

overcasts put in. This colliery is experimenting with the Thomson & Vandepool electric coal cutting machine. New boilers have been put in at the Springfield Co-operative Coal Co., the Springfield Coal and Tile Co., and the Auburn Coal Co. At the Barclay colliery, about 2,500 feet of double track has been put in, with the entries newly timbered for the whole distance, with a view of putting in the endless rope for haulage; the ventilation has been considerably increased, more advantage taken of splitting the air with suitable overcasts and regulators. At the Starne colliery, about 2,000 feet of 20-pound rail has been put in on the main entries, a new boiler has been set up and boiler house built, and general improvements made on the outside plant. A new fan, Crawford and McCrimmon manufacture, has been put in at the Cantrall shaft. At the Capital Co-operative No. 2 shaft some improvements have been made in the underground works by increasing the area of the air-courses and putting in double track haulage. The Sorento Coal Co., Bond county, has made some important improvements at their colliery during the year; a new coal spur has been run in from the J. S.-E. R. R., giving the shaft connections with this road and the T., St. L. & K. C. R. R. A pair of first motion engines, Litchfield manufacture, have been put in for hoisting; also a new fan-engine, with extended boiler power, the air-courses in the mine considerably improved, and more splits made of the current and suitable overcasts put in. The new company operating the Smithsboro colliery has made some improvements during the year, two new boilers have been put in, which will double the steam power, and the underground works have been somewhat improved.

The new company operating the Virden colliery has secured 100 acres more royalty. The land is situated near to the shaft. The company intends opening out this new territory in good shape; the air is to be split for each set of entries and proper overcasts to be put in. The old and extended parts of the mine will be abandoned. The C. & A. railroad has extended the side-tracks, giving the company more facilities for shipping their coal.

The City Coal Co., of Niantic, has put in a pair of coupled first motion engines during the year, Wm. Ellison & Son manufacturers, St. Louis, Mo. The company has also lengthened and improved its side-tracks.

At the Girard colliery two overcasts have been put in during the year. The splitting of the air-currents has considerably improved the ventilation.

*Escapement Shafts.*—The Hillsboro<sup>\*</sup> Coal Co. has completed its escapement shaft during the year. The Taylorville Coal Co. and Coffeen Coal Co. are sinking their escapement shafts; the Penwell Coal Co. and Springside Coal Co. have secured the right of way from the city of Pana to drive from one shaft to the other for escapement for both shafts, and are at present pushing the work.

*Discipline.*—As fire-damp has shown itself in some of the mines in larger quantities than in former years, I have insisted on a more rigid examination by the mine examiners. Safety lamps have been furnished by the