

old Riverton shaft. Entries have been driven from each shaft for an escapement for both. The shaft is located on the Illinois Central railroad, and has a royalty of 371 acres. The works are opened on the double entry plan. The shaft is 230 feet deep. The ventilation is by a 6-foot Murphy fan, giving 35,000 cubic feet, in two splits. All the outside works are in good condition. The coal is hoisted by double, first motion engines 16x32, Litchfield make; drum 6 feet, rope $1\frac{1}{2}$ inch.

Joseph Hann, Manager Sangamon Coal Co.

RIVERTON COAL AND MINING COMPANY.

This shaft has had some improvements made during the year. The old furnace has been abandoned, and a 12-foot Brazil fan set up on the air chamber of the hoisting shaft, which gives over twice the quantity of air the furnace gave. The workings were extended too far for the furnace. A pair of double entries have been driven nearly a mile, to make an escapement shaft for the No. 3 of the Sangamon company. The Riverton company recently owned the No. 3 Sangamon company's shaft. These entries are now cut off since the holing has been made, which has shortened the air courses, giving more ventilation to the other parts of the mine. This is one of the oldest mines in Sangamon county, and has been worked very extensively.

Robt. Jess, Supt.; John Hickey, Mine Manager.

CAPITAL CO-OPERATIVE SHAFT.

One of the boilers at this shaft exploded Feb. 16, 1885, killing the engineer, Wm. Daughton. The boiler and engine house were a total wreck. Everything has been built up again, and two new steel boilers put in. A new 12-foot Brazil fan has been set up on the air chamber of the hoisting shaft, which will give adequate ventilation for the mine. The old furnace has been abandoned, not having had power enough to ventilate the mine. Ladders have been put in escapement shaft.

James Ryan, Manager.

WABASH COAL AND MINING Co. No. 2 COLLIERY, AT DAWSON.

This shaft has been worked nearly up to its full capacity. The coal averages $5\frac{1}{2}$ feet thick, and is of a very fair quality. This seam is not so much troubled with "horseback" and clay slips as the mines around Springfield. The ventilation is very good. An 8-foot Murphy fan is used for ventilation, and everything is in good order below. The air has been split, and air crossings put in during the year.

T. P. Mowitt, Manager.

WEST END COAL COMPANY.

The top works of this company were destroyed by fire in August, 1884, and subsequently rebuilt by the insurance company. The furnace

has been abandoned and a 12-foot Brazil fan set up on the escapement shaft. The fan gives twice the air of the furnace, showing a total of 35,000 cubic feet in three splits. The mine is now well ventilated and everything is in good working order. Ladders have been put in the escapement shaft.

Robt. Green, Manager.

PLEASANT PLAINS COAL AND MINING Co.

This company has sunk a new shaft, half a mile west of the village of Pleasant Plains, Sangamon county. The old shaft east of the town has been abandoned. The new shaft is located on the Ohio and Mississippi railroad. The shaft is 135 feet deep, and the coal is hoisted by a pair of 10x16 engines, second motion. An upright boiler is used for steam. The mine is opened up on the double-entry plan. The shaft has been in operation eight months. An escapement shaft will be sunk within the time allowed by law.

John Galloway, Manager.

COLLIERIES IN MACON COUNTY.

DECATUR COAL Co.

This shaft has been worked very successfully during the year, having increased their output 15,000 tons. Their new hoisting shaft, to be used as an escapement, is down 350 feet, and in very good shape. At a depth of 30 feet from the surface a bed of quicksand was found, and a running crib had to be used in sinking through it. The crib was made of 10x12 timbers, and was run down by weights through the sand. At a depth of 60 feet a seam of blue clay was found. Drift timbers were put in to try and arrest the crib here. The shaft was then making from 50 to 60 cubic feet of water per minute. Below the blue clay sand and gravel were found. The blue clay being only 4 feet thick it gave away and carried the crib into the lower sand, to a depth of 133 feet from the surface. At this point a resting place was found for the crib. The shaft was sunk 6 feet deeper on an offset of 18 inches. Here a lining of 8x12 timbers was started, and carried up above the upper sand. A puddle wall of cement was carried up between the timbers to shut off the water. Three small seams of coal were passed through in sinking, one 10 inches, one 12 inches and one 1 inch, the latter at 310 feet from the surface. At a depth of 324 feet a hard flinty lime stone was found, 11 feet in thickness, equivalent to the Carlinville and Shoal Creek limestone, the dividing line between the upper and lower coal measures. Bituminous shale was found below the limestone, equivalent to the horizon of coal No. 8 of the general section of the State. This will be one of the best constructed shafts in the State when finished. It is very substantially timbered and of good size. An air chamber is being carried down at one end, having an area of 50 feet for ventilation. The 8-foot fan at the

old hoisting shaft is now being replaced by a 12-foot fan. The number of men and mules now at work, and the extension of the mine, has rendered the capacity of the 8-foot fan inadequate.

Mark Moran, General Manager.

NIANTIC COAL Co.

This shaft has been worked only about one-half its capacity during the year. A new escapement shaft has been finished, and ladders put in from top to bottom. The underground workings are in fair condition. A new fan will have to be erected, as the underground workings are getting extended too far for the present fan, which is very improperly constructed.

T. H. Mooney, Superintendent; M. A. Leonard, Mine Manager.

COLLIERY IN EDGAR COUNTY.

DREW AND WASSON COAL COMPANY.

This is the shaft that originally belonged to the Illiana Coal Co., located at Illiana, having been leased to the Drew and Wasson Coal Co. This company has a number of mines in Indiana. The new company is putting everything in good order around the mine, putting ladders in escapement shaft and cleaning out the air courses. The work has been changed from long-wall to pillar-and-room.

John Watson, Superintendent; Henry Robinson, Mine Manager.

COLLIERIES IN BOND COUNTY.

SORRENTO COAL COMPANY.

This shaft is located within the corporate limits of the village of Sorrento, and at the intersection of the Jacksonville and Southeastern and Toledo, Cincinnati and St. Louis Railroads. The seam of coal averages $7\frac{1}{2}$ feet thick, and is No. 6 of the general strata of the State. The coal was hoisted for the first time in November, 1884. A single engine on second motion is used to hoist the coal. The engine is 14x28, and there is one boiler 42x22. A 7-foot drum and $1\frac{1}{8}$ inch rope is used for hoisting. The shaft is 373 feet deep. The roof is not so good here as at Mt. Olive. There are about 2 feet of slate and 11 feet of rock, very poor. About 20 miners are at present employed. The shaft pillars have not been holed around yet.

Chas. Pullen, Manager.

SMITHSBORO COAL AND MINING Co.

This a new shaft just sunk to the coal, a distance of 450 feet, to a seam $4\frac{1}{2}$ feet thick. The shaft has been well sunk and timbered in a very substantial manner. The coal is of a very good quality, very dense and free from sulphur.

Samuel Ainsworth, Manager.

COLLIERIES IN MORGAN COUNTY.

APPLE CREEK COAL Co.

This is a new shaft, located within the corporate limits of the village of Franklin, Morgan county, on the Jacksonville and South-eastern Railroad. The shaft is 202 feet deep, and the coal seam $4\frac{1}{2}$ feet in thickness. The company sunk 138 feet below the present seam. A drill hole had previously been sunk and a 6-foot seam reported, but upon reaching this level with the shaft the coal was found to be only $2\frac{1}{2}$ feet thick. The works are opened up with double entries and are in good shape; an 8-foot Brazil fan has been put in to secure good ventilation. The company is at present sinking an escapement shaft. When finished the fan will be located there. The coal is hoisted by twin first motion engines Litchfield make, with all the latest appliances; disk indicator connected by worm gearing, and relief valve. Two cylinder boilers are used for steam, each 42x22; the hoisting drum is 5 feet in diameter, ropes $1\frac{1}{8}$ inch, head sheaves 5 feet. Fan engine, is 6x12, geared direct to the fan shaft. The air is split at the bottom of the downcast with a capacity of 8,000 cubic feet in each split.

Barnard Gavin, Manager.

FARMERS' COAL Co.

This is a new shaft, located within the corporated limits of Neelyville, on the Wabash, St. Louis and Pacific Railroad. It is a co-operative company, consisting of John Murray, Edward Holt, Neil Donald, John Quigley, Laffette Weinesberg, F. H. Donald, Carnipple and Seeman. The shaft is 50 feet deep, and the coal seam $2\frac{1}{2}$ feet thick, No. 1 coal. The entries are opened up 20 feet wide, with a six-foot wall in the centre, built of slate, making it virtually double entries. The mine is ventilated by a furnace on top. The coal is hoisted by a single engine 10x20, second motion; one boiler 24x36; hoisting rope 1 inch. They have a royalty of about 170 acres. The company is at present sinking an escapement shaft. At my first visit the shaft was in a deplorable condition, but is now in good order. Gates have been put around the shaft, covers on the cages, and new ropes.

John Murray, Mine Manager.

COLLIERY IN SCOTT COUNTY.

WM. H. BATES & Co.

This shaft is located one mile north of Winchester, on the Chicago, Burlington and Quincy Railroad. There have been some improvements made in this mine during the year. Iron track has been put in all the entries. Formerly the miners themselves pushed the coal to the shaft; now laborers are employed to do it. The entries are extended for a distance of 1,800 feet. The underground works are in very good order, and the ventilation good. This is a very