

fair quality of coal, and is seam No. 1. It is nearly all blasted with powder. The coal is $2\frac{1}{2}$ feet thick. Hand-power geared drills could be very economically used here, as it is very laborious work for a miner to use the common, ordinary hand drill in such a low seam of coal.

Wm. H. Bates, Manager.

COLLIERY IN COLES COUNTY.

MATTOON COAL AND MINING CO.

Considerable improvement has been made at this shaft during the year, both above and below. The return air-courses, when the present management took charge of the works, were nearly closed up; 30 cubic feet per man per minute, was all the air that could be obtained with the fan. The air-courses have all been repaired and cleaned out, so that now there is over 100 feet of air per man. The hauling roads have been made wider, and the partings at the bottom of the shaft retimbered and made higher. The underground works are now in a tolerably fair condition. The company had some trouble in securing a site for an escapement shaft, but now the ground is secured and the company is sinking another hoisting shaft, to be used as an escapement. The shaft is going down at the intersection of the Illinois Central and Peoria, Decatur and Evansville railroads, and it will be pushed ahead until completed. Timbers 10x12 will be used for cribbing timbers. If much water is met with an inside lining of 8x10 timbers will be put in, with a puddling wall of 4 inches of Portland cement. It is the intention of the company to puddle all shaft water back.

Jas. P. Cummings, Manager.

COLLIERY IN CHRISTIAN COUNTY.

PANA COAL AND MINING CO.

This shaft is located within the corporate limits of the village of Pana, and at the intersection of the Illinois Central, the Indianapolis and St. Louis, and Ohio and Mississippi railroads. The shaft is 742 feet deep. They began hoisting coal September, 1884. The shaft is 7x18 in the clear, having two cage ways and a fan chamber. The shaft is very substantially timbered, 10x12 timbers being used until the stone head was reached. The coal seam has an average of 7 feet in thickness, and is of very fair quality. Double engines are used for hoisting the coal, 20x48 cylinders, drum 10 feet in diameter, rope $1\frac{1}{2}$ inches. Two tons of coal are hoisted at a time. Coal is shipped on all three railroads, with chutes for locomotives on the I. & St. L. The underground works are laid out with double entries. A 12-foot fan has been erected for ventilation, giving 25,000 cubic feet of air in two splits. The mine has been

worked very successfully since it began operations. A 13x30 engine is used to run the fan and revolving screens. The screens are 42 inches 18 feet and are used to make 4 sizes of coal. Four flue boilers are used for steam with a brick smoke stack 6x8 in the clear.

Chas. A. White, Sup't; Hugh Hughes, Mine Manager.

LITCHFIELD COAL AND MINING CO.

It was the intention of this company to abandon this mine, not being able to compete with the larger seams at Mt. Olive and Gillespie. They have been working on pillars for the last two years. Now the company has leased the mine to Joseph Richardson, who has opened it up to the face of the solid coal, and is driving it forward on a long wall face. The traveling way to the old shaft for an escapement has been cleaned up and put in order. A fan will be located at the old shaft to ventilate the mine.

Jos. Richardson, Manager.

ROODHOUSE, GREENE CO., ILL.

Pocket coal has been discovered about 2 miles east of this place. The coal seems to lay about 25 feet above coal seam No. 1, and is thickest in the bed of the creeks. Two shafts have been put down to it, one by Campbell and Nelson, the other by Thos. Carter. The Campbell shaft is 26 feet to the top of the coal, and the coal is 13 feet thick. Five feet next to the top is of a very fine bituminous nature, free from sulphur and dross. Four feet next to the bottom is a very good coal for steam and house coal, and the bottom 2 feet is cannel coal. The upper 2 feet is block coal, and the 4 feet in the centre is soft and mixed with small slaty bands. At Carter's shaft the coal is 4 feet thick, having 6 inches cannel coal in the bottom. This coal burns to a white ash, and gives off no clinker and very little smoke. Since these shafts were opened the tile manufacturers of Whitehall and citizens of Whitehall and Roodhouse will not use the coal from seam No. 1, the pocket coal being of so much better quality.