Coal production by counties, with increase or decrease in each year for the years ended June 30, 1898, and 1899:

Counties.	Total Output of all Grades of Coal in Tons.			
	1898.	1899.	Increase.	Decrease.
St. Clair Madison Clinton Marion Bond	1, 849, 474 1, 403, 977 434, 735 494, 117 100, 955	1,600,752 630,769 417,584 714,513 96,314	248, 722 773, 208 17, 151 4, 641	220, 396
Total	4, 283, 258	3, 459, 932	1,043,722	220, 396
ncrease Decrease Net increase				1, 043, 722 220, 396

The counties of St. Clair, Madison, Clinton and Bond show an increase of 1,043,722 tons over the output of last year, and Marion shows a decrease of 220,396 tons, leaving the net increase for the district 823,326 tons, or 23.8 per cent.

The reason for the decrease in Marion is that the general strike of 1898 continued until December at Centralia, and at Sandoval to January 8, 1899, when work was resumed.

The number of days lost on account of strikes at the above named places was 266, and 20 days were lost at Oden. At the present time the district is free from strikes, and the indications are that the year now entered on will show a large increase in production.

During the last year the production of coal cut by machines has increased 20 per cent. This increase is due to the change of mining machines being placed where drills were formerly used, with one exception. Also the number of machines being put in at other mines has increased 20 per cent over that of last year, and so long as present conditions remain the tendency is that each year will see more machines being put in. The reason for this apparent tendency is that section 1 of an act providing that all coal mined shall be paid for is being complied with throughout the entire district.

The percentage of fine coal produced by machines varies from 20 to 30 per cent. The percentage of fine coal produced by shooting off the solid varies from 33 to 45 per cent.

From these figures it will be seen that the amount of saleable coal from machines is increased 15 per cent. Added to this the differential allowed varies from 17 to 19 per cent. With this enhancement in favor of machines, it will be seen that the time is not far distant when machines will be adopted in all mines that produce coal for commercial purposes.

Improvements.—The schedules will show a small amount of coal taken out at New Baden and Germantown, Clinton county. The shaft at New Baden is only 6x9 feet; it is intended for an escapement shaft. It is expected

that work will be commenced on the main hoisting shaft during September. The Germantown Coal Co. has recently built up the top works at its mine and has commenced shipping coal.

The Henrietta Coal Co., now known as the Penny Coal company, has put down an escapement shaft and is making preparations to put a fan at the top of the same. The company has also equipped its mine with electric mining machines, installed by the Morgan & Gardner Electric company. The machines are now working at a great disadvantage; the roof, which is soapstone varies in thickness from 6 inches to 2 feet and is very brittle, requiring props to be placed close to the face of the coal.

The following companies have put electric machines in their mines: The Tirre & Sons Coal Co., Lenzburg; the Johnson Coal & Mfg. Co., Marissa; and the Hippard Coal company, Belleville, all in St. Clair county. The Sorrento Prospecting and Mining company, Sorrento, Bond county, has added to its plant two electric mining machines, put in by the Link-Belt Electric company. The Conrad Reinecke Coal company, Belleville, has replaced drills with electric cutting machines, put in by the Jeffrey Electric company.

The Missouri & Illinois Coal company has put in three mining machines in the mine at Wilderman, where formerly air drills were operated.

The Kelb Coal Co. of Mascoutah, has put in four mining machines where it formerly had air drills.

Escapement Shafts.—The following escapement shafts have been put down during the year: The Trenton Coal, Light & Power company, Trenton, Clinton county, and the Hydraulic Press Brick company, known as the Independent Coal Co., Collinsville, Madison county.

The sinking of the escapement of the Kinmundy Coal company, Kinmundy, Marion county, is still in operation. The depth at present is nearly 700 feet.

The following escapement shafts caved in, owing to the severe winter, and the shaft timbers being a little decayed, but all have been reopened: the escapement shaft at Zildolph's mine, Marissa, St. Clair county, and one at the Brookside mine, Troy, Madison county, both owned by the Consolidated Coal Company.

New Mines in Contemplation.—The St. Louis & O'Fallon Coal company has sunk a main and escapement shafts. It is located in what is called "Nigger Hollow," one and a half miles northeast of Birkner, St. Clair county. The size of the main shaft is 7½ x 15 feet, and the escapement shaft 5x10 feet. This is the Belleville seam known as Number 6.

The company is at present grading railroad bed to the mine and has possession of a right of way between East St. Louis and the mine.

The Donke Bros. Coal & Coke Co., Belleville, St. Clair county, has started to sink a shaft. The size is 9x18 feet in the clear. It is the intention to equip it with all the modern and latest improved machinery, steel top works and electric mining machines, and to place their çoal in the market over their own railroad. The shaft is located nearly two miles west of Collinsville, Madison county.