

State inspector of coal mines reports

Section 73, Pages 2161 - 2190

These reports of the Kansas State Mine Inspector mostly concern coal mining, though by 1929 the scope of the reports broadens to include metal mines. The content of individual reports will vary. The reports address mining laws and mining districts; industry production and earnings; fatal and non-fatal accidents; accident investigations and transcripts of oral interviews; labor strikes; mine locations; mining companies and operators; and proceedings of mining conventions. The reports document the political, economic, social, and environmental impacts of more than seventy years of mining in southeastern Kansas.

Creator: Kansas. Inspector of Coal Mines

Date: Between 1884 and 1956

Callnumber: SP 622 K13

KSHS Identifier: DaRT ID: 210191

Item Identifier: 210191

www.kansasmemory.org/item/210191

KANSAS
HISTORICAL
SOCIETY



Biennial Report.

13

are changes that may be necessary to be made, time will bring them forth and the law will likely be amended to bring it nearer to perfection, but the great and important thing is that the principle has been established, recognizing the rights of those who are maimed and killed while producing something for the benefit of mankind, that they or those depending upon them shall receive a compensation when they meet with an accident while employed at a hazardous occupation.



LOCATION OF MINES.

OSAGE COUNTY.

The mines of Osage county are worked on the long-wall system. Each miner brushes his own road, making his roadway three and one-half feet high and four and one-half feet wide. In the north part of the county the miner's room is thirty-six feet wide, and in the south part it is forty-five feet wide. Carrying his road in the center of his room he works through to the next man, and thus they take out all the coal and leave no pillars. The mining, which is fire-clay underneath the coal, and the dirt which he gets from brushing his roadway, fill up the place where the coal was taken out, allowing the roof to rest on it. The mines are ventilated by a furnace, and the working-face is the main air-course; that is, the air sweeps along the working-face. The coal lies at a depth of from 25 to 140 feet, the average thickness of the coal seam in and around Osage City being thirteen inches, and at Burlingame and Scranton seventeen inches. When the doors and curtains are kept up and a good fire going there is very little trouble about the air, but the seam of coal, being so thin, makes a very small place for the air to travel around the face; and sometimes, when several miners fire a shot in their brushing, they block this air-course until they have their brushing-shot cleaned up. By this method of furnace ventilation, when a good fire is kept going it rarifies the air, and this causes the cooler air to rush toward the furnace. Keeping about the same temperature, a constant current of air will continue to circulate in the mine; a great number of these mines have been idle here nearly a year on account of the strike over the question of the pay the miners should receive for driving what is known as a one-sided entry.

The Standard Coal Company mine is situated two and one-half miles southwest of Scranton, connected with the A. T. & S. F. railway, and employs an average of fifty-six miners. The coal is hoisted by a horse. The shaft is 6 x 13 feet and 43 feet deep. A number of men organized a coöperative company and have been working in this mine since the strike has been settled.

The Jackson-Walker Coal and Material Company mine is situated two miles southwest of Scranton, on a switch of the A. T. & S. F. railway. There are three openings, the escapement-shaft being 300 feet away from the main shaft, and the air-shaft about 100 feet. The shaft is 5 x 13 feet and 49½ feet deep. It has been worked very little during this period on account of the strike.

McIntosh's mine, situated two miles south of Scranton, employs but a few miners. Pays two dollars per ton to the miners. The vein of coal here is twelve inches thick, with a very soft fire-clay mining underneath. This vein is about the same thickness and same general appearance as the work east of Osage City. The coal is hoisted by a horse. The shaft is 5 x 10 feet and 28 feet deep.

Labor Exchange mine, situated one mile and one-half southwest of

State inspector of coal mines reports

Biennial Report.

15

Scranton. This mine is operated by thirty-five miners who organized themselves into a company known as the Labor Exchange. They have a good vein of coal, and have been very successful. They have equipped their mine well, and they claim that they are doing better than when they were working for an individual coal operator. They are connected by a switch off the A. T. & S. F. railway.

Chappell's mine No. 6 is situated at Fostoria, about four miles west of Scranton, on a switch off the A. T. & S. F. railway. The shaft is $5\frac{1}{2} \times 10\frac{1}{2}$ feet and 102 feet deep. A steam-engine is used to hoist the coal. This mine has worked but very little this period on account of the strike.

Chappell's mine No. 3, situated at Fostoria, has a switch off the A. T. & S. F. railway, and is about four miles west of Scranton. A horse is used to hoist the coal out of the shaft, which is 6×12 feet and 89 feet deep. This mine also worked but very little.

Elliott's mine No. 2 is situated at Fostoria. The shaft is 5×10 feet and 85 feet deep. This mine has changed hands. It did not work much on account of the strike.

Elliott's mine No. 3, situated at Fostoria, has a steam hoist. Since the strike a company of men have organized a coöperative company and are now working the mine. Their engine house and top house burned down, but they have rebuilt it.

John Bell's mine is situated at Fostoria. The shaft is 5×10 feet and 85 feet deep. A coöperative company of miners is operating it at the present time.

Foster's mine, situated at Fostoria. This is an old mine. They have improved it greatly by sinking an air-shaft close by the working place.

Hugh McFaline's, situated a little east of Burlingame depot, is 5×11 and 84 feet deep. One of the oldest mines in the county, with a prospect to continue to operate for some time to come.

Central Coal Company, situated about one and one-half miles east of Burlingame. The coal is hoisted by a horse. The shaft is $5\frac{1}{2} \times 8$, 85 feet deep.

Jno. D. Jack's mine is situated in the south part of Burlingame. The coal is hoisted by a horse. The shaft is 6×11 feet and 108 feet deep. This mine worked all during the strike, as the question of the one-sided entry was settled, in fact all the mines around Burlingame were at work nearly all the time the strike was on in the others, the operators having agreed to pay the price demanded by the miners.

Strunk Coal Company, situated one-half mile south of Burlingame depot. The coal is hoisted by a horse. The shaft is 5×10 feet and 100 feet deep.

Mills Coal Company, is situated two miles from Burlingame on a switch of the A. T. & S. F. railway. The shaft is 6×12 and 82 feet deep.

Hotchkiss Bros. Coal Company, one mile southwest of Burlingame, has a switch off the A. T. & S. F. railway. The coal is hoisted by a horse. The shaft is 5×12 feet and 140 feet deep.

Coöperative Coal Company, situated about three-fourths of a mile southwest of Burlingame, has a switch off the A. T. & S. F. railway. This mine is operated by a company of miners, and only members of the company are



employed. The shaft is 6 x 14 feet and 140 feet deep. Coal hoisted by a gasoline engine.

The Black Diamond Coal Company mine, situated one and one-half miles southwest of Burlingame, has a switch off the A. T. & S. F. railway. This mine has worked but very little during this period.

Coughlin Coal Company mine, situated one mile northeast of Peterton. The shaft is 5 x 12 feet and 31 feet deep.

Jackson-Walker Coal and Material Company mine No. 28 is situated one mile northeast of Osage City, connected with a switch off the A. T. & S. F. railway. The coal is hoisted by a horse. The shaft is 5 x 13½ feet and 26½ feet deep. This shaft is worked but very little on account of the strike.

Jackson-Walker Coal and Material Company mine No. 29 is situated one mile south of Peterton. The coal is hoisted by a horse. The shaft is 5 x 13½ feet and 31½ feet deep.

Jackson-Walker Coal and Material Company mine No. 30 is situated one-half mile south and one-half mile west of Peterton. This is a new mine and gives promise of being a good mine when developed.

Kansas Coal Company, situated one and one-half miles west of Osage City, is connected by switch from Missouri Pacific railway. The shaft is 7 x 14 feet and 90 feet deep. The coal is hoisted by a horse. A number of miners organized a coöperative company and are now operating this mine.

Black Diamond Coal Company, situated one mile west of Osage City, is on a switch off the Missouri Pacific railway. The coal is hoisted by a horse. The shaft is 6 x 14 feet and 86 feet deep.

A. W. Franstrom's mine is situated one mile west of Osage City, connected with the Missouri Pacific railway. The coal is hoisted with a horse. The shaft is 5 x 14 feet and 50 feet deep. The old shaft flooded out and a new one has been sunk.

Western Coal and Fuel Company's mine No. 5 is situated one-half mile west of Osage City. The shaft is 5 x 12 feet and 50 feet deep. The coal is hoisted by a horse. The mine is worked by a company of miners.

Sam Corlson's mine is situated close to the Missouri Pacific depot in Osage City. The coal is hoisted by a horse. The shaft is 5½ x 14 feet and 59 feet deep.

Sam Corlson's mine is situated one-half mile north and one-half mile west of Osage City. This is a new mine, well equipped, and gives promise of being a good mine.

Labor Exchange, branch No. 233, has two mines. No. 1 is situated one mile northwest of Osage City. The coal is hoisted by a horse. The shaft is 4½ x 14 feet and 57 feet deep. Mine No. 4, of the same company, was sunk and equipped in the summer of 1907. Later on they rebuilt the pit-top and installed an electric hoist; they get their power from the Osage City electric power plant; this is an improvement over the horse. Situated about two miles north and one mile west of Osage City, connected by switch on A. T. & S. F. railway. The shaft is 4½ x 14 feet and 67 feet deep.

John A. Johnson's mine No. 2 is situated a little north of Osage City. The coal is hoisted by a horse. The shaft is 5 x 14 feet and 30 feet deep.

Gus Johnson's mine No. 4 is situated one mile east of Osage City on a



Biennial Report.

17

switch of the Missouri Pacific. The coal is hoisted by a horse. The shaft is 5x12 feet and 38 feet deep.

Superior Coal Company is situated one mile southeast of Osage City. The coal is hoisted by a horse. The shaft is 6x14 feet and 30 feet deep.

Isaiah Jones's mine No. 3, known of the Big Four, is situated one mile southeast of Osage City. The coal is hoisted with a horse. The shaft is 5½x13 feet and 30 feet deep.

Boruff's mine is situated one mile east of Peterton. The shaft is 5x9 feet and 21 feet deep.

LEAVENWORTH COUNTY.

The mines in Leavenworth county are all worked on the long-wall system. Each miner has his separate road. The coal is twenty-two inches thick and lies at a depth of about 740 feet. There is a fire-clay mining underneath the coal and the miners go down in this fire-clay about ten inches. On account of the great depth of this vein, when the coal face is kept straight and taking this ten inches of mining, the weight from the above crushing down on the coal crushes the mining out, thus aiding the miner a good deal in his work. Considerable gas is generated, but fire bosses are employed who examine the mine every morning and make a report as to whether there is any gas in the miner's room before he is allowed to go into it.

The Kansas state mine is situated at Lansing, on the A. T. & S. F. railway. The shaft is just outside of the main prison walls, and only inmates of the prison are employed in mining the coal. There is a 500-horsepower engine at the main hoisting shaft and a 250-horsepower engine at the escapement shaft. The shaft is 715 feet deep, has good covers on the cages and safety catches attached. These are good safety catches, as the rope once broke and the catches caught and held the cage. In the air shaft there is a shale mine. It is worked at a depth of 115 feet. The shale is twenty-five feet thick, of which eight feet nearest the bottom is of good quality. They work this on the room and pillar plan. The top buildings around the mine are in a very bad condition, and I have recommended that they build a steel tower and remove the fan from where it is, placing it between the main shaft and the air shaft; the coal mine is ventilated by an 18-foot fan which produces 40,000 cubic feet of air per minute. The mine is kept in a first class physical condition.

Mine No. 1 of the Home-Riverside Coal Company, located at Leavenworth, is connected with the Missouri Pacific and K. C. N. W. railways. First-class machinery is installed at this mine, with a 400-horsepower hoisting engine, and 50-horsepower engine to run a 20-foot fan, which, when making sixty-five revolutions per minute, produces 19,000 cubic feet of air. There are four currents of air in this mine. The air is carried to and circulates well around the working face, as the mine is worked on the long-wall system. Gas generates here, but not enough to make it dangerous, and it will only accumulate in pockets on the road close to the brushing, usually. The mine is examined every morning by the fire boss, who reports when he finds any quantity of gas in the miner's room. The cages have covers and safety catches. The shaft is 10x14 feet, 712 feet deep.

Mine No. 2, belonging to the same company, is situated one mile south



of mine No. 1, and connected with a switch to the Union Pacific railway. Good machinery is installed at this mine. There is a 20-horsepower engine which runs a 12-foot fan at eighty-seven revolutions per minute, producing 17,780 cubic feet of air. It is connected with No. 1 for escapement purposes. This shaft is about the same size and depth as No. 1.

Mine No. 3, of the same company, is located northeast of Leavenworth, close to the city limits, and connected with the Missouri Pacific railway. This mine is equipped with good machinery, having a first class engine to hoist the coal, ventilated with a 25 foot fan and 150-horsepower engine to run it. This is the oldest mine in the state, and the circuit which the air travels a great distance around. They have cleaned out a number of air courses and are now in a very good condition. The air is carried to the working face and conducted around it in a very satisfactory manner. All of the main entries are kept well timbered and are brushed high and wide. The roads are kept clean and in a first-class condition. The main shaft and the air shaft have been retimbered and are now in a good condition. The main shaft is 11 x 12 feet and 720 feet deep; the air shaft is 8 x 10 feet and the same depth as the main shaft. There is two currents of air in the mine, and a volume of 13,720 cubic feet of air per minute is traveling through the mine. Only one side of the mine is working and they have two currents of air on this side. There is a second-motion engine installed at the air shaft in case there should be an accident at the main shaft.

Mine No. 1 of the Brighton Coal Company is situated eight miles southwest of Leavenworth. This mine was sunk about sixteen years ago and was then abandoned, but on November 11, 1906, they began cleaning it out preparing to operate it. They continued to work in it with just a few men up until the year 1908, when on the 11th day of December, 1908, upon my visiting the mine, I found they were employing about 30 men, and had not begun sinking their escapement shaft. As they had no escapement shaft down, I notified them that they must cease all work in the main shaft until the escapement shaft was sunk, so they quit working on the 11th day of December, 1908, and the shaft has not been in operation since.

Mine No. 1, Carr Coal Company, is situated four miles south of Leavenworth, connected with the A. T. & S. F. and K. C. N. W. railways. There is good machinery installed at this mine. It has a 500-horsepower engine, with a 12-horsepower engine to run the fan and a 60-horsepower engine at the air shaft. It is ventilated with a 12-foot fan running eighty revolutions per minute and producing 15,250 cubic feet of air, which is split into four separate currents at the head of the main north entry and at the head of the main south entry, traveling around the face to the air shaft. The ventilation in this mine is in fair condition. The shaft is 8 x 16 feet and 750 feet deep.

CRAWFORD COUNTY.

Crawford county is the largest coal producing county in the state, and the indications are that it will continue to remain so for some time. The coal lies at a depth of from 30 to 250 feet, and the thickness of the coal ranges from 32 to 44 inches. The mines are worked on the room-and-pillar system and the coal is shot off of the solid. On account of the great amount of powder that is used in some of the larger mines, if a door is left

State inspector of coal mines reports

Biennial Report.

19

open at night by the shot firers or if the fan is not kept running rapidly at night, the next morning when the miners go to work there is often an accumulation of carbonic oxide gas (CO), commonly known as white damp, and carbonic acid gas (CO₂), known as black damp. On two different occasions where a door had been left open all night and the men had gone to work, they were overcome and had to be carried out; their lights all burned bright, but the accumulation of white damp was so great that if they had not received assistance they would have died in a short while. It was impossible to find out who had left the door open. Again, when the room is driven in 75 or 100 feet without a break-through, it is a common occurrence for the miner to be overcome by the accumulation of white damp generated from the explosion of the powder used to shoot his coal the night before. In the north part of the county, where the coal lies at the greatest depth, the mines generate considerable carbureted hydrogen (CH₄), which, when mixed with air, becomes an explosive fire-damp, and men are often severely burned. These feeders of gas are found generally just after a place has gone through a horseback. There is not sufficient attention paid to the handling of this gas in these deep mines, as the impression prevails that there is not enough gas to be dangerous, as this is the same vein of coal that has been worked in this district for so many years, and no large body of gas has accumulated; but in these deeper mines they are meeting with heavier feeders of gas and more are getting burned, generally because the proper precaution is not taken, either by the mine foreman or by the miners. The safety lamps, which are kept at the mines north of Pittsburg, to examine the mines for gas, are so often kept in such bad condition that, instead of being a safety lamp they are a very dangerous lamp to carry into a body of gas, on account of allowing the gauze on the lamp to become clogged up with dirt and grease. The companies are now beginning to pay more attention to this accumulation of gas in these deep mines, and fire bosses are employed in the mine where the gas generates.

Central Coal and Coke Company mine No. 17 is located one mile northwest of Nelson. The shaft is 8 x 16 feet and 130 feet deep. The shaft is ventilated by a 16-foot fan.

Central Coal and Coke Company mine No. 31 is one-half mile east and three-fourths of a mile south of Nelson. This is an old mine and is now abandoned. The shaft was ventilated by two fans, one 11-foot and the other 12-foot.

Central Coal and Coke Company mine No. 38 is located at Curranville. The shaft is 8 x 16 feet and 57 feet deep. The shaft is ventilated with a 16-foot fan.

Mine No. 15 of the Central Coal and Coke Company is five miles northwest of Weir, connected with the Frisco railway. The mine is ventilated with a fan.

Mine No. 41 of the Central Coal and Coke Company is located one mile west and two miles north of Weir, connected with the Frisco railway. The ventilation in the air shaft is good.

Clemens & Son Coal Company's mine No. 3, located two miles west of Pittsburg, is an old mine and had been worked out, but the company secured some more coal land adjoining and expected to start up and work this new coal.



Clemens & Son mine No. 1 is located one mile north and one-half west of the Missouri Pacific depot at Pittsburg. This is an old mine and has been abandoned. It was ventilated by a 12-foot fan.

Clemens & Son Coal Company's mine No. 4 is located one-half mile west of Mulberry. The shaft is $7\frac{1}{2}$ x 16 feet and 69 feet deep. Ventilated by a 14-foot fan.

Western Coal and Mining Company mine No. 11 is located one and one-half miles southwest of Yale. The main shaft is 8 x 13 feet and 95 feet deep. Ventilated by a 16-foot fan.

Mine No. 13 of the Western Coal and Mining Company is located one mile northwest of Yale on the Missouri Pacific railway. This shaft is 8 x 13 feet and 95 feet deep. Ventilated by a 16-foot fan.

Mine No. 15 of the Western Coal and Mining Company is situated northeast of Franklin, connected with the Missouri Pacific railway. The shaft is 8 x 13 feet and 215 feet deep. Ventilated by a fan.

Mine No. 16 of the Western Coal and Mining Company is situated west of Franklin, connected with the Missouri Pacific. The shaft is 8 x 13 feet and 195 feet deep. Ventilated by a fan.

Mine No. 10 of the Western Coal and Mining Company is situated two miles southwest of Fleming, connected with the Missouri Pacific railway. Ventilated by a fan.

Mine No. 14 of the Western Coal and Mining Company is situated one mile northwest of Fleming, connected with the Missouri Pacific. Ventilated by a fan.

Mine No. 3 of the Scammon Coal Company is situated two and one-half miles northwest of Mulberry, connected with the Frisco railway. It has changed hands, and is now operated by Joseph Linthicum. Ventilated by a 12-foot fan.

Mine No. 4 of the Gross & Jenkins Coal Company is situated one and three-fourths miles south of Coalvale, on the Frisco railway. The shaft is 8 x 16 feet and 61 feet deep. Ventilated by a 12-foot fan.

Mine No. 7 of the Columbus Coal Company is situated south of Mulberry, connected with the Frisco railway. The shaft is 8 x 16 feet and is ventilated by a 12-foot fan.

Mine No. 9 of the Pittsburg-Cherokee Coal and Mining Company is situated northwest of Frontenac, connected with the A. T. & S. F. railway. The shaft is 7 x 16 feet and 100 feet deep. Ventilated by a 16-foot fan.

Mine No. 11 of the Cherokee-Pittsburg Coal and Mining Company is situated four miles north of Frontenac, on the A. T. & S. F. railway. The shaft is 8 x 16 feet and 145 feet deep. Ventilated by 16-foot fan.

Mine No. 5 of the Cherokee-Pittsburg Coal and Mining Company is situated one-half mile northwest of Chicopee, on the A. T. & S. F. Railway. The shaft is 9 x 24 feet and 90 feet deep. Ventilated by a fan, which is run by a first-class engine.

Mine No. 6 of the Cherokee-Pittsburg Coal and Mining Company is situated in the west part of Frontenac, connected with the A. T. & S. F. railway. The shaft is 8 x 16 feet and 85 feet deep. Ventilated by a fan.

Mine No. 12 of the Cherokee-Pittsburg Coal and Mining Company is situ-

State inspector of coal mines reports

Biennial Report.

21

ated one mile northwest of Frontenac, connected with the A. T. & S. F. railway. Ventilated by a 20-foot fan.

Mine No. 8 of the Cherokee Coal and Mining Company is situated half a mile southwest of Chicopee, connected with the A. T. & S. F. railway. The shaft is 7 x 15 feet and 89 feet deep. Ventilated by a fan.

Dickinson Coal Company mine No. 6 is situated two miles northwest of Fuller depot, at Breezy hill. The shaft is 7½ x 11 feet and 210 feet deep. Ventilated by a 14-foot fan.

Sheridan Coal Company mine No. 3 is situated one and one-half miles west of Fuller depot. The shaft is 8 x 11 feet and 210 feet deep. Ventilated by a 14-foot fan.

Sheridan Coal Company mine No. 2 is situated one-fourth mile west of Fuller depot. The shaft is 7 x 11 feet and 77 feet deep. Ventilated by a 14-foot fan.

Sheridan Coal Company mine No. 5 is situated one mile north of the Fuller depot. The shaft is 7 x 11 feet and 50 feet deep. Ventilated by a fan.

McCormick Coal Company mine No. 1 is situated one-half mile west of Curranville. The shaft is 8 x 16 feet and 119 feet deep. Ventilated by a 12-foot fan.

McCormick Coal Company mine No. 4 is situated one and three-fourths miles northwest of Mulberry. The shaft is 7½ x 16 feet and 83 feet deep. Ventilated by 12-foot fan.

Wear Coal Company mine No. 20 is situated two and three-fourths miles northwest of Pittsburg, connected with the Frisco railway. The shaft is 8 x 13 feet and 120 feet deep. Ventilated by a 12-foot fan.

Wear Coal Company mine No. 19 is situated north and east of Dunkirk, connected with the A. T. & S. F. railway. The shaft is 8 x 13 feet and 180 feet deep. Ventilated by a 12-foot fan.

Wear Coal Company mine No. 17 is situated at Dunkirk, connected with A. T. & S. F. railway. The shaft is 185 feet deep. Ventilated by a 12-foot fan.

Girard Coal Company is situated four and one-half miles east of Girard, connected with the A. T. & S. F. railway. The shaft is 7 x 13½ feet and 168 feet deep. Ventilated by a 16-foot fan.

Hamilton Coal Company mine No. 7 is situated at Radley, connected by the A. T. & S. F. railway. The shaft is 7 x 13½ feet and 165 feet deep. Ventilated by a 16-foot fan.

Hamilton Coal and Mercantile Company mine No. 6 is situated one-fourth mile north of Cherokee. The shaft is 7½ x 15½ feet and 120 feet deep. Ventilated by a fan.

Chapman Coal Company mine No. 4 is situated a little east of Curranville. The shaft is 8 x 16 feet and 45 feet deep. Ventilated by a 12-foot fan.

Chapman Coal Company mine No. 2 is situated one and one-fourth miles south of Fuller. The shaft is 8 x 16 feet and 45 feet deep.

Chapman Coal Company mine No. 3 is situated half of a mile south of Fuller. The shaft is 8 x 16 feet and 45 feet deep. Ventilated by a 14-foot fan.



Nevius Coulter Coal Company mine No. 6 is one-fourth mile east of Radley station, connected with A. T. & S. F. railway. The shaft is 8 x 16 feet and 172 feet deep. Ventilated by a fan.

Nevius Coal Company mine No. 1 is situated two miles west of Fourth and Broadway, Pittsburg. The shaft is 8 x 14 feet and 96 feet deep. Ventilated by a 12-foot fan.

Pittsburg Northern coal mine is situated east of Franklin. Ventilated by a 12-foot fan.

Joe Burnett Coal Company mine No. 1 is situated west of McCormick's camp. The shaft is 8 x 16 feet and 115 feet deep. Ventilated by a 12-foot fan.

Mine No. 12 of the J. R. Crowe Coal Company is situated two and one-half miles north of Weir, on the Frisco railway. Ventilated by a fan.

Mine No. 14 of the J. R. Crowe Coal Company is situated at Croweburg, connected by a switch from the Frisco railway. The shaft is 8 x 16 feet and is ventilated by a 20-foot fan.

Mine No. 15 of the J. R. Crowe Coal Company is situated at Croweburg, connected with the Frisco railway. The mine is 8 x 16 feet and ventilated by an 18-foot fan.

Mine No. 16 of the J. R. Crowe Coal Company is situated northwest of Croweburg, connected by a switch with the Frisco railway. Ventilated by a large fan.

Mine No. 1 of the Pittsburg Coal Company is situated half a mile south of Englevale, connected with the Missouri Pacific railway. The shaft is 6 x 13 feet and 250 feet deep. Ventilated by a large fan.

B. S. Chambers Coal Company is situated two and one-half miles northwest of Mulberry, connected with the Frisco railway. Ventilated by a small fan.

Mine No. 1 of the Cockerill Coal Company is situated one mile west of Pittsburg, on Twentieth street, connected with the Frisco railway. The shaft is 7½ x 14 feet and 70 feet deep. Ventilated by a fan.

Mine No. 3 of the Male Coal Company is situated one mile northwest of Pittsburg. The shaft is 7 x 12 feet and 38 feet deep. Ventilated by a furnace.

Mine No. 4 of the Hamilton-Grant Coal Company is situated west of Pittsburg. The shaft is 6 x 12 feet and 30 feet deep. Ventilated by a furnace.

Mine No. 1 of the La Belle Coal Company is situated one mile west of Frontenac, connected with the A. T. & S. F. railway. Ventilated by a fan.

Mine No. 1 of the Calvin-Puckett Coal Company is situated one and one-half miles north and one and one-half miles east of Pittsburg. Ventilated by a furnace.

Venson & Nicholas Coal Company is situated at Eighteenth street, Pittsburg. This is a small gin-shaft.

Mine No. 6 of the Ben Abbott Coal Company is situated one-half mile north of Coalvale. This mine was known as Crowe's No. 6.

Mine No. 2 of the Black Diamond Coal Company is situated one mile north of Pittsburg. This is a small gin-shaft.

State inspector of coal mines reports

Biennial Report.

23

Mine No. 3 of the R. Wilson Coal Company is situated at Twenty-fifth and Grand, Pittsburg. This a small gin-shaft.

Mine No. 3 of the Pittsburg Coal and Coke Company is situated six miles southwest of Pittsburg, connected with the Frisco railway. This is a new mine.

Mine No. 4 of the Nevius Coal Company is situated two miles southwest of Chicopee, connected with the Frisco railway. Ventilated by a fan.

Mine No. 16 of the Cockerill Coal Company is situated two miles southwest of Chicopee, connected with the Frisco railway. Ventilated by a fan.

NEW MINES.

Mine No. 8 of the Sheridan Coal Company, situated one mile south of Breezy Hill. This mine is well equipped, has good top buildings, good machinery, shaker screens, self-dumping cages, with covers and safety catches attached. They have installed good machinery, and have opened the mine in good shape; they are connected with an escapement shaft which is 300 feet away. They are opening this mine up in such a manner that they will be prepared to handle a large output of coal. Their pit-cars are the latest improved roll-bearing cars. In a short while they will employ a large number of men. This mine gives promise of being a first-class mine.

Mine No. 9 of the same company, situated west of Mulberry. This is a new mine just being developed, and all the latest improved machinery is being installed. This gives promise of being a very good mine.

Mine No. 10 of the same company, situated northwest of Mulberry, is just being developed with all the latest improved machinery. This mine also gives promise of being a very good mine as they have found good coal in it.

Mine No. 5 of the Chapman Coal Company, situated one mile north of Croweburg. This is a new mine just being developed. They have just completed a new tippie, and it is an excellent tippie. They have put in shaker screens and self-dumping cages and installed first-class machinery at this mine; they have also put in a wash-house on the top for the miners to wash in. They have found a good vein of coal. This mine is being developed as a one-sided mine, driving a high and a wide entry a distance of 300 feet away from the mine, grading it so that the loads will run to the shaft bottom on about a one-per-cent grade. All the coal is caged from one side, the empties bumped across the cage, where they will run around the shaft bottom on an easy grade. As the driver comes within 300 feet of the shaft bottom he can unhook and the cars will run from there to the bottom of the shaft; under this plan they can have a great many more loaded cars on the bottom of the mine ready to be hoisted than they can under the old system of caging from both sides, and one cager can handle as much coal as several did under the plan of caging on both sides. This is a fine plan to open a mine on, and as they have found good coal, this will be one of the best mines in the district when it is opened up. Credit should be given Mr. Hazen, the manager of this company, for establishing the wash-house for the miners, also for the excellent manner in which he is developing this mine.

The Fleming Coal Company have a new mine north of Arma. They have found a good vein of coal, but have not developed it yet.

The Hamilton Coal and Mercantile Company have just sunk a new mine northeast of Arma. This mine has not yet been developed.



CHEROKEE COUNTY.

The coal in this county is all mined on the room-and-pillar system, leaving a pillar of coal between each room. The coal ranges in height from three to four feet, and is shot off the solid. The mines are all ventilated by a fan, and when the fan is not kept running gases which are injurious to the health of the miners accumulate very quickly. After the shots have been fired, if the fan is not kept running, or a door left open, the next morning when the miners go to work they find considerable carbonic oxid gas (CO), or white damp, and carbonic acid gas (CO₂), commonly known as black damp. Generally there is not much carbureted hydrogen (CH₄) generated in these mines; only when a place is driven through a horseback sometimes a strong feeder is found; and if the miner is not careful when he first goes through this horseback he is liable to get burned; and very often, on going into those places without first brushing them out, they do get burned. The largest body of carbureted hydrogen (CH₄) gas ever found in a coal mine in Kansas was found in a mine in this county, and it is to be hoped more attention will be paid to it in the future.

Mine No. 6 of the M. K. & T. railway coal department is situated three-fourths of a mile east of West Mineral. This is the oldest mine around Mineral, and has been worked out and abandoned.

Mine No. 8 of the M. K. & T. railway coal department is located one-half mile southeast of West Mineral. There are good top buildings and first-class machinery at this mine—second-motion engine, shaker screens, self-dumping cages, with covers and safety catches attached. The shaft is 7 x 15½ feet and 120 feet deep, with four separate currents of air, ventilated by a 12-foot fan.

Mine No. 11 of the M. K. & T. railway coal department is situated three-fourths of a mile north of West Mineral. There are good top buildings at this mine and first-class machinery—first-motion engine, shaker screens and self-dumping cages, with covers and safety catches. The shaft is 7 x 15½ feet and 156 feet deep. Ventilated by a 14-foot fan.

Mine No. 15, M. K. & T. railway coal department, is situated one and one-half miles north of East Mineral. There is a fine tippie and top building at this mine, first-class first-motion engine, shaker screens, and self-dumping cages, with covers and safety catches. The shaft is 7½ x 15½ feet and 138 feet deep. Ventilated by a 12-foot fan.

Mine No. 16 of the M. K. & T. railway coal department is situated one and one-half miles east of East Mineral. This is a new mine, and is equipped to handle a large production of coal. They have a first-class tippie, top houses and machinery—first-motion engine, shaker screens and self-dumping cages, with covers on the cages and safety catches attached. The shaft is 12.4 x 7.6 feet and 97 feet deep. Ventilated by a 12-foot fan.

Mine No. 18 of the M. K. & T. railway coal department is situated two miles south of Mineral. It is a new mine, and when developed gives a promise of being a good mine.

Mine No. 1 of the Scammon Fuel Company, situated one and one-half miles northwest of West Mineral, is connected with the M. K. & T. railway. This mine is well equipped on top, with first-class machinery and good tippie, shaker screens, self-dumping cages with covers on and safety



State inspector of coal mines reports

Biennial Report.

25

catches attached. The shaft is 8x16 feet and 154 feet deep. Ventilated by a 16-foot fan.

Mackie Fuel Company mine C is situated one-half mile west and three-fourths of a mile south of Scammon; is connected with the Frisco railway. The mine is in a good condition. They have good tipple with shaker screen, and have self-dumping cages with covers and safety catches. Ventilated by a 16-foot fan.

Mine No. 1 of the Fidelity Land and Improvement Company, situated at Stone City, is connected with the M. K. & T. railway. This mine has good machinery, shaker screens and self-dumping cages. The shaft is 7x12 feet and 153 feet deep. Ventilated by a 14-foot fan.

Mine No. 8 of the Fidelity Land and Improvement Company, situated two miles north of Mineral, is connected with the M. K. & T. railway. They have built a first-class tipple and top buildings and installed good machinery; second-motion engine, shaker screens with self-dumping cages, which have covers and safety catches attached. The shaft is 8x16 feet and 152 feet deep. Ventilated by a 14-foot fan.

Mine No. 1 of the Cherokee Crescent Coal Mining Company is situated at West Mineral. They have a first-class hoisting engine, shaker screens and self-dumping cages with covers on top and safety catches attached. This mine is connected with the M. K. & T. railway. Ventilated by a 12-foot fan.

Mine No. 2 of the Cherokee Crescent Coal Mining Company, situated one and one-fourth miles northeast of Carona, is connected with the Missouri Pacific railway. They have shaker screens and self-dumping cages with covers and safety catches attached. Ventilated by a 12-foot fan.

Mine 1, Mayer Coal Company, situated three-fourths of a mile southwest of Mineral, on the M. K. & T. railway, has a good tipple and top-buildings, first-class machinery, first-motion engine, shaker screens, and self-dumping cages with covers and safety catches. The shaft is 7½ x 16 feet and 100 feet deep. Ventilated by a 12-foot fan.

John Coal Company mine, located one and one-half miles south of East Mineral, on the M. K. & T. railway. This shaft is 7 x 16 feet and 68 feet deep. Ventilated by a small fan. Only employs a few men.

Larson Bros. Coal Company mine is situated two and one-half miles southwest of Weir. The shaft is 6 x 12 feet and 42 feet deep. Ventilated by a small fan. Only employs a few men.

J. W. Robertson Coal Company mine, situated one mile south of Weir, is connected with the Frisco railway. This is a small mine, not employing many men.

Thompson Coal Company mine is situated one mile south of Weir. This is a small slope 6 x 10 feet and 24 feet deep. Employs only a small number of men.

Sherman Zinc, Oil, Coal and Gas Company, situated at Carona, is connected with the Missouri Pacific railway. This mine is 7 x 14 feet and 104 feet deep. Mine ventilated with a small fan. Employs a small number of men.

Joe Humble Coal Company mine No. 4, situated two miles north of Scam-



mon, is connected with the Frisco railway. The shaft is 6 x 12 feet and 106 feet deep. They employ a small number of men.

Mine No. 2 of the Weir Junction Coal Company is situated two miles south of Cherokee, on the Frisco railway. There is a steam hoist, shaker screen, and self-dumping cages with covers. The shaft is 6 x 12 feet and 104 feet deep. Ventilated with a fan.

Mine No. 3 of the Weir Junction Coal Company is situated one mile southeast of Scammon, connected with the Frisco railway. Ventilated by a fan. They employ a small number of men.

Mine No. 1 of the Cherokee Coal Mining Company is situated one-half mile south of Cherokee, connected with the Frisco railway. The shaft is 8 x 15 feet and 128 feet deep. Ventilated by a fan.

Mine No. 2 of the Cherokee Coal Mining Company is situated one and one-half miles south of Cherokee, connected with the Frisco railway. This is a small mine working the upper vein, which is about twenty-four inches thick. Ventilation very good. Employs small number of men.

Mine No. 39 of the Central Coal and Coke Company is situated one and one-half miles west and one and one-fourth miles north of Weir, and connected by a switch with the Frisco railway. They have shaker screens, self-dumping cages with covers and safety catches attached. The shaft is 8 x 16 feet and 121 feet deep. Ventilated by a fan.

Mine No. 44 of the Central Coal and Coke Company is situated two miles south of Cherokee, on the Frisco railway. This shaft is 7½ x 15½ feet and 126 feet deep. Ventilated by a fan.

Mine No. 42 of the Central Coal and Coke Company is situated one and one-fourth miles west and one and one-half miles south of Scammon, connected with the M. K. & T. and Frisco railways. They have first-class machinery, shaker screens and self-dumping cages. The shaft is 8 x 18 feet and 58 feet deep. Ventilated by a fan.

Mine No. 43 of the Central Coal and Coke Company is situated one mile west and two miles north of Scammon, connected with the Frisco and M. K. & T. railways. This is a new mine with a new top house and first-class machinery, shaker screens and self-dumping cages with safety catches. The shaft is 8 x 16 feet and 51 feet deep. Ventilated by a good fan.

Mine No. 16 of the Central Coal and Coke Company is situated one and three-fourths miles west of Scammon. There is good machinery, shaker screens, self-dumping cages with covers and safety catches attached. The shaft is 8 x 15 feet and 84 feet deep. The ventilation of the mine is good.

Mine No. 2 of the Hamilton Coal and Mercantile Company, situated one-half mile north of Weir, is connected with the Frisco railway. This is a very old mine and will be abandoned soon. The shaft is 8 x 16 feet and 90 feet deep.

Mine No. 5 of the Hamilton Coal and Mercantile Company, situated one mile south of East Mineral, is connected with the M. K. & T. railway. This shaft is 7½ x 15½ feet and 70 feet deep.

The J. H. Bennett Coal Company mine No. 1 is situated one and three-fourths miles northwest of Weir, on the Frisco railway. It is ventilated by a fan and is about 70 feet deep.



Biennial Report.

27

Mine No. 3 of the Norton Coal Company, known as the Blue Goose, is situated three-fourths of a mile west of Scammon, connected with the Frisco railway. The shaft is 7 x 12 feet and 89 feet deep. The coal is hoisted by steam and dumped by self-dumping cages.

Mine No. 4 of the Fleming Coal Company is situated one and one-fourth miles southwest of Turck, connected with the M. K. & T. railway. The shaft is 7 x 16 feet and 50 feet deep. Mine is ventilated by a 12-foot fan.

Mine No. 5 of the Fleming Coal Company is situated one mile west of Turck, on the M. K. & T. railway. The shaft is 7 x 15 feet and 28 feet deep. It is ventilated by a 10-foot fan.

Mine No. 3 of the Fleming Coal Company is situated one-half mile east of Turck, connected with the Frisco railway. Coal hoisted with an engine. Mine ventilated with a fan.

Mine No. 1 of the Vanducker Coal Company is situated one mile west and one-fourth mile east of Stippville. This is a small mine.

Mine No. 5 of the Miller & Fitzgibbons Coal Company, known as the Wildcat, is located one-fourth miles south of Scammon, and is now abandoned.

Mine No. 12 of the Western Coal and Mining Company is located one-half mile from Carona, on the Missouri Pacific railway. The shaft is 9 x 13 feet and 98 feet deep. Coal is hoisted with an engine and they have self-dumping cages. Ventilating by a 12-foot fan.

Mine No. 3 of the J. R. Crowe Coal Company is located two miles west of Weir, on the Frisco railway. The shaft is 7 x 15 feet and 108 feet deep. Ventilating by a fan.

Mine No. 7 of the J. R. Crowe Coal Company is located two miles northwest of Weir, on the Frisco railway. The shaft is 8 x 16 feet and 124 feet deep.

Mine No. 5 of the Barrett Coal Company is situated two miles south of Scammon, connected with the Frisco railway. The shaft is 8 x 12 feet and 33 feet deep.

Mine No. 7 of the Norton Coal Company is located three miles southwest of Cherokee, connected with the Missouri Pacific railway. The shaft is 8 x 16 feet and 115 feet deep.

Mine No. 8 of the Columbus Coal Company is situated three miles south of Scammon, on the Frisco railway. The shaft is 8 x 16 feet and 60 feet deep.

The Little Butterfly mine of the Columbus Coal Company is located one-fourth of a mile northwest of Stippville. The shaft is 6 x 8 feet and 23 feet deep.

Mine No. 6 of the Mayer Coal Company is 8 x 15½ feet and 152 feet deep. This is a new mine and is well equipped to handle a large output of coal. Situated on the M. K. & T. railway, one and one-half miles north and one-half mile west of West Mineral.

Mine No. 4 of the Mayer Coal Company is 8 x 16 feet and 94 feet deep. This is a new mine and the coal has been very faulty, but is a well-equipped mine; situated three and one-half miles southwest of Cherokee, on a switch of the Frisco railway.

Mine No. 9 of the Fidelity Coal Company, situated at Stone City. This mine is well equipped to handle a large output of coal, and is a large mine.



28

Inspector of Coal Mines.

It has the best coal in this district; it is about four feet thick. Switch on the M. K. & T. railway.

Mine No. 9 of the Clemens Coal Company is a new mine, situated on the switch of the M. K. & T. railway.

Mackie Coal Company has a new mine sunk and don't intend to open up until fall.

Doc Steven coal mine is a small mine at Sherman, sunk to the first vein of coal; thickness of coal twenty-four inches.

STATISTICAL TABLES.

(29)



COAL-MINING INDUSTRY IN CRAWFORD COUNTY FOR THE FISCAL YEAR ENDING JUNE 30, 1909.

| Office No. | NAME OF OPERATOR. | Post-office address. | Number or name of mine. | Mine boss. | Location of mine. |
|------------|-------------------------------|----------------------|-------------------------|------------------|--|
| 1 | Cherokee-Pittsburg Mining Co. | Topeka. | 5. | Wm. Hart. | 1 mile northwest of Chicopee. |
| 2 | " | " | 8. | Ed. Flynn. | 1 mile southwest of Chicopee. |
| 3 | " | " | 6. | John Beltsinger. | ½ mile west of Frontenac. |
| 4 | " | " | 9. | John McGarvie. | " |
| 5 | " | " | 11. | A. Tennant. | ¾ mile northeast of Frontenac. |
| 6 | Central Coal and Coke Co. | Weir. | 15. | Felix Murphy. | ¾ mile northwest of Frontenac. |
| 7 | " | Pittsburg. | 17. | Geo. Wickware. | 1¼ miles east and 3 miles north of Weir. |
| 8 | " | " | 31. | Peter McCall. | ½ mile north and 1 mile west of Nelson. |
| 9 | " | " | 38. | Wm. Jones. | ½ mile west of Cornell. |
| 10 | " | " | 41. | Ross Thomas. | 2 miles southwest of Fuller. |
| 11 | Western Coal Mining Co. | Weir. | 10. | D. B. White. | 1 mile west and 2 miles north of Weir. |
| 12 | " | St. Louis, Mo. | 11. | Dave Fulton. | 1 mile east of Cherokee. |
| 13 | " | " | 13. | Jas. Sarles. | 2 miles northwest of Cornell. |
| 14 | " | " | 14. | Andrew Seecombe. | " |
| 15 | " | " | 15. | Wm. Steele. | 2 miles north of Cornell. |
| 16 | " | " | 16. | Francis Keegan. | 1 mile west of Fleming. |
| 17 | Wear Coal Co. | " | 17. | Jack Davis. | 1 mile south of Arma. |
| 18 | " | " | 19. | Jas. Nuttman. | " |
| 19 | " | " | 20. | Thos. Griffith. | 1½ miles southwest of Arma. |
| 20 | Sheridan Coal Co. | Fuller. | 2. | Francis Keegan. | 7 miles northwest of Pittsburg. |
| 21 | " | " | 3. | Gus. Lenburg. | 9 miles northwest of Pittsburg. |
| 22 | " | " | 5. | Chas. Davis. | 3 miles northwest of Pittsburg. |
| 23 | Dickinson & Co. | " | 8. | T. L. Davis. | ¼ mile west of Fuller. |
| 24 | McCormick Coal Co. ① | " | 5. | Wm. Johnson. | 2 miles northwest of Fuller. |
| 25 | J. R. Crowe Coal Co. ② | " | 6. | Sam. Neil. | 1 mile north of Fuller. |
| 26 | " | Weir. | 1. | J. L. Kirkwood. | 2 miles west and ½ mile north of Fuller. |
| 27 | " | " | 12. | A. Gessline. | ½ mile west of Curranville. |
| 28 | " | " | 14. | Joe Johnson. | 2½ miles north of Weir. |
| 29 | Chapman Coal Co. ③ | Curranville. | 15. | Alex. Sharp. | Croweburg. |
| 30 | " | " | 16. | Jno. Richardson. | Croweburg. |
| | | | 2. | O. S. Hubert. | 1¼ miles south of Fuller. |
| | | | 3. | Gorge Fox. | ¼ mile southeast of Fuller. |
| | | | 3. | John Ryder. | " |

30

Inspector of Coal Mines.



| | | | | | |
|----|---|------------------|---------------------|-----------------------|---|
| 31 | Chapman Coal Co..... | Curranville..... | 4..... | A. T. Ryder..... | 1½ miles southeast of Fuller. |
| 32 | Clemens & Son Coal Co. ⑤..... | Pittsburg..... | 1..... | Rice Hornbuckle..... | 1¼ miles northwest of Pittsburg. |
| 33 | " " " " ⑤..... | " " " " " "..... | 3..... | S. S. Boone..... | 1½ miles southwest of Pittsburg. |
| 34 | " " " " " "..... | " " " " " "..... | 4..... | Wm. Neabitt..... | ½ mile northwest of Pittsburg. |
| 35 | Girard Coal Co..... | Radley..... | 7 (formerly 1)..... | John Steele..... | 4½ miles east of Girard. |
| 36 | Hamilton Coal and Mercantile Co..... | Weir..... | 6..... | Robt. Eadie..... | ¼ mile north of Cherokee. |
| 37 | " " " " " "..... | " " " " " "..... | 7..... | John B. Fulton..... | ½ mile southeast of Radley. |
| 38 | C. C. Cockerill Coal Co..... | Pittsburg..... | 16..... | Pete McCabe..... | 1 mile southwest of Chicopee. |
| 39 | J. R. Burnett Coal Co. ⑥..... | " " " " " "..... | 1..... | Ed Jones..... | 1¾ miles southwest of Curranville. |
| 40 | R. Wilson Coal Co..... | " " " " " "..... | 3..... | George Wilson..... | Twenty-fifth and Grand ave., Pittsburg. |
| 41 | Pittsburg & Midway Coal Co..... | Midway..... | 7..... | Robt. Penman..... | ½ mile southwest of Midway. |
| 42 | Nevius Coal Co..... | Pittsburg..... | 1..... | Jas. Monahan..... | 2 miles west of Pittsburg. |
| 43 | Bannister-Nevius Coal Co. ⑦..... | " " " " " "..... | 5..... | M. J. Cavanaugh..... | 2 miles west of Pittsburg. |
| 44 | Southeastern Kansas Coal Mining Co..... | " " " " " "..... | 4..... | Joe Glades..... | 6 miles southwest of Pittsburg. |
| 45 | Pittsburg & Midway Coal Mining Co..... | Midway..... | 3 (strip)..... | Smith & Finamore..... | ¼ mile south of Midway. |
| 46 | Clemens & Son Coal Co..... | Pittsburg..... | 105 (strip)..... | Jno. Cunningham..... | 4 miles northeast of Weir. |

1. Mine in state of development first six months.
2. All roads put in first-class order, and many improvements for welfare of miners.
3. Opening up mine.
4. Mine shut down March, 1909.
5. Idle March, April, May and June. No business.
6. A new mine. Produced coal about six months; idle April, May and June, 1909.
7. Mine idle part of August, all of September and October, and part of November, and from February 16 to October 1, 1909.

Biennial Report.



COAL-MINING INDUSTRY IN CRAWFORD COUNTY FOR THE FISCAL YEAR END-
ING JUNE 30, 1909—CONTINUED.

| Office No. | Railroad connections. | Kind of opening. | Kind of power. | Tons of coal produced. | | | |
|------------|-----------------------|------------------|----------------|------------------------|----------------|------------|----------------|
| | | | | Lump. | Nut and slack. | Mine run. | Total out-put. |
| 1 | Santa Fe. | Shaft. | Steam. | | | 259,623.10 | 259,623.10 |
| 2 | " | " | " | | | 23,551.90 | 235,543.90 |
| 3 | " | " | " | | | 177,410.50 | 177,410.50 |
| 4 | " | " | " | | | 207,861.90 | 207,861.90 |
| 5 | " | " | " | | | 181,734.20 | 181,734.20 |
| 6 | Frisco. | " | " | 54,181.75 | 66,650.10 | 999.35 | 88,506.10 |
| 7 | { K. C. S. | " | " | | | | 100,222.00 |
| | { Santa Fe. | | | | | | |
| 8 | { Mo. Pac. | " | " | | | | 103,044.00 |
| | { K. C. S. | | | | | | |
| 9 | { Mo. Pac. | " | " | | | | 110,688.00 |
| | { K. C. S. | | | | | | |
| 10 | Frisco. | " | " | 43,723.00 | 31,639.00 | 3,245.00 | 78,609.00 |
| 11 | Mo. Pac. | " | " | 38,723.55 | 49,503.40 | 255.85 | 88,482.80 |
| 12 | " | " | " | 77,085.00 | 43,173.00 | 3,799.00 | 124,057.00 |
| 13 | " | " | " | 72,185.00 | 30,721.00 | 3,906.00 | 106,812.00 |
| 14 | " | " | " | 84,281.00 | 55,851.80 | | 140,132.80 |
| 15 | " | " | " | 61,425.00 | 30,666.00 | 4,015.00 | 96,106.00 |
| 16 | " | " | " | 25,825.00 | 17,154.00 | 1,391.00 | 44,870.00 |
| 17 | { Mo. Pac. | " | " | 53,868.00 | 26,605.00 | 1,664.00 | 82,137.00 |
| | { Santa Fe. | | | | | | |
| 18 | Mo. Pac. | " | " | 25,085.00 | 13,288.00 | 504.00 | 38,877.00 |
| 19 | Frisco. | " | " | 21,774.00 | 12,688.00 | | 34,462.00 |
| 20 | K. C. S. | " | " | 32,675.00 | 53,312.00 | | 85,987.00 |
| 21 | " | " | " | | | | 74,110.55 |
| 22 | { K. C. S. | " | " | | | | 32,045.90 |
| | { Frisco. | | | | | | |
| 23 | K. C. S. | " | " | | | | 100,288.00 |
| 24 | { K. C. S. | " | " | 18,329.00 | 94,179.00 | 3,457.00 | 115,965.00 |
| | { Mo. Pac. | | | | | | |
| 25 | Frisco. | " | " | 75,116.00 | 25,038.00 | 1,500.00 | 101,654.00 |
| 26 | " | " | " | 80,003.00 | 29,589.00 | | 109,592.00 |
| 27 | " | " | " | 60,761.00 | 26,040.00 | | 86,801.00 |
| 28 | " | " | " | 6,936.00 | 9,649.00 | | 16,635.00 |
| 29 | K. C. S. | " | " | 11,048.00 | 16,573.00 | | 27,621.00 |
| 30 | " | " | " | 15,255.00 | 15,555.00 | 7,628.00 | 38,438.00 |
| 31 | " | " | " | 17,470.00 | 11,646.00 | | 29,116.00 |
| 32 | Frisco. | " | " | | 16,827.85 | | 16,827.85 |
| 33 | " | " | " | 24,310.00 | 8,087.00 | 1,303.00 | 33,700.00 |
| 34 | " | " | " | | | 64,397.00 | 64,397.00 |
| 35 | { Frisco. | " | " | 20,043.25 | 25,208.13 | -230.85 | 55,482.23 |
| | { Santa Fe. | | | | | | |
| 36 | Frisco. | " | " | 913.00 | 1,115.00 | 35,591.00 | 37,619.00 |
| 37 | Santa Fe. | " | " | 10,324.00 | 12,618.00 | | 22,942.00 |
| 38 | Frisco. | " | " | | | 27,484.15 | 27,484.15 |
| 39 | Mo. Pac. | " | " | | | 20,155.75 | 20,155.75 |
| 40 | None. | " | Horse. | 1,250.00 | 1,020.00 | 2,400.00 | 4,670.00 |
| 41 | { Frisco. | Slope | Steam | 13,863.10 | 25,422.55 | 498.15 | 39,783.85 |
| | { Santa Fe. | | | | | | |
| 42 | Frisco. | Shaft. | " | | | 49,687.00 | 49,687.00 |
| 43 | " | " | " | | | 6,617.00 | 6,617.00 |
| 44 | " | " | " | | | 40,148.00 | 40,148.00 |
| 45 | { Frisco. | Strip. | | | 15,919.10 | 18,005.45 | 33,924.55 |
| | { Santa Fe. | | | | | | |
| 46 | Frisco. | " | " | | | 14,904.00 | 14,904.00 |
| Totals. | | | | | | | 3,586,766.00 |

Biennial Report.

33

COAL-MINING INDUSTRY IN CRAWFORD COUNTY FOR THE FISCAL YEAR ENDING
JUNE 30, 1909—CONCLUDED.

| Office No. | Average number of employees. | | | | | | Mining price per ton | Under-ground day wage | Top day wage | Number of 12½-lb. kegs powder | Number of days worked |
|------------|------------------------------|------|-------------|----------------------|--------------------|---------|----------------------|-----------------------|--------------|-------------------------------|-----------------------|
| | Miners | Boys | Shot firers | Under-ground day men | Total under-ground | Top men | | | | | |
| 1 | 243 | 13 | 6 | 53 | 315 | 34 | 349 | \$ 72 | 2 56 | 2 02½ | 265 |
| 2 | 212 | 7 | 6 | 47 | 272 | 14 | 286 | 72 | 2 56 | 2 02½ | 269 |
| 3 | 190 | 14 | 7 | 85 | 296 | 19 | 315 | 72 | 2 56 | 2 02½ | 288 |
| 4 | 189 | 14 | 5 | 52 | 260 | 15 | 275 | 72 | 2 56 | 2 02½ | 265 |
| 5 | 185 | 8 | 5 | 46 | 244 | 14 | 258 | 72 | 2 56 | 2 02½ | 267 |
| 6 | 125 | | 3 | 36 | 164 | 16 | 180 | 72 | 2 60 | 2 37 | 161 |
| 7 | 135 | 2 | 4 | 23 | 164 | 13 | 177 | 72 | 2 56 | 2 02½ | 212 |
| 8 | 121 | 1 | 3 | 25 | 150 | 14 | 164 | 72 | 2 56 | 2 02½ | 212 |
| 9 | 130 | 2 | 4 | 21 | 157 | 12 | 169 | 72 | 2 56 | 2 02½ | 227 |
| 10 | 108 | | 3 | 19 | 130 | 10 | 140 | 72 | 2 70 | 2 52 | 154 |
| 11 | 105 | 1 | 2 | 12 | 120 | 7 | 127 | 72 | 2 56 | 2 35 | 245 |
| 12 | 175 | | 4 | 22 | 201 | 9 | 210 | 72 | 2 56 | 2 30 | 204 |
| 13 | 145 | | 1 | 19 | 167 | 8 | 175 | 72 | 2 56 | 3 30 | 205 |
| 14 | 150 | 1 | 3 | 16 | 170 | 7 | 177 | 72 | 2 56 | 2 30 | 241 |
| 15 | 125 | | 2 | 15 | 142 | 8 | 150 | 72 | 2 56 | 2 30 | 189 |
| 16 | 60 | | 2 | 9 | 71 | 7 | 78 | 72 | 2 56 | 2 35 | 222 |
| 17 | 127 | | 2 | 19 | 148 | 9 | 157 | 72 | 2 56 | 2 02½ | 188 |
| 18 | 60 | | 2 | 10 | 72 | 7 | 79 | 72 | 2 56 | 2 02½ | 219 |
| 19 | 60 | | 2 | 6 | 68 | 5 | 73 | 72 | 2 56 | 2 02½ | 121 |
| 20 | 97 | 1 | 2 | 15 | 115 | 9 | 124 | 72 | 2 56 | 2 02½ | 195 |
| 21 | 102 | 1 | 2 | 14 | 119 | 9 | 128 | 72 | 2 56 | 2 02½ | 195 |
| 22 | 43 | | 2 | 6 | 51 | 6 | 57 | 72 | 2 56 | 2 02½ | 198 |
| 23 | 143 | 2 | 2 | 13 | 160 | 9 | 169 | 72 | 2 56 | 2 02½ | 208 |
| 24 | 154 | 3 | 3 | 20 | 180 | 10 | 190 | 72 | 2 56 | 2 02½ | 205 |
| 25 | 125 | | 3 | 13 | 141 | 7 | 148 | 72 | 2 56 | 2 02½ | 186 |
| 26 | 131 | | 3 | 17 | 151 | 9 | 160 | 72 | 2 56 | 2 02½ | 184 |
| 27 | 120 | | 3 | 12 | 135 | 8 | 143 | 72 | 2 56 | 2 02½ | 126 |
| 28 | 30 | | 2 | 6 | 38 | 6 | 44 | 72 | 2 56 | 2 02½ | 248 |
| 29 | 150 | | 3 | 27 | 180 | 9 | 189 | 72 | 2 56 | 2 30 | 240 |
| 30 | | | 2 | 12 | 94 | 8 | 102 | 72 | 2 56 | 2 02½ | 230 |
| 31 | 38 | | 2 | 5 | 45 | 2 | 47 | 72 | 2 56 | 2 30 | 192 |
| 32 | 18 | | 2 | 4 | 24 | 4 | 28 | 72 | 2 56 | 2 02½ | 192 |
| 33 | 78 | | 2 | 13 | 93 | 9 | 102 | 72 | 2 56 | 2 02½ | 202 |
| 34 | 83 | | 2 | 13 | 96 | 9 | 105 | 72 | 2 56 | 2 02½ | 213 |
| 35 | 110 | | 2 | 14 | 126 | 9 | 135 | 72 | 2 56 | 2 02½ | 209 |
| 36 | 68 | | 2 | 13 | 84 | 11 | 94 | 72 | 2 56 | 2 02½ | 171 |
| 37 | 37 | | 2 | 9 | 43 | 10 | 53 | 72 | 2 56 | 2 02½ | 170 |
| 38 | 50 | | 2 | 9 | 61 | 6 | 67 | 72 | 2 56 | 2 02½ | 171 |
| 39 | 58 | | 2 | 6 | 66 | 6 | 72 | 72 | 2 56 | 2 01½ | 170 |
| 40 | 4 | 1 | 2 | 2 | 7 | 1 | 8 | 72 | 2 56 | 2 02½ | 300 |
| 41 | 56 | | 2 | 12 | 70 | 8 | 78 | 72 | 2 56 | 2 02½ | 210 |
| 42 | 58 | | 2 | 12 | 72 | 8 | 80 | 72 | 2 77 | 2 38 | 198½ |
| 43 | 25 | | 2 | 5 | 32 | 6 | 38 | 72 | 2 72 | 2 29 | 73 |
| 44 | 54 | | 2 | 6 | 62 | 7 | 69 | 72 | 2 69 | 2 37 | 198½ |
| 45 | 30 | | | | | | | | | | 220 |
| 46 | | | | | | | | | | | |
| | 4,588 | 71 | 120 | 819 | 5,569 | 494 | 6,063 | | | | 526,786 |



COAL-MINING INDUSTRY IN CRAWFORD COUNTY FOR THE FISCAL YEAR ENDING JUNE 30, 1910.

| Office No. | NAME OF OPERATOR. | Post-office address. | Number or name of mine. | Mine boss. | Location of mine. |
|------------|------------------------------------|----------------------|-------------------------|------------------|--|
| 1 | Cherokee-Pittsburg Coal Mining Co. | Topeka | 5. | Wm. Hart | 1 mile northwest of Chicopee. |
| 2 | " | " | 8. | Edward Flynn | 1 mile southwest of Chicopee. |
| 3 | " | " | 6. | John Beitsinger | ½ mile west of Frontenac. |
| 4 | " | " | 9. | John McGarvie | ¾ mile northeast of Frontenac. |
| 5 | " | " | 11. | A. Tennant | 4 miles northwest of Frontenac. |
| 6 | " | " | 12. | Felix Murphy | 2 miles northwest of Frontenac. |
| 7 | Central Coal and Coke Co. | Weir | 15. | Geo. Wickware | 1¼ miles east and 3 miles north of Weir. |
| 8 | " | Pittsburg | 17. | Peter McCall | ½ mile north and 1 mile west of Nelson. |
| 9 | " | " | 31. | Wm. Jones | ½ mile west of Cornell. |
| 10 | " | " | 38. | Wm. Vanduker | 2 miles southwest of Fuller. |
| 11 | " | Weir | 41. | D. B. White | 1 mile west and 2 miles north of Weir. |
| 12 | Western Coal Mining Co. ① | St. Louis, Mo. | 10. | Dave Fulton | 1 mile east of Cherokee. |
| 13 | " | " | 11. | Thos. Griffith | 2 miles northwest of Cornell. |
| 14 | " | " | 13. | Frank Gardner | 2 miles north of Cornell. |
| 15 | " | " | 14. | Jack Davis | 1 mile west of Fleming. |
| 16 | " | " | 15. | James Price | 1 mile south of Arma. |
| 17 | " | " | 16. | Francis Keegan | 1½ miles southwest of Arma. |
| 18 | Weir Coal Co. ① | " | 17. | Gus Linburg | 7 miles northwest of Pittsburg. |
| 19 | " | " | 19. | Chas. Davis | 9 miles northwest of Pittsburg. |
| 20 | " | " | 20. | Wm. Lewins | 3 miles northwest of Pittsburg. |
| 21 | Sheridan Coal Co. | Fuller | 2. | Ed. Solomon | ¾ mile west of Fuller. |
| 22 | " | " | 3. | Clement Ducobut | 2 miles northwest of Fuller. |
| 23 | " | " | 5. | Wm. Johnson | 1 mile north of Fuller. |
| 24 | Dickinson & Co. | " | 6. | Ed. Solomon | 2 miles west and ½ mile north of Fuller. |
| 25 | McCormick Coal Co. | " | 1. | Sam Neil | ½ mile west of Curranville. |
| 26 | J. R. Crowe Coal Mining Co. ② | Weir | 12. | Andrew Gessaline | 2¼ miles north of Weir. |
| 27 | " | " | 14. | James Duff | Croweburg. |
| 28 | " | " | 15. | Alex Sharp | Croweburg. |
| 29 | " | " | 16. | Jas. McVickers | Croweburg. |
| 30 | Chapman Coal Co. | Curranville | 3. | James Reid | ¼ mile southeast of Fuller. |
| 31 | " | " | 4. | John T. Ryder | ½ mile east of Curranville. |
| 32 | Clemens & Son Coal Co. ③ | Pittsburg | 1. | A. T. Ryder | 1¼ mile northwest of Frisco depot. |
| 33 | " | " | 3. | R. Hornbuckle | 1½ mile southwest of Frisco depot. |
| | | | | S. S. Boone | |

34

Inspector of Coal Mines.



State inspector of coal mines reports

| | | | | | |
|----|---|-----------|-------------|---------------------|---|
| 34 | Clemens & Son Coal Co. | Pittsburg | 4 | Wm. Nesbitt | 1/2 mile northwest of Frisco depot. |
| 35 | Girard Coal Co. | Radley | 7 | John Steele | 4 1/2 miles east of Girard. |
| 36 | Hamilton Coal Mining Co. | Weir | 6 | Robt. Eadie | 1/4 mile north of Cherokee. |
| 37 | | | 7 | John B. Fulton | 1/2 mile southeast of Radley. |
| 38 | C. C. Cockerill Coal Co. | Pittsburg | 16 | Pete McCabe | 1 mile southwest of Chicopee. |
| 39 | J. R. Burnett Coal Mining Co. | " | 1 | Wm. Kirkwood | |
| 40 | R. Wilson Coal Co. | " | 3 | Andrew Gessline | 1 1/4 miles southwest of Curranville. |
| 41 | Pittsburg-Northern Coal Co. | " | 8 | J. B. Gore | 25 Grand avenue, Pittsburg. |
| 42 | Pittsburg and Midway Coal Co. | Midway | 7 | Geo. Wilson | 2 miles southeast of Arma. |
| 43 | Kansas Southeastern Coal Co. | Pittsburg | 7 | Thos. Richardson | 1/2 mile southeast of Midway. |
| 44 | Wm. Hamilton, jr., Coal Co. | " | 1 | Robt. Penman | 1 1/2 miles northeast of Pittsburg. |
| 45 | W. B. McCormick & Co. | Mulberry | 4 | Elmer Whited | 1 mile west of Pittsburg. |
| 46 | Nevius Coal Co. | Pittsburg | 1 | J. Lawson | 1 1/2 miles w. and 1/2 mile n. of Mulberry. |
| 47 | Southeastern Kansas Coal and Mining Co. | " | 4 | J. S. Samples | 2 miles west of Pittsburg. |
| 48 | Bannister-Nevius Coal Co. | " | 5 | Jas. Monahan | 6 miles southwest of Pittsburg. |
| 49 | Pittsburg Midway Coal Mining Co. | Midway | 3 (strip) | Joe Glades | 2 miles west of Pittsburg. |
| 50 | J. J. Stephenson Coal Co. | Pittsburg | 105 (strip) | Smith, Davis, Blair | 1/4 mile south of Midway. |
| 51 | Clemens & Son Coal Co. | " | 106 (strip) | Jno. Cunningham | Midway, Fuller, Pittsburg. |
| 52 | | | | Jno. A. Allred | 4 miles northeast of Weir. |

1. Mine idle from April 1 to June 30, 1910. Contract with U. M. W. of A. expired.
2. Abandoned.
3. Mine idle April, May and June, 1910; suspension.
4. Mine idle July, August, September and October, 1909. No business.
5. Only worked three days in March, 1910, as men wanted a new mine boss.
6. Sold to Roy Mellun Coal Company.
7. Formerly owned by C. C. Cockerill.
8. Worked out; closed down January 25, 1910.
9. Mine began December 15, 1909.
10. Idle three weeks during July, August and October. April and May, 1910, suspension.
11. Mine idle April, May and June, 1910.
12. Mine worked out December, 1909.
13. Idle July, August and September, 1909, and April, May and June, 1910.
14. No work March, 1910.

Biennial Report.



COAL-MINING INDUSTRY IN CRAWFORD COUNTY FOR THE FISCAL YEAR
ENDING JUNE 30, 1910—CONTINUED.

| Office No. | Railroad connections. | Kind of opening. | Kind of power. | Tons of coal produced. | | | |
|------------|-------------------------------------|------------------|----------------|------------------------|----------------|------------|----------------|
| | | | | Lump. | Net and slack. | Mine run. | Total out-put. |
| 1 | Santa Fe. | Shaft. | Steam. | | | 184,171.30 | 184,171.30 |
| 2 | " | " | " | | | 136,965.90 | 136,965.90 |
| 3 | " | " | " | | | 57,182.50 | 57,182.50 |
| 4 | " | " | " | | | 144,668.10 | 144,668.10 |
| 5 | " | " | " | | | 143,007.70 | 143,007.70 |
| 6 | " | " | " | | | 159,766.60 | 159,766.60 |
| 7 | Frisco. | " | " | 34,386.80 | 42,599.80 | 5,508.30 | 82,494.90 |
| 8 | { K. C. S. Mo. Pac. Santa Fe. | " | " | | | | 99,917.00 |
| 9 | { K. C. S. Mo. Pac. | " | " | | | | 65,154.00 |
| 10 | K. C. S. | " | " | | | | 92,854.00 |
| 11 | Frisco. | " | " | 27,599.00 | 39,855.00 | 9,201.00 | 76,655.00 |
| 12 | Mo. Pac. | " | " | 19,717.80 | 34,078.80 | | 53,796.60 |
| 13 | " | " | " | 44,686.00 | 40,151.00 | 1,415.00 | 86,252.00 |
| 14 | " | " | " | 64,320.00 | 26,194.00 | 605.00 | 91,159.00 |
| 15 | " | " | " | 49,236.55 | 49,033.60 | 539.50 | 98,808.65 |
| 16 | " | " | " | 74,027.00 | 43,779.00 | 13,714.00 | 131,520.00 |
| 17 | " | " | " | 42,596.00 | 26,054.00 | 1,499.00 | 70,149.00 |
| 18 | { Mo. Pac. Santa Fe. | " | " | 39,946.00 | 41,842.00 | 1,066.00 | 82,854.00 |
| 19 | Mo. Pac. | " | " | 40,410.00 | 19,707.00 | 1,157.00 | 61,274.00 |
| 20 | Frisco. | " | " | 15,512.00 | 8,291.00 | | 23,803.00 |
| 21 | K. C. S. | " | " | 29,801.45 | 54,515.80 | | 84,317.25 |
| 22 | " | " | " | 51,792.95 | 20,501.15 | 7,675.75 | 79,969.85 |
| 23 | { K. C. S. Frisco. | " | " | 146.60 | 53,707.10 | 4,964.30 | 58,818.00 |
| 24 | { K. C. S. K. C. S. | " | " | 90,710.60 | 41,348.75 | 758.10 | 132,817.45 |
| 25 | { K. C. S. Mo. Pac. | " | " | 8,680.00 | 108,694.00 | 6,894.00 | 124,268.00 |
| 26 | Frisco. | " | " | 13,999.00 | 4,663.00 | | 18,662.00 |
| 27 | " | " | " | 7,309.00 | 2,700.00 | 90,000.00 | 100,009.00 |
| 28 | " | " | " | 48,773.00 | 20,912.00 | | 69,685.00 |
| 29 | " | " | " | 20,206.00 | 27,910.00 | | 48,116.00 |
| 30 | K. C. S. | " | " | 28,439.00 | 42,660.00 | | 71,099.00 |
| 31 | " | " | " | 5,598.00 | 7,399.00 | 7,200.00 | 20,197.00 |
| 32 | Frisco. | " | " | | | 11,709.00 | 11,709.00 |
| 33 | " | " | " | | | 45,126.00 | 45,126.00 |
| 34 | " | " | " | | | 66,605.00 | 66,605.00 |
| 35 | { Frisco. Santa Fe. | " | " | 14,908.44 | 27,637.30 | 3,191.00 | 45,731.74 |
| 36 | Frisco. | " | " | 2,177.00 | 2,661.00 | 31,568.00 | 36,406.00 |
| 37 | Santa Fe. | " | " | 20,395.00 | 24,928.00 | 7,607.00 | 52,930.00 |
| 38 | Frisco. | " | " | | | 24,912.00 | 24,912.00 |
| 39 | Mo. Pac. | " | " | | | 57,433.35 | 57,433.35 |
| 40 | None | " | Horse | 1,000.00 | 1,100.00 | 2,000.00 | 4,100.00 |
| 41 | Mo. Pac. | " | Steam. | 22,398.50 | 17,400.30 | 3,789.95 | 43,588.75 |
| 42 | { Frisco. Santa Fe. | Slope | " | 4,478.40 | 10,423.25 | 1,438.85 | 16,340.50 |
| 43 | Mo. Pac. | Shaft | " | | | 8,929.70 | 8,929.70 |
| 44 | " | " | " | | | 10,000.00 | 10,000.00 |
| 45 | Frisco. | " | " | 26,851.00 | 22,555.00 | 1,873.00 | 51,279.00 |
| 46 | " | " | " | | | 61,864.00 | 61,864.00 |
| 47 | " | " | " | | | 11,652.00 | 11,652.00 |
| 48 | " | " | " | | | 24,911.00 | 24,911.00 |
| 49 | " | Strip | " | 112.80 | 5,079.15 | 13,912.00 | 19,103.95 |
| 50 | { Frisco. Santa Fe. | " | " | | | 12,291.60 | 12,291.60 |
| 51 | Frisco. | " | " | | | 14,211.00 | 14,211.00 |
| 52 | " | " | " | | | 5,043.00 | 5,043.00 |
| Total | | | | | | | 3,374,069.00 |



Biennial Report.

37

COAL-MINING INDUSTRY IN CRAWFORD COUNTY FOR THE FISCAL YEAR END- ING JUNE 30, 1910—CONCLUDED.

| Office No. | Average number of employees. | | | | | | Mining price per ton. | Under-ground day wage. | Top day wage. | Number of 12½-lb. kegs powder. | Number of days worked. |
|------------|------------------------------|-------|--------------|-----------------------|---------------------|----------|-----------------------|------------------------|---------------|--------------------------------|------------------------|
| | Miners. | Boys. | Shot firers. | Under-ground day men. | Total under-ground. | Top men. | | | | | |
| 1 | 235 | 15 | 6 | 55 | 311 | 31 | \$0 72 | \$2 56 | \$2 02½ | 24,405 | 197 |
| 2 | 194 | 8 | 5 | 29 | 236 | 14 | 72 | 56 | 02½ | 20,283 | 201 |
| 3 | 77 | 1 | 2 | 15 | 95 | 12 | 72 | 56 | 02½ | 6,187 | 182 |
| 4 | 190 | 11 | 5 | 52 | 258 | 14 | 72 | 56 | 02½ | 22,868 | 192 |
| 5 | 205 | 9 | 5 | 46 | 265 | 13 | 72 | 56 | 02½ | 22,515 | 190 |
| 6 | 200 | 8 | 6 | 63 | 277 | 16 | 72 | 56 | 02½ | 23,939 | 182 |
| 7 | 111 | 3 | 3 | 30 | 144 | 12 | 72 | 58 | 40 | 13,020 | 176 |
| 8 | 138 | 4 | 4 | 31 | 177 | 14 | 72 | 56 | 02½ | 16,605 | 203 |
| 9 | 100 | 2 | 3 | 23 | 128 | 15 | 72 | 56 | 02½ | 9,405 | 163 |
| 10 | 135 | 2 | 4 | 24 | 165 | 12 | 72 | 56 | 02½ | 14,896 | 187 |
| 11 | 115 | 3 | 3 | 23 | 141 | 11 | 72 | 65 | 47 | 14,890 | 175 |
| 12 | 78 | 1 | 2 | 12 | 93 | 7 | 100 | 56 | 30 | 8,000 | 162 |
| 13 | 160 | 4 | 4 | 22 | 186 | 9 | 195 | 56 | 30 | 13,172 | 175 |
| 14 | 145 | 3 | 3 | 19 | 167 | 8 | 175 | 56 | 30 | 13,753 | 175 |
| 15 | 155 | 2 | 3 | 18 | 178 | 7 | 185 | 56 | 30 | 15,579 | 171 |
| 16 | 195 | 2 | 2 | 24 | 221 | 9 | 230 | 56 | 30 | 19,491 | 186 |
| 17 | 110 | 3 | 3 | 14 | 126 | 7 | 133 | 56 | 30 | 9,916 | 188 |
| 18 | 125 | 2 | 2 | 23 | 150 | 9 | 159 | 56 | 02½ | 12,775 | 169 |
| 19 | 105 | 2 | 2 | 14 | 121 | 8 | 129 | 56 | 02½ | 9,600 | 170 |
| 20 | 40 | 2 | 2 | 6 | 48 | 6 | 54 | 56 | 02½ | 3,799 | 138 |
| 21 | 108 | 1 | 2 | 20 | 131 | 10 | 141 | 56 | 02½ | 13,699 | 194 |
| 22 | 109 | 1 | 2 | 16 | 128 | 10 | 138 | 56 | 02½ | 13,366 | 184 |
| 23 | 74 | 1 | 2 | 10 | 87 | 7 | 94 | 56 | 02½ | 10,837 | 199 |
| 24 | 175 | 3 | 2 | 17 | 197 | 9 | 206 | 56 | 02½ | 21,863 | 194 |
| 25 | 158 | 3 | 3 | 21 | 185 | 10 | 195 | 56 | 02½ | 19,081 | 190 |
| 26 | 40 | 3 | 3 | 6 | 48 | 6 | 54 | 56 | 02½ | 2,654 | 115 |
| 27 | 127 | 3 | 3 | 16 | 146 | 9 | 155 | 56 | 02½ | 14,925 | 176 |
| 28 | 110 | 3 | 3 | 12 | 125 | 8 | 133 | 56 | 02½ | 11,020 | 169 |
| 29 | 64 | 2 | 2 | 6 | 72 | 7 | 79 | 56 | 02½ | 7,365 | 166 |
| 30 | 80 | 2 | 2 | 12 | 94 | 8 | 102 | 56 | 28 | 9,019 | 196 |
| 31 | 38 | 2 | 2 | 5 | 45 | 2 | 47 | 56 | 28 | 2,296 | 160 |
| 32 | 18 | 2 | 2 | 4 | 24 | 4 | 28 | 56 | 02½ | 1,584 | 189 |
| 33 | 84 | 2 | 2 | 17 | 103 | 11 | 114 | 56 | 02½ | 4,873 | 96 |
| 34 | 82 | 2 | 2 | 12 | 96 | 8 | 104 | 56 | 02½ | 10,630 | 182 |
| 35 | 70 | 2 | 2 | 11 | 83 | 8 | 91 | 56 | 02½ | 6,938 | 202 |
| 36 | 65 | 2 | 2 | 13 | 80 | 9 | 89 | 56 | 02½ | 2,818 | 214 |
| 37 | 90 | 2 | 2 | 13 | 105 | 10 | 115 | 56 | 02½ | 4,400 | 157 |
| 38 | 40 | 2 | 2 | 7 | 49 | 5 | 54 | 56 | 02½ | 1,880 | 180 |
| 39 | 100 | 2 | 2 | 10 | 112 | 8 | 120 | 56 | 02½ | 4,678 | 165 |
| 40 | 4 | 2 | 2 | 2 | 6 | 1 | 7 | 56 | 02½ | 780 | 270 |
| 41 | 75 | 2 | 2 | 10 | 87 | 9 | 96 | 56 | 02½ | 7,470 | 190 |
| 42 | 32 | 2 | 2 | 8 | 40 | 6 | 46 | 56 | 02½ | 2,129 | 151 |
| 43 | 33 | 2 | 2 | 6 | 42 | 5 | 47 | 56½ | 04½ | 1,620 | 101 |
| 44 | 60 | 2 | 2 | 4 | 66 | 4 | 100 | 56 | 02½ | 1,490 | 196 |
| 45 | 69 | 2 | 2 | 14 | 85 | 7 | 92 | 56 | 02½ | 8,073 | 191 |
| 46 | 61 | 2 | 2 | 13 | 76 | 8 | 84 | 75 | 36 | 9,013 | 184½ |
| 47 | 26 | 2 | 2 | 6 | 34 | 7 | 41 | 70 | 39 | 1,863 | 128½ |
| 48 | 45 | 2 | 2 | 7 | 54 | 6 | 60 | 75 | 30 | 3,668 | 129 |
| 49 | 25 | 2 | 2 | 7 | 54 | 6 | 60 | 75 | 30 | 1,894 | 215 |
| 50 | | | | | | | | | | | |
| 51 | | | | | | | | | | | |
| 52 | | | | | | | | | | | |
| | 4,985 | 73 | 122 | 851 | 5,887 | 436 | 6,353 | | | 497,024 | |

1. Suspended February, 21, 1909. 2. Mine closed down March 2, 1909. 3. Idle during 1909. 4. Machine mine. 5. Just opening up mine.
6. Idle January, February, March, April, May and June, 1909. 7. New mine; commenced loading coal September, 1908. 8. Idle five months.



Biennial Report.

39

COAL-MINING INDUSTRY IN CHEROKEE COUNTY FOR THE FISCAL YEAR
ENDING JUNE 30, 1909—CONTINUED.

| Office No..... | Railroad connections. | Kind of opening.. | Kind of power.... | Tons of coal produced. | | | |
|----------------|-----------------------|-------------------|-------------------|------------------------|--------------------|--------------|--------------------|
| | | | | Lump..... | Not and slack..... | Mine run.... | Total out-put..... |
| 1 | Frisco..... | Shaft... | Steam... | 32,321.00 | 26,453.00 | 3,470.00 | 66,244.00 |
| 2 | Frisco..... | " | " | 10,644.00 | 3,292.00 | 3,034.40 | 16,870.40 |
| 3 | Frisco, M. K. & T.... | " | " | 22,190.00 | 36,782.00 | 1,307.00 | 70,279.00 |
| 4 | Frisco..... | " | " | 34,656.00 | 26,274.00 | 1,479.00 | 62,419.00 |
| 5 | Frisco..... | " | " | 15,113.00 | 4,554.00 | 694.00 | 20,361.00 |
| 6 | M. K. & T..... | " | " | 51,027.05 | 20,647.10 | 4,613.05 | 76,287.20 |
| 7 | " | " | " | 65,261.85 | 23,296.20 | 6,011.55 | 94,569.60 |
| 8 | " | " | " | 93,242.05 | 31,376.85 | 401.00 | 125,019.90 |
| 9 | " | " | " | 83,586.80 | 31,609.15 | 1,871.50 | 117,067.45 |
| 10 | Frisco..... | " | " | 117,014.25 | 45,527.65 | 1,646.10 | 164,188.00 |
| 11 | " | " | " | 16,970.00 | 5,660.00 | | 22,630.00 |
| 12 | " | " | " | | | | |
| 13 | " | " | " | 11,628.00 | 4,085.00 | | 15,713.00 |
| 14 | " | " | " | | | | |
| 15 | " | " | " | 8,875.00 | 10,846.00 | | 19,721.00 |
| 16 | M. K. & T..... | " | " | 13,351.00 | 16,318.00 | 19,941.00 | 49,610.00 |
| 17 | Frisco..... | " | " | 11,403.00 | 16,710.00 | | 28,113.00 |
| 18 | " | " | " | 8,716.00 | 10,559.00 | 2,455.00 | 21,730.00 |
| 19 | Mo. Pac..... | " | " | 68,391.25 | 28,895.75 | 2,175.20 | 99,462.20 |
| 20 | Frisco..... | " | " | 5,498.00 | 6,770.00 | 837.00 | 13,105.00 |
| 21 | M. K. & T..... | " | " | | | 62,744.00 | 62,744.00 |
| 22 | Frisco, M. K. & T.... | " | " | | | 57,979.00 | 57,979.00 |
| 23 | M. K. & T..... | " | " | 46,040.70 | 42,678.10 | 23,678.41 | 112,397.21 |
| 24 | Mo. Pac..... | " | " | 6,326.40 | 4,789.10 | 286.60 | 11,402.10 |
| 25 | Frisco..... | " | " | 1,577.05 | 1,689.35 | 920.95 | 4,187.35 |
| 26 | M. K. & T..... | " | " | 48,447.10 | 17,266.10 | | 65,713.20 |
| 27 | " | " | " | 31,374.00 | 15,481.10 | 369.55 | 47,224.65 |
| 28 | " | " | " | | | 83,744.00 | 83,744.00 |
| 29 | " | " | " | | | 22,064.00 | 22,064.00 |
| 30 | Frisco..... | " | " | | | 47,483.00 | 47,483.00 |
| 31 | " | " | " | | | 22,856.00 | 22,856.00 |
| 32 | Mo. Pac..... | " | " | | | 129,075.00 | 129,075.00 |
| 33 | " | " | " | | | 52,484.00 | 52,484.00 |
| | Total..... | | | | | | 1,796,739.00 |



COAL-MINING INDUSTRY IN CHEROKEE COUNTY FOR THE FISCAL YEAR
ENDING JUNE 30, 1909 — CONCLUDED.

| Office No..... | Average number of employees. | | | | | | Mining price per ton..... | Under-ground day wage..... | Top day wage..... | Number of 12½-lb. kegs powder.... | Number of days worked..... |
|----------------|------------------------------|-----------|------------------|-------------------------------|---------------------------|-------------|------------------------------|-------------------------------|-------------------|--------------------------------------|-------------------------------|
| | Miners..... | Boys..... | Shot firers.. | Under- ground day men.. | Total under- ground... | Top men.... | | | | | |
| 1 | 86 | 2 | 2 | 25 | 115 | 14 | \$0 72 | \$2 71 | \$2 33 | 9,071 | 159 |
| 2 | 37 | | 2 | 7 | 46 | 6 | 72 | 2 70 | 2 55 | 2,659 | 92 |
| 3 | 92 | 1 | 2 | 15 | 110 | 14 | 72 | 2 94 | 2 39 | 9,667 | 149 |
| 4 | 149 | 4 | 4 | 22 | 179 | 16 | 72 | 2 76 | 2 44 | 6,359 | 90 |
| 5 | 48 | | 4 | 9 | 59 | 7 | 72 | 2 73 | 2 46 | 3,232 | 98 |
| 6 | 69 | | 2 | 15 | 86 | 10 | 72 | 2 62 | 2 22 | 6,585 | 277 |
| 7 | 119 | 4 | 2 | 21 | 146 | 31 | 72 | 2 52 | 2 29 | 8,740 | 269 |
| 8 | 123 | 3 | 2 | 16 | 145 | 14 | 72 | 2 56 | 2 20 | 11,186 | 273 |
| 9 | 116 | 2 | 2 | 14 | 134 | 16 | 72 | 2 63 | 2 22 | 10,172 | 269 |
| 10 | 148 | 2 | 2 | 19 | 172 | 22 | 72 | 2 59 | 2 22 | 12,343 | 262 |
| 11 | 60 | 1 | 2 | 10 | 73 | 7 | 72 | 2 56 | 2 02½ | 3,880 | 116 |
| 12 | | | | | | | | | | | |
| 13 | 28 | | 2 | 6 | 36 | 7 | *2 81 | 2 75 | 2 02½ | 1,638 | 127 |
| 14 | | | | | | | | | | | 42 |
| 15 | 38 | | 2 | 7 | 47 | 8 | 72 | 2 56 | 2 02½ | 1,525 | 207 |
| 16 | 80 | | 2 | 13 | 95 | 11 | 72 | 2 56 | 2 02½ | 3,520 | 242 |
| 17 | 53 | | 2 | 8 | 63 | 6 | 72 | 2 56 | 2 50 | 2,117 | 240 |
| 18 | 73 | | 2 | 8 | 83 | 9 | 72 | 2 68 | 2 50 | 1,834 | 125 |
| 19 | 125 | 2 | 3 | 19 | 149 | 7 | 72 | 2 56 | 2 35 | 15,488 | 240 |
| 20 | 50 | | 2 | 10 | 62 | 7 | 72 | 2 66 | 2 26 | 2,270 | 90 |
| 21 | 101 | | 2 | 10 | 113 | 9 | 72 | 2 81 | 2 42 | 11,677 | 145 |
| 22 | 74 | | 2 | 9 | 85 | 10 | 72 | 2 81 | 2 44 | 7,836 | 150 |
| 23 | 170 | | 2 | 25 | 197 | 11 | 72 | 2 56 | 2 02½ | 20,483 | 237 |
| 24 | 40 | | 2 | 8 | 50 | 4 | 72 | 2 56 | 2 02½ | 2,082 | 83 |
| 25 | 10 | | | 3 | 13 | 4 | 72 | 2 56 | 2 02½ | 400 | 77 |
| 26 | 80 | | 2 | 12 | 94 | 9 | 72 | 2 56 | 2 02½ | 7,752 | 204 |
| 27 | 62 | | 2 | 14 | 78 | 9 | 72 | 2 56 | 2 02½ | 4,323 | 196 |
| 28 | 135 | | 3 | 21 | 159 | 9 | 72 | 2 56 | 2 02½ | 7,723 | 174 |
| 29 | 48 | | 2 | 10 | 60 | 6 | 72 | 2 60 | 2 40 | 4,053 | 112 |
| 30 | 72 | | 2 | 11 | 85 | 9 | 72 | 2 60 | 2 40 | 7,691 | 176 |
| 31 | 45 | | 2 | 17 | 64 | 7 | 72 | 2 60 | 2 40 | 2,679 | 105 |
| 32 | 190 | | 4 | 39 | 233 | 17 | 72 | 2 70 | 2 30 | 18,293 | 184 |
| 33 | 86 | | 2 | 18 | 106 | 7 | 72 | 2 80 | 2 55 | 8,031 | 161 |
| | 2,607 | 21 | 66 | 441 | 3,137 | 333 | 3,460 | | | 215,260 | |

* Day work.



COAL-MINING INDUSTRY IN CHEROKEE COUNTY FOR THE FISCAL YEAR ENDING JUNE 30, 1910.

| Office No. | NAME OF OPERATOR. | Post-office address. | Number or name of mine. | Mine boss. | Location of mine. |
|------------|------------------------------------|-----------------------|-------------------------|--------------------|---|
| 1 | Central Coal and Coke Co. ① | Kansas City, Mo. | 16. | John White. | 1 1/4 miles west of Scammon. |
| 2 | " " " ② | Weir. | 39. | Thos. Scott. | 2 miles west and 1 1/4 miles north of Weir. |
| 3 | " " " ③ | Kansas City, Mo. | 42. | Chas. Spensburger. | 1 1/4 miles w. and 1 1/2 miles s. of Scammon. |
| 4 | " " " ④ | Weir. | 43. | J. M. Young. | 1 mile w. and 2 miles s. of Scammon. |
| 5 | " " " ⑤ | " | 44. | Jas. Lavery. | 3 miles west and 1/4 mile north of Weir. |
| 6 | M. K. & T. Coal Department ⑥ | Parsons. | 6. | Ed. Ryan. | 1/4 mile east of West Mineral. |
| 7 | " " " ⑦ | " | 8. | W. F. Maylen. | " |
| 8 | " " " ⑧ | " | 11. | M. Wagner. | 1/2 mile southeast of West Mineral. |
| 9 | " " " ⑨ | " | 15. | Robt. Smith. | 1/2 mile north of West Mineral. |
| 10 | " " " ⑩ | " | 16. | Dan Ryan. | 1 1/4 miles e. and 1/2 mile n. of W. Mineral. |
| 11 | " " " ⑪ | " | 18. | Ed Ryan. | 1 mile s. and 1/2 mile e. of E. Mineral. |
| 12 | J. R. Crowe Coal Mining Co. ⑫ | Weir. | 18. | Mike Wagner. | 1 1/4 miles s. and 1/4 mile e. of W. Mineral. |
| 13 | " " " ⑬ | " | 3. | Harry Smith. | 1 1/4 miles west of Weir. |
| 14 | " " " ⑭ | " | 7. | Richard Luke. | 3 miles northwest of Weir. |
| 15 | " " " ⑮ | " | 18. | Fred Green. | 3 miles south of Scammon. |
| 16 | Hamilton Coal and Mercantile Co. ⑯ | " | 19. | John McGill. | 3 miles southwest of Scammon. |
| 17 | " " " ⑰ | " | 5. | John Haigh. | 1 1/4 miles northwest of Frisco depot. |
| 18 | Weir Junction Coal Co. ⑱ | Cherokee. | 2. | J. G. Schwab. | 1 mile southeast of Mineral. |
| 19 | " " " ⑲ | " | 3. | C. Lampton. | 2 miles south of Cherokee. |
| 20 | Western Coal Mining Co. ⑳ | St. Louis, Mo. | 12. | Jack Davidson. | 1 mile south of Scammon. |
| 21 | J. H. Bennett Coal Co. ㉑ | Weir. | 1. | Ernest Shaw. | 1/2 mile west of Carona. |
| 22 | Scammon Fuel Co. ㉒ | Scammon. | 1. | John Barr. | 2 miles northwest of Weir. |
| 23 | Geo. K. Mackie Fuel Co. ㉓ | " | 1. | J. W. Morton. | 1 1/4 miles northwest of West Mineral. |
| 24 | Cherokee-Crescent Coal Co. ㉔ | West Mineral. | 1. | Geo. Mack. | 1 1/4 miles southwest of Scammon. |
| 25 | " " " ㉕ | Roseland. | 2. | W. H. Green. | Mineral. |
| 26 | Fleming Coal Co. ㉖ | Skidmore. | 2. | Wm. Williams. | 1 1/4 miles northeast of Carona. |
| 27 | " " " ㉗ | " | 4. | Geo. Waggoner. | 3/4 mile north of Turck. |
| 28 | " " " ㉘ | " | 5. | Aug. Maison. | 1 1/4 miles southwest of Turck. |
| 29 | Mayer Coal Co. ㉙ | Mineral. | 1. | Jno. Maxwell. | 1 mile west of Turck. |
| 30 | Vanduker Coal Co. ㉚ | Roseland. | 1. | Jno. Humble. | 1 1/4 miles southeast of Mineral. |
| 31 | Fidelity Coal Mining Co. ㉛ | Stone City. | 1. | John Citron. | Southwest of Stippville. |
| 32 | " " " ㉜ | " | 8. | John Dorman. | 3 miles north of Mineral. |
| 33 | Kansas Fuel Co. ㉝ | Scammon. | 5. | Alex. Brown. | 2 miles north of Mineral. |
| 34 | Norton Coal Co. ㉞ | " | 5. | Mike Walsh. | 2 miles south of Scammon. |
| 35 | " " " ㉟ | " | 7. | Andrew Braidwood. | 1/4 mile west of Scammon. |
| 36 | McGregor Coal Co. ㊱ | Columbus R. R. No. 3. | 1. | Thos. Graham. | 2 1/2 miles northwest of Scammon. |
| 37 | J. J. Stephenson Coal Co. ㊲ | Pittsburg. | Strip. | McGregor. | 3 miles north of Columbus. |

1. Closed down April 1, 1910. Suspension. 2. Suspended February 21, 1909. 4. Abandoned November, 1909. 6. Idle.
3. Strike account of powder November 24, 1909, to March 22, 1910. Mine closed from March 2, 1909, to October 19, 1909.
5. But very short time in operation. 7. Only worked July and August, 1909. Mine worked out. 10. Worked out August, 1909.
8. Mine was idle months of July and August, 1909. 9. Idle from February 4, 1910, to latter part of March, 1910, account of strike.

Biennial Report.



COAL-MINING INDUSTRY IN CHEROKEE COUNTY FOR THE FISCAL YEAR
ENDING JUNE 30, 1910—CONTINUED.

| Office No. | Railroad connections. | Kind of opening. | Kind of power. | Tons of coal produced. | | | |
|------------|-----------------------|------------------|----------------|------------------------|----------------|------------|----------------|
| | | | | Lump. | Nut and slack. | Mine run. | Total out-put. |
| 1 | Frisco | Shaft | Steam | 26,998.00 | 40,928.00 | 8,825.00 | 76,751.00 |
| 2 | Frisco | " | " | | | | |
| 3 | M. K. & T. | " | " | 46,801.00 | 56,118.00 | 6,906.00 | 109,825.00 |
| 4 | Frisco | " | " | 302.00 | 12,859.00 | 1,936.00 | 15,097.00 |
| 5 | M. K. & T. | " | " | 24,211.00 | 10,095.00 | 687.00 | 34,993.00 |
| 6 | Frisco | " | " | 7,308.20 | 3,447.50 | 658.65 | 11,414.35 |
| 7 | M. K. & T. | " | " | 56,446.30 | 21,996.50 | 3,568.30 | 28,010.10 |
| 8 | " | " | " | 43,023.60 | 16,778.15 | 2,257.45 | 62,059.20 |
| 9 | " | " | " | 72,070.05 | 32,512.65 | 4,558.65 | 109,141.35 |
| 10 | " | " | " | 94,877.30 | 38,391.50 | 44.50 | 13,312.85 |
| 11 | " | " | " | 3,784.80 | 1,842.10 | 3,074.15 | 8,701.05 |
| 12 | Frisco | " | " | 16,480.00 | 5,494.00 | | 21,974.00 |
| 13 | " | " | " | | | | |
| 14 | " | " | " | 18,148.00 | 6,376.00 | | 24,524.00 |
| 15 | " | " | " | 24,677.00 | 8,025.00 | | 32,702.00 |
| 16 | " | " | " | 1,613.00 | 1,971.00 | | 3,584.00 |
| 17 | M. K. & T. | " | " | 6,822.00 | 8,338.00 | 181.00 | 15,341.00 |
| 18 | Frisco | " | " | 6,299.00 | 13,108.00 | | 19,407.00 |
| 19 | " | " | " | 9,654.00 | 14,941.00 | 2,014.00 | 26,609.00 |
| 20 | Mo. Pac. | " | " | 59,345.15 | 27,643.50 | 969.40 | 87,958.05 |
| 21 | Frisco | " | " | 13,555.00 | 14,172.00 | 1,051.00 | 28,778.00 |
| 22 | M. K. & T. | " | " | | | 88,045.00 | 88,045.00 |
| 23 | Frisco | " | " | | | 77,747.00 | 77,747.00 |
| 24 | M. K. & T. | " | " | | | | |
| 25 | Mo. Pac. | " | " | 39,948.65 | 49,045.50 | 9,935.30 | 98,929.00 |
| 26 | Frisco | " | " | 14,683.30 | 5,843.35 | 3,572.45 | 24,099.10 |
| 27 | M. K. & T. | " | " | 3,583.30 | 5,470.85 | 133.75 | 8,187.90 |
| 28 | " | " | " | 32,992.16 | 14,184.55 | | 47,176.71 |
| 29 | " | " | " | 25,487.35 | 14,468.75 | | 39,956.10 |
| 30 | Frisco | " | " | | | 90,520.00 | 90,520.00 |
| 31 | M. K. & T. | " | " | 8,000.00 | 2,000.00 | 5,000.00 | 10,000.00 |
| 32 | " | " | " | | | | |
| 33 | Frisco | " | " | | | 59,872.00 | 59,872.00 |
| 34 | " | " | " | | | 19,462.00 | 19,462.00 |
| 35 | Mo. Pac. | " | " | | | 104,899.00 | 104,899.00 |
| 36 | " | " | " | | | 42,567.00 | 42,567.00 |
| 37 | Frisco | Strip | Horse | | | 1,305.00 | 1,305.00 |
| | | | | | | 10,865.00 | 10,865.00 |
| | Total | | | | | | 1,453,809.00 |