

north-east of Sorrento. A pair of 18x32 direct engines, with eight foot drum and eight foot head-sheaves have been put in. The plant is first class in every particular.

Two small mines have been opened in Jersey county, and one in Macoupin county.

*Mining Machines.*—There are now thirteen collieries in the district, operated by coal-cutting machines; two mines having introduced machinery during the year, the Wolf Bros. Coal Company, at Edwardsville, and the Mount Olive Coal Company at Mount Olive. These two collieries have put in Chouteau machines, which are said by the managers of the mines to be working very successfully. A number of experiments with the running by electricity of coal-cutting machines have been made during the year. An electric plant is now being put in at the Girard Coal Co's. shaft, Girard, Macoupin county. The Smith coal-cutting machine is said to be in very successful operation at the Summerfield mines, in St. Clair county. It is claimed that the electric machine can be put in at less cost than the compressed air machine; the underground works can be illuminated by incandescent lamps; the blasting also done by electricity, and the shots can be fired simultaneously, which will give a larger yield of lump coal, and less powder will be used. Electric motive force will be largely used in mines in the near future, for mining, pumping, haulage, etc. In another year one-half of the coal mined in this district, will be mined by machinery; forty-seven per cent. of the entire output this year has been mined by machinery.

*Prospective Mines.*—In Christian county the Assumption Coal Company has found coal at a depth of 984 feet; the coal is said to be 4 feet 8 inches thick, and of good quality; the Taylorville and Pana coal ought to have been found here at a depth of 650 feet, but in sinking none was found; Assumption is about ten miles north of Pana, and about twelve miles east of Taylorville. The coal at Pana is, on an average, seven feet thick, and at Taylorville about eight feet thick, which shows that our coal seams, at times, nip out in a very short distance. This coal seam is 4 feet 8 inches thick, and corresponds with No. 2 of the general section of the State.

In Macoupin county a prospecting shaft has been sunk at Shipman, on the line of the Chicago, Alton and St. Louis railroad; Shipman is about sixteen miles south of Carlinville; coal three feet thick was found at a depth of 330 feet; the coal corresponds with No. 1 of the general strata of the State. A small seam of coal was found at a depth of 130 feet, corresponding to No. 6 of the general strata. It is doubtful if coal No. 5 or 6 can be found on the line of this railroad, south of Macoupin creek, thick enough to be worked at a profit.

A seven foot seam of coal has been found at a depth of 684 feet at Ramsey, Fayette county; the prospecting was done with the Diamond drill. This seam is equivalent to the Pana, Coffeen and Hillsboro coal.