## SANGAMON COUNTY.

Sangamon county is rich in deposits of coal, and is one of the largest coal producing counties of the State, being surpassed in its product only by La Salle. St. Clair and Macoupin counties. All the mines of this county work the No. 5 seam, which has an average thickness of six feet, and lies about two hundred and fifty feet below the prairie levels. In the bottom lands it is obtained at less depth. At the Auburn mines the bed has a total thickness of eight feet, but the upper eighteen inches is separated by a slaty parting, and is usually left in position to give additional strength to theroof. In all parts of the county and vicinity this is a dry seam, and all expense for pumping is obviated. It is mined by blasting from the solid face; no cutting machines are used, but an improved hand drilling machine has been tried with satisfactory results.

There are in all thirteen well equipped and extensive mines, in the county, which through the active agency of the County Inspector show material improvement for the year in precautionary measures and appliances. These mines give employment to over one thousand men, some of whom are negroes, and produced last year 632,835 tons of coal.

Several mines near Springfield are located on adjacent lands, and roadways have been established leading from one mine to the other, as safety passages in case of accident, and in lieu of escapement shafts. In one instance, however, such an opening has been made by one company without the consent of the other, which has led to some litigation between the companies as to their respective rights in such case. The objecting company in this case had constructed an escapment shaft for its own men at considerable cost, while the other sought to avoid that necessity and still claims compliance with the law by making the communication. Further mention of the case is made in the accompanying report of the inspector.

The seam in this district has the uniformity peculiar to deposits in this part of the State and to the seams of considerable depths. lying very nearly level, and varying in thickness only when "horsebacks" are encountered. It is so persistent that it is considered almost a certain find at its proper level, in any part of the county, and the expense of shafts is sometimes undertaken without preliminary tests with the drill. There is a strong presumption, based on geological data, and established by borings in one locality, tha<sub>t</sub> the seam now opened, is underlaid in this county, at no great depth, by other workable seams from four to five feet each in thickness; but the quantity of coal now in sight is so great that the necessity for deeper explorations cannot arise for many years. The average condition of mines in this county compares favorably with that in other counties where large capital is invested in mining. It is the purpose of the leading operators to develope their property according to the most improved methods, and secure the maximum of favorable condition for the work and the men. The nominal price for mining is 75 cents per ton, and no strikes are reported.

The County Inspector makes the following report:

"From the accompanying report it will be seen that, including the "B" shaft of the Sangamon Company, which has been recently opened, there are thirteen coal mines in the county, of which eight are in the immediate vicinity of Springfield. The total amount of capital invested is \$675,000, as compared with \$509,000 the year before. These mines have produced 632,835 tons of coal, and have an estimated capacity of 1,409,000 tons per annum. Number of acres coal land, 7,650; number of acres worked out, 1,005; total number persons 75

employed underground, 1,006. Each mine is operated by shaft, and by steam power, and the inside work is on the room and entry plan. The stratum of coal worked here is number five; that at Dawson is reported as number six. For the purpose of ventilation each mine has either a fan or a furnace. A fan is now being constructed at Dawson, and at Auburn a fire lamp and grate appliance is in use. I have used an anemometer for ascertaining the volume of air at the down cast, and am of the opinion that better ventilation should be afforded mines to protect them more fully from the injurious effects of gases-Each mine is provided with an escapement shaft or its legal equivalent. The Wilmington and Springfield Company, and the Springfield Co-operative Company being contiguous mines, have effected a communication by mutual agreement, and the main shaft of each is regarded as an escapement shaft for the other. Workmen at Dawson and at Auburn are now engaged in constructing escapement shafts. In the working of the Black Diamond mines a break-through was made into the adjoining mines of the Wabash Coal Company, which the proprietors of the former claimed constituted a second place of egress, as contemplated by the law, and relieved them from sinking an escapement shaft. The proprietors of the Wabash Company, who had long previously put in an escapement shaft for the use of its men, objected, and proceeded to obstruct the passage-way between the two mines. To determine their relative rights in the premises the facts were submitted to Judge Zane of the Circuit Court of this county, who, after argument, decided that the communication should be kept open, and ordered a mandatory writ to issue for the observance of the decree. The proprietors of the Wabash Company appealed from this decision, and the case was again argued at the May term of the Appellate Court, but as yet no decision has been rendered.

"Herewith is given a detailed statement of the accidents which have occurred during the year, which have been eleven in number. Six of these were fatal, and five, more less serious. Six accidents, two of them fatal, arose from want of care in blasting, and two men were killed by the falling of the roof, for want of due precaution in sounding the roof, or properly timbering it with props and cross-pieces.

"In the discharge of my duties as inspector, I have had authentic copies of the mining law printed and distributed among owners and miners throughout the district, and have called special attention to its requirements with reference to furnishing maps and plats of mines, certificates of the inspection of bollers, the putting on of safety catches and cage covers, the giving of notice of accidents, the construction of escapement shafts, and of the necessary ventilating apparatus, believing that the law was framed for the mutual benefit of owners and miners, and that the security and health of the miners provided for under the general power of the State to make laws of this kind, should be the legitimate and constant care of operators.

"My time has been diligently occupied in the performance of such duties, and the provision made by the county board has enabled me to devote my whole time to the work, unembarrassed by other employment. I have met with some opposition, but on the whole have secured a fair measure of co-operation and compliance with my suggestions."