benton Coal Company will open a new mine, to be designated as No. 2, one mile southeast of Benton.

The Big Muddy and Carterville Coal Company will have a new mine, to be known as No. 2, at Royalton.

The Marion County Coal Company will have a new mine, two and one-half miles northwest of Centralia.

The White Ash Coal Company is opening a new mine, four miles south of Duquoin.

The following is a detailed statement of the fatal accidents occurring in this district during the year ended June 30, 1907:

August 2, 1906, Matt Watheau, shot firer, age 35 years, married, was killed by a shot blowing through a pillar, while working in the Dering Coal Company's mine at West Frankfort. He leaves a widow and three children.

September 19, 1906, Ezra Young, miner, age 60 years, married, was killed by falling clod in the Royal Coal and Coke Company's mine at Sparta. He leaves a widow.

October 11, 1906, John A. Hummel, miner, aged 33 years, married, was killed instantly at the face of his room by falling slate. He was drawing a pillar in the Paradise Coal Company's mine at Duquoin. He leaves a widow and two children.

October 11, 1906, Gus Lee, miner, aged 20 years, single, was killed instantly by falling slate. Lee and Hummel were working together drawing a pillar of a room in the Paradise Coal Company's mine, Duquoin, Ill.

December 11, 1906, Herman Habich, miner, aged 34 years, was killed instantly by falling rock and slate, the mass weighing about 2,000 pounds. He was employed in the Breese Trenton Mining Company's mine, Breese. He leaves a widow and two children.