

State inspector of coal mines reports

Section 90, Pages 2671 - 2700

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

State inspector of coal mines reports

Twenty-fourth Annual Report.

55

the law by providing sufficient lockers and heat. On June 20 he again returned to the mine and examined the bathhouse, and found new addition not completed, and recommended that work on same be pushed as rapidly as possible. On June 27 Kotzman made an inspection of the mine and found it in fair condition. He made numerous minor recommendations for the betterment of conditions. On November 26 Paisley visited the mine and found conditions good, and ordered bathhouse kept clean and sanitary and provided with proper heat.

Mine No. 15 of the Crowe Coal and Mining Company is located at Croweburg, on a switch off the Frisco railway. This mine worked 233 $\frac{3}{4}$ days, employed 144 men and produced 100,347 tons of coal during the year. Walter Casselman, mine foreman.

Deputy Inspector Kotzman made an inspection of this mine on January 11 and found the mine lacking in air, and ordered ventilating current increased and considerable loose rock all over the mine timbered or taken down. On May 4 Paisley inspected the mine and ordered all roadways cleared of dust and same thoroughly sprinkled. On June 8 Kotzman ordered several doors and curtains hung. On October 10 Kotzman ordered roadways cleaned and sprinkled, ventilating current increased in several places, and considerable loose rock all over the mine timbered or taken down.

Mine No. 16 of the Crowe Coal and Mining Company is located at Croweburg, on a switch off the Frisco railway. This mine has been idle during the first, second and third quarters, and produced 7122 tons of coal, gave employment to 52 men and worked 50 days during the last quarter. James Friel, mine foreman.

Deputy Inspector Kotzman inspected this mine on November 17 and found it in fair condition. This mine has been closed for about eighteen months and just resumed operation during the last quarter.

Mine No. 4 of the Clemens Coal Company is located at Mulberry, and is connected by switch to the Frisco railway. The mine produced 105,166 tons of coal, gave employment to 125 men and worked 249 days during the year. William Rae, mine foreman.

On January 10 Inspector Kotzman made an inspection of this mine and found it in general fair condition. He found the bathhouse kept in dirty condition and ordered it kept within the requirements of the bathhouse law. On January 28 Paisley visited the mine in answer to a complaint regarding the bathhouse, and ordered it kept in clean and sanitary condition. On May 6 Sherwood and Kotzman made an inspection of the mine and found it in good condition. They recommended some loose rock in several places in the mine be timbered or taken down. On June 6 Sherwood again inspected the mine and found considerable bad rock, which he ordered timbered or taken down, water on roadways in several places taken off, and several other minor recommendations to improve conditions.

Mine No. 11 of the Clemens Coal Company, located one mile northwest of Mulberry, on a switch off the Frisco railway, produced 140,436 tons of coal, gave employment to 154 men and worked 232 $\frac{3}{4}$ days during the year. John Davidson, mine foreman.

On January 4 Inspector Paisley visited the mine in answer to complaints regarding the bathhouse, and recommended that better light, heat and water be provided, and same kept in clean and sanitary condition. On January 7 Inspector Sherwood inspected the mine and found it in good condition. On March 20 Kotzman again inspected the mine and again found it in good condition. He tested the safety catches and found them in good condition. He examined the ropes and found them bad, and ordered new ropes put on immediately. On July 11 Kotzman again inspected the mine and found it in good condition. On October 25 Sherwood inspected the mine and found it in good condition. Paisley inspected the mine on December 2 and found it in good condition.



State inspector of coal mines reports

Mine No. 15 of the Clemens Coal Company, located three miles northwest of Pittsburg, on a switch off the Frisco railway, is a new mine. The mine produced 5894 tons of coal, employed 19 men and worked 70 days during the year. Mike Fleming, mine foreman.

Deputy Inspector Sherwood inspected this mine on March 21 and found the mine in good condition. On June 8 Sherwood again inspected the mine and again found conditions excellent. On December 8 Sherwood again inspected the mine and ordered several doors and curtains hung to better ventilation; examined the cages, safety catches and ropes and found them in good condition. The workings of this mine are of a faulty character.

Mine No. 16 of the Clemens Coal Company, located six miles northeast of Pittsburg, on a switch off the Santa Fe railway, is also a new mine. The mine produced 49,016 tons of coal, gave employment to 65 men and worked 241 days during the year. Wm. Barker, later Frank Samples, mine foreman.

Deputy Inspector Kotzman inspected this mine on January 13 and ordered manholes made on several of the main entries. He also found wash house kept in poor condition, and ordered same kept clean and sanitary. On February 16 Kotzman inspected the mine and found it in good condition. He ordered loose rock in the straight east and back east entry timbered or taken down. On April 15 Sherwood inspected the mine and found it lacking in air, and ordered air brought to working faces and roadways cleaned and sprinkled. On July 25 Paisley inspected the mine and recommended that curtains all over mine be repaired and loose rock taken down or timbered.

Mine No. 18 of the Clemens Coal Company, located four miles west of Pittsburg, is connected by switch to the Santa Fe railway, and is a new mine under development. The mine produced 1956 tons of coal, gave employment to 27 men and worked 73 days during the last quarter of the year. Francis Keegan, mine foreman.

Mine No. 6 of the Hamilton Coal and Mercantile Company is located one-fourth of a mile north of Cherokee, on a switch off the Frisco railroad. This mine gave employment to 107 men, worked 246 days and produced 59,446 tons of coal during the year. Gus Champ, mine foreman.

Deputy Inspector James Sherwood made a thorough inspection of this mine on June 23 in company with Inspector Green. They recommended manholes made on all main roads and considerable loose rock all over the mine timbered or taken down; also recommended that bathhouse be put up to the requirements of the law, or a new one built. On October 19 Inspector Kotzman inspected the mine and found it in general fair condition.

Mine No. 7 of the Hamilton Coal and Mercantile Company, located at Radley, is connected to the Santa Fe railway. The mine produced 67,472 tons of coal, gave employment to 146 men and worked 198 days during the year. John Hobbs, mine foreman.

Deputy Inspector Sherwood made a thorough inspection of this mine on April 16 and found the mine in fair condition. He ordered several doors and curtains repaired to improve ventilation, and roads cleaned and sprinkled. On June 1 Paisley inspected the mine and found it in fair condition. He ordered ventilation increased on east side of mine and considerable loose rock timbered or taken down. On June 26 he again inspected the mine and ordered overcast on west side of mine repaired immediately and more air furnished this side of the mine; manholes to be put in on motor road; recommended telephones installed in several entries and ventilating current on east side of mine increased. On October 13 Paisley again inspected the mine and ordered roadways cleaned and sprinkled, telephones put in working order, and some loose rock taken down or timbered.

State inspector of coal mines reports

Twenty-fourth Annual Report.

57

Mine No. 8 of the Hamilton Coal and Mercantile Company, located one mile east of Arma, on a switch off the Missouri Pacific railway, gave employment to 196 men, worked 214 days and produced 112,351 tons of coal during the year. John Fulton, mine foreman.

Deputy Inspector Paisley inspected this mine on January 7 and found the mine in fair condition. He ordered numerous stoppings put in and curtains repaired to improve ventilation. Ordered wash house put up to the requirements of the law by providing proper light, heat, ventilation and water supply; also recommended that east cage be replaced by a new one as soon as possible. On February 22 Inspector Kotzman made an inspection of this mine and ordered several entries stopped, on account of poor ventilation. He found considerable loose rock in the mine, which he ordered properly timbered or taken down immediately. On March 1 Kotzman again inspected the mine and found a decided improvement in conditions. On May 11 Paisley again inspected the mine and ordered considerable loose rock all over the mine taken down or timbered, stoppings gone over, and air in several entries increased. On August 18 Paisley found the mine in good condition. He made numerous recommendations for better conditions. On September 21 Paisley found the mine lacking in air, and ordered air brought to face immediately. He also found numerous places which he ordered timbered or loose rock taken down. On September 6 Paisley again inspected the mine. On October 5 Sherwood inspected the mine and found it in good condition. On November 27 Sherwood again inspected the mine and ordered several doors and curtains hung, stoppings made air-tight, and loose rock all over the mine timbered or taken down. On December 22 Sherwood again inspected the mine and ordered doors and curtains repaired, loose rock in several portions of the mine timbered or taken down, and bathhouse put up to the requirements of the law.

Mine No. 7 of the Girard Coal Company, located at Radley, on a switch off the Santa Fe railway, gave employment to 150 men, worked 197 days and produced 73,164 tons of coal. William Hudson, mine foreman.

Deputy Inspector Sherwood inspected the mine on January 19 and found all his previous recommendations carried out. He ordered several doors and curtains hung, stoppings overhauled, and made several minor recommendations. On January 24 Sherwood again inspected the mine and found it in fair condition. Kotzman inspected the mine on February 18 and ordered manholes made on several of the main entries. He found the ventilation in good condition. On April 10 Sherwood inspected the mine and ordered telephones put in working order, loose rock all over the mine timbered or taken down, and the east cage tightened up. On June 20 Sherwood ordered roadways cleaned and sprinkled, ventilation in several entries increased, and considerable loose rock timbered or taken down. On September 29 Sherwood inspected the mine and ordered considerable loose rock timbered or taken down, ventilation in several entries increased, and telephones put in working order. Paisley inspected the mine on October 21 and found it in fair condition. On November 1 Sherwood inspected the mine and found it in poor condition. Ventilation was lacking in numerous places, considerable loose rock all over the mine, and several other dangerous conditions. He ordered the mine closed until such time when it is put in lawful condition. On November 6 Paisley inspected the mine and found conditions good.

Mine No. 8 of the Pittsburg Northern Coal Company, located one and one-half miles east of Franklin, on a switch off the Missouri Pacific railway, gave employment to 172 men, worked 223 days and produced 111,479 tons of coal. Joe Ruchaber, mine foreman.

On March 6 Paisley inspected this mine and recommended that ventilating current in several entries be increased, loose rock timbered or taken down, telephones to be installed in several entries, manholes to be made, and bathhouse kept in clean and sanitary condition. On May 24



Paisley inspected the mine and found it in fair condition, recommended curtains in several entries renewed, steps in manway repaired, telephones repaired, and some loose rock timbered or taken down. Kotzman inspected the mine on October 2 and ordered roadways cleaned and sprinkled, ventilating current in numerous places increased, loose rock timbered or taken down, and curtains repaired.

Mine No. 9 of the Girard Fuel Company is located one and one-half miles northwest of Arma, on a switch off the Missouri Pacific railway. The mine produced 23,225 tons of coal, gave employment to 55 men and worked 164 days during the year. Harry Haigh, mine foreman.

On February 18 Inspector Sherwood made a thorough inspection of this mine and found it in general good condition. A decided improvement was made in conditions in this mine during the past few months. On March 15 Kotzman inspected the mine and ordered manway to air shaft cleaned out, phones repaired and a new rope put on east cage. On April 18 Sherwood again inspected the mine and ordered manholes cleaned out on main west road, several sets of timbers on bottom renewed, and some loose rock pulled down or timbered. On May 16 Sherwood again found the mine in good condition. On June 12 Sherwood ordered roadways cleaned and sprinkled and some loose rock in several places in the mine taken care of. On July 18 Sherwood made an inspection and found conditions good. On September 30 Sherwood found the mine lacking in air in several entries and ordered same looked after immediately. He also ordered considerable loose rock timbered or taken down. On October 11 Sherwood ordered manway put in lawful condition and roadways kept cleaned and sprinkled.

Mine No. 1 of the Nevius Coal Company, located two miles west of Pittsburg, on a switch off the Frisco railroad, gave employment to 40 men, produced 4523 tons of coal and worked 42 days. This mine was worked out and abandoned in March. Eugene Lupens, mine foreman.

Mine No. 6 of the Nevius-Coulter Coal Company, located at Radley, on a switch off the Santa Fe railway, gave employment to 57 men, worked 94 days and produced 22,388 tons of coal. Joe Gladys, mine foreman.

Inspector Sherwood made an inspection of this mine on January 4 and found the mine in poor condition, on account of ventilation not being kept up. He recommended numerous doors and curtains hung and others repaired, stoppings put in, and considerable loose rock all over the mine timbered or taken down. On January 18 Sherwood again inspected the mine and found a great improvement in the ventilation and other conditions. Kotzman inspected the mine on June 1 and found conditions fair. He made numerous recommendations to improve conditions. On July 13 Paisley inspected the mine and ordered ventilation increased in several entries, and some loose rock timbered or taken down. On July 22 Kotzman closed several entries in the mine on account of poor ventilation and several other dangerous conditions. He returned to the mine on July 24 and found conditions improved and allowed the mine to again resume operations.

Mine No. 1 of the J. R. Burnett Coal Company, located one and one-fourth miles southwest of Curranville, was operated under lease by the J. H. Price & Sons Coal Company during the first quarter, and by the Wilson Bros. Coal Company during the second, third and fourth quarters. The mine produced 25,541 tons of coal, gave employment to 39 men and worked 209 days during the year.

This mine was inspected a number of times by the inspectors during the year, and on almost every visit found the mine in good condition. This is an old mine and will soon be abandoned.

Mine No. 6 of the F. E. Doubleday Coal Company, located at Coalvale, and connected by switch with the Frisco railroad, is 56 feet deep and is



Twenty-fourth Annual Report.

59

equipped with a 14-foot fan. The mine gave employment to 108 men, worked 265 days and produced 82,934 tons of coal during the year. Charles Spensberger, mine foreman.

Deputy Inspector Sherwood made a thorough inspection of this mine on May 16 and found it in fair condition and ventilation excellent. He again returned to the mine on October 26 and found the mine in good condition. He ordered some loose rock all over the mine timbered or taken down. This mine has been kept in good condition during the year, and little attention has been required on the part of the inspection department.

Mine No. 7 of the Spencer-Newland Coal Company, located one mile south of Mulberry, on a switch off the Frisco railway, gave employment to 143 men, worked 216½ days and produced 94,798 tons of coal. Herman Haymont, later Ted Luke, mine foreman.

Deputy Inspectors Kotzman and Paisley visited the mine on April 25 in answer to complaints regarding the cages, and after making a thorough examination of them found them in good condition, but recommended that the bonnet of cage be tightened up. On June 22 Inspector Sherwood made an inspection of the mine and found it in good condition. He ordered telephones put in working condition and scales repaired. On August 3 Sherwood again inspected the mine and found ventilation lacking in several places in the mine, and ordered ventilating current increased, air course between fifth south and air shaft cleaned out, and new cages provided immediately. On September 25 Sherwood inspected the mine and found it in fair condition. He ordered several doors and curtains hung, roadways cleaned and sprinkled, and some loose rock timbered or taken down. On November 16 Sherwood inspected the mine and found it in good condition. He ordered several doors and curtains hung and considerable loose rock timbered or taken down. On December 27 Sherwood again inspected the mine and again found it in fair condition. He ordered roadways cleaned and sprinkled, several doors hung and some loose rock timbered or taken down. The back west entry, which is being used as an air way, was ordered cleaned out, to give the air a greater space to travel and improve the ventilation.

Mine No. 2 of the Katy Coal Company, located one and one-half miles southeast of Radley, is connected by switch to the Santa Fe railway. The mine produced 99,051 tons of coal, gave employment to 172 men and worked 216½ days during the year. John Humble, mine foreman.

An electric shot-firing apparatus is installed at this mine. Deputy Inspector Sherwood inspected the mine on January 3 after an explosion which occurred at the mine on December 31, which did considerable damage to the interior as well as the tipple of the mine. He recommended that the roadways be cleaned and sprinkled, and made a number of other recommendations. On February 3 he again returned to the mine and found it in good condition. All the roadways were cleaned and thoroughly saturated with water. On March 13 he again inspected the mine and ordered telephones installed, stairway put in air shaft, considerable loose rock taken down or timbered, and more lockers put in bathhouse. Sherwood again inspected the mine on June 21 and found it in excellent condition. On August 30 Sherwood ordered considerable loose rock timbered or taken down, telephones repaired, and made a number of other minor recommendations. On November 27 Kotzman inspected the mine and found it in good condition and ordered telephones repaired. Kotzman returned on December 18 and found all his previous recommendations carried out. An all-steel tipple is erected at this mine, the first to be erected in the state.

Mine No. 1 of the Geo. T. McGrath Coal Company is located four miles southwest of Pittsburg, on a switch off the Frisco railroad. This mine produced 43,180 tons of coal, gave employment to 65 men and worked 243 days during the year.



State inspector of coal mines reports

60

State Inspector of Coal Mines.

Deputy Inspector Paisley inspected the mine on April 15 and found it in fair condition. On May 15 he again inspected the mine and found conditions good. He ordered curtains and doors repaired and kept in good condition. This is an old mine and will soon be worked out and abandoned.

Mine No. 1 of the Dopking & Wachter Coal Company is located northwest of Frontenac, and is connected by switch to the Santa Fe railroad. The mine produced 59,604 tons of coal, gave employment to 56 men and worked 288 days during the year.

On March 3 Inspector Sherwood inspected this mine and found everything entirely satisfactory. The mine is equipped with an electric hoist. On May 12 he again found the mine in excellent condition. Kotzman inspected the mine on September 22 and found the mine in good condition. This mine has been kept in good condition during the year.

The remainder of the mines in this county are strip pits and small mines. The small mines operate principally during the winter months and supply the local trade.

CHEROKEE COUNTY.

During the calendar year ending December 31, 1916, the deep mines in Cherokee county produced 1,078,200 tons of coal, and the strip mines produced 358,416 tons, making a total of 1,436,616 tons, which is 21.10 per cent of the state's production. The mines in Cherokee county decreased considerably during the last year. Exact figures are not available on account of the report being changed from the fiscal to the calendar year. The coal is shot off of the solid, and to produce this amount of coal the miners used 93,514 twenty-five-pound kegs of powder. There were 1594 men employed in the deep mines and 365 in the strip mines, making a total of 1959 men.

Mine No. 42 of the Central Coal and Coke Company, located three miles southwest of Scammon, is connected by switch to the Frisco railway. The mine produced 104,703 tons of coal, gave employment to 138 men and worked 216½ days during the year. John White, mine foreman.

Deputy Inspector Fred Green inspected this mine on January 3 and found a great improvement in ventilation; in fact, the ventilation was better than on any previous visit to the mine. Paisley visited the mine on January 26 and recommended that the bathhouse be put up to the requirements of the law, by providing sufficient light, heat and water, and that it be kept in clean and sanitary condition. On April 19 Green again inspected the mine and ordered several entries closed until proper ventilation was provided, and several doors and curtains hung and others repaired. On April 24 he again returned to the mine and found conditions greatly improved. On June 22 Green found the mine in good condition. On October 6 Green found the ventilation good, and made several minor recommendations, which he requested to be carried out as soon as possible.

Mine No. 43 of the Central Coal and Coke Company is located one mile west and two miles north of Scammon, and connected with the Frisco and M. K. & T. railways. The mine produced 16,573 tons of coal, gave employment to 75 men and worked 66½ days. This mine was worked out and abandoned on May 2, 1916. Robert Murray, mine foreman.

Deputy Inspector Green inspected this mine on February 28 and found that the company was just taking out little blocks of coal here and there, and would soon start to pull pillars and abandon the mine.

Mine No. 44 of the Central Coal and Coke Company, located three miles west of Weir, on a switch off the Frisco railway, produced 3471 tons

State inspector of coal mines reports

Twenty-fourth Annual Report.

61

of coal, gave employment to 40 men and worked 28 days. This mine was worked out and abandoned on February 11, 1916. Thomas Scott, mine foreman.

Mine No. 18 of the J. R. Crowe Coal and Mining Company is located three miles south of Scammon, on a switch off the Frisco railway. This mine gave employment to 83 men, worked 221 days and produced 65,729 tons of coal. John Maxwell, jr., mine foreman.

This mine was inspected on February 5 by Deputy Inspector Green and found in general fair condition. He found the bathhouse kept in unlawful condition and recommended that it be put up to the requirements of the law immediately. Green again inspected the mine on March 8 and found it in fair condition with the exception of the roadways, which were in poor condition. He ordered all mud and water on roadways removed. On May 18 Green again inspected the mine and found it in good condition. Green again inspected the mine on June 29 and ordered several doors and curtains hung to better ventilation, also some loose rock timbered or taken down. On July 8 he ordered roads cleaned and water taken off.

Mine No. 19 of the J. R. Crowe Coal and Mining Company is located four miles southwest of Scammon, on a switch off the Frisco railway. The mine produced 63,122 tons of coal, gave employment to 69 men and worked 212 days during the year. Charles Hiller, later John Maxwell, mine foremen.

Inspector Green inspected this mine on February 24 and ordered more air driven to the working faces of the entries and considerable loose rock timbered or taken down. On April 11 Green again inspected the mine and found it lacking in air in several places, and ordered ventilating current looked after immediately. He found blade on fan broken and ordered new one put on immediately. On July 1 Green ordered mud and water removed from roadways and several bad places timbered or loose rock pulled down. On October 7 Green found the mine in fair condition. On December 4 Green visited the mine and found that the workings of this mine holed through into the Mackie abandoned mine. He ordered a cement stopping put in at once, and on returning to the mine on December 11 found this had been done.

Mine No. 20 of the J. R. Crowe Coal and Mining Company, located four miles southwest of Scammon, on a switch off the Frisco railway, produced 101,295 tons of coal, gave employment to 116 men and worked 234 days during the year. Thomas Humes, mine foreman.

Deputy Inspector Fred Green inspected this mine on February 20 and found considerable water on several of the roadways. He ordered these entries stopped until water was removed. On June 8 he found the mine in good condition. On July 25 he visited the mine and found conditions satisfactory. On September 29 Green again inspected the mine and found the ventilation good, and ordered some minor improvements made. On December 21 Green visited the mine and instructed the company to employ a gas man to run the mine before the miners or other persons were allowed to enter their working places.

Mine No. 7 of the Fidelity Coal Mining Company, operated under lease by Mike Walsh, located two and one-half miles northwest of Scammon, is connected with the Missouri Pacific railway. This mine gave employment to 115 men, worked 235 days and produced 61,579 tons of coal during the year. Mike Walsh, foreman.

Deputy Inspector Green inspected this mine on February 14 and found the mine in good condition. On August 30 Green again inspected the mine and found the ventilation bad on account of the fan being stopped. He gave the foreman instructions to have the fan running continuously. Deputy Inspectors Sherwood and Green inspected the mine on October 2



State inspector of coal mines reports

62

State Inspector of Coal Mines.

and ordered several entries stopped until ventilation was improved; otherwise the mine was in fair condition. On December 27 Green inspected the mine and again found several entries lacking in air, and ordered ventilating current in these places increased.

Mine No. 8 of the Fidelity Coal Mining Company, operated under lease by the Corsini Coal Company, located two miles north of Mineral and connected by switch with the Missouri, Kansas and Texas railway, worked 242 days, gave employment to 52 men and produced 15,440 tons of coal during the year. R. Corsini, mine foreman.

Deputy Inspector Green inspected this mine on April 7 and found the mine in general in fair condition. He made numerous recommendations, which if carried out would better conditions considerably. Inspector Green inspected this mine a number of other times during the year and always found it in fair condition.

Mine No. 9 of the Fidelity Coal Mining Company, operated under lease by the Ryan & Reedy Coal Company, located at Stone City on a switch off the M. K. & T. railway, produced 62,820 tons of coal, gave employment to 99 men and worked 230 days during the year. This mine was leased to Francis Ryan during the first two quarters of this year. Francis Ryan, later Tim Reedy, mine foreman.

Deputy Inspector Fred Green made an inspection of this mine on February 9, after the mine had been closed down for some time, and found it in fair condition. The bathhouse was very poorly looked after, and he ordered it kept in clean and sanitary condition. He also examined the ropes and safety catches and found them, to the best of his judgment, in good condition. Inspector Green again inspected the mine on December 1 and found the mine in fair condition. He ordered the dust cleaned off the roads on the north side of the mine and roadways sprinkled. He also recommended that a door be put across the main north entry, to increase the volume of air in that part of the mine. A disaster occurred at this mine on December 13 in which twenty men lost their lives. Complete detailed report of this disaster is given under the head of "Explosions." On December 27 Green inspected the mine, as the company was again ready to resume operations, and would not let them commence operations until all dust was removed from the mine and roadways sprinkled. On December 30 he again inspected the mine and found it, to the best of his judgment, in good condition, and gave the company permission to resume work.

Mine No. 11 of the Fidelity Coal Mining Company is located three miles northeast of Mineral and connected by switch to the M. K. & T. railway. The mine gave employment to 72 men, worked 198 days and produced 39,111 tons of coal during the year. Mike Wagner, mine foreman. Mine leased to Pete Russell, of Mineral, Kan.

On March 29 Green inspected the mine and found it in good condition. On May 23 Green again inspected the mine and again found it in good condition. On June 19 Inspectors Green and Sherwood inspected the mine in answer to complaints regarding gas, and ordered the company to have gas man make mark at switch and face and record such inspection in book in weighmaster's office, which is kept there for that purpose, and on the blackboard. The superintendent agreed to have this done. Green inspected the mine on September 19 and found it in good condition. On December 26 Green found manway to escape shaft in poor condition, and ordered it put in lawful condition. Otherwise he found the mine in fair condition.

Mine No. 4 of the Mayer Coal Company, leased to O'Leary & Burke Coal Company, is located four miles north of Scammon, on a switch off the Missouri Pacific and Frisco railways. The mine worked 254 days, gave employment to 88 men and produced 45,924 tons of coal during the year. John O'Leary, mine foreman.

State inspector of coal mines reports

Twenty-fourth Annual Report.

63

Deputy Inspector Paisley visited this mine on January 18 in answer to complaints regarding the washhouse, and found it in poor condition. He ordered the company to have it put up to the requirements of the law immediately. On April 25 Inspector Green inspected the mine and ordered it closed until the bottom was retimbered and made safe, and sufficient air circulated through several of the entries in the mine. Green returned to the mine on April 27 and found it in fair condition; examined the ropes and cages and ordered new rope put on north cage. Green inspected the mine on July 24 and recommended that all broken crossbars and timbers on bottom be replaced by new timbers. On August 7 Green returned to the mine and found that his instructions regarding the timbering on the bottom were not complied with, and ordered the mine closed until such time when bottom is put in safe condition. He returned to the mine on August 10 and found instructions carried out, and allowed them to resume operation. On November 29 Green again inspected the mine and found ventilation lacking in all portions of same, and ordered the mine closed. The mine was idle three days, and on his return visit on December 2 he found a great improvement in ventilation and other conditions, and the mine in good condition.

Mine No. 5 of the Mayer Coal Company, leased to Joseph Ryan, is located two miles south of Mineral on a switch off the M. K. & T. railway. The mine worked 240 days, produced 64,165 tons of coal and gave employment to 82 men during the year. Joseph Ryan, mine foreman.

Deputy Inspector Fred Green made a thorough inspection of this mine on February 21 and found the mine in general good condition. He made several minor recommendations. On August 21 Inspector Green again returned to the mine and found the same in good condition. He examined the tippie and found it in dangerous condition. He ordered the mine closed until the tippie was made safe.

Mine No. 6 of the Mayer Coal Company, located three miles northwest of Mineral, on a switch off the M. K. & T. railway gave employment to 96 men, worked 227 days and produced 49,733 tons of coal during the year. Mike Walsh, mine foreman.

This mine was inspected on March 25 by Deputy Inspector Fred Green and found in good condition. On July 15 Green returned to the mine and found the ventilation poor and ordered mine closed until the ventilation was put up to the requirements of the law. He returned to the mine on July 19 and found conditions much better, and allowed them to resume operation. He again returned to the mine on July 27 and found the mine in good condition.

Mine No. 9 of the Clemens Coal Company is located three and one-half miles southwest of Scammon on a switch off the Frisco railroad. The mine gave employment to 79 men, worked 198½ days and produced 84,212 tons of coal. This mine was worked out and abandoned on November 27, 1916. Francis Keegan, mine foreman.

Deputy Inspector Fred Green inspected this mine on April 10 and found the mine in general good condition.

Mine No. 2 of the Cherokee Crescent Coal Company, known as the Star mine, is located one and one-fourth miles northeast of Carona, and is connected by switch to the Missouri Pacific railway. The mine produced 93,181 tons of coal, gave employment to 161 men and worked 231 days during the year. William Green, mine foreman.

On February 2 Green inspected the mine and found it lacking in air, on account of the fan not being kept running at the required speed. He ordered same speeded up to eighty revolutions per minute and kept running continuously at this speed. On February 22 and 23 he again inspected the mine and found it in fair condition. On March 22 Inspector Green, in company with Inspector Sherwood, visited the mine and found the manway from main shaft to air shaft entirely too low and narrow



and not kept in condition. They ordered this made to comply with the requirements of the law immediately. On June 5 and 6 Green again inspected the mine and found same in fair condition. On July 28 Green ordered several entries in the mine closed on account of poor ventilation. On August 25 Green ordered several entries in the mine closed until ventilation was put in better condition. He examined the manway from main shaft to air shaft and found that the company had complied with his recommendations, and that the same was in good condition. On October 16 he found the mine in fair condition. On December 7 and 8 Green again inspected the mine and ordered several rooms abandoned, as the roof was too bad, several entries stopped until ventilation was properly conducted to working faces, and some loose rock timbered or taken down.

Mine No. 15 of the M. K. & T. Coal Department is located one mile northeast of Mineral, on a switch off the M. K. & T. railway. This mine produced 24,496 tons of coal, gave employment to 43 men and worked 205 days during the year. Ed. Ryan, mine foreman. This mine will soon be worked out and abandoned.

Deputy Inspector Green inspected this mine on March 23 and found it in fair condition. He ordered bathhouse put up to the requirements of the law. He returned to the mine on March 30 and found it in clean and sanitary condition. On April 26 Green found several air courses caved in, and ordered men home until same was cleaned out and ventilation restored. On June 19 Sherwood and Green ordered bathhouse put up to the requirements of the law. On July 21 Green ordered roadways cleaned and sprinkled, and found ventilation excellent.

Mine No. 16 of the M. K. & T. Coal Department, located one and one-half miles southeast of Mineral, is connected by switch to the M. K. & T. railway. The mine gave employment to 24 men, worked 52 days and produced 4785 tons of coal. This mine was worked out and abandoned during the first quarter of this year. T. Reidy, mine foreman.

Mine F of the George K. Mackie Fuel Company is located two and one-half miles southwest of Scammon, and connected with the Frisco and M. K. & T. railways. The mine produced 39,754 tons of coal, gave employment to 56 men and worked 125 days. This mine was worked out and abandoned on August 7, 1916. George Jenkins, mine foreman.

Deputy Inspector Green made several visits to this mine and found it in fair condition. He made numerous recommendations, which were carried out.

Mine H of the George K. Mackie Fuel Company is located south of Roseland, and is connected by switch to the Frisco and M. K. & T. railways. The mine produced 32,011 tons of coal, gave employment to 71 men and worked 133 days. This is a new mine and was just opened up during the second quarter of this year.

Deputy Inspector Green made an inspection of this mine on September 1 and November 17 and 21, and on each visit found the mine in fair condition. He gave the company instructions to keep all dust off roads and have them sprinkled when necessary, and to see to it that all miners provide themselves with good, substantial tool boxes.

Mine G of the George K. Mackie Fuel Company, located north of Roseland, is connected by switch to the Frisco and M. K. & T. railways. This is also a new mine just being developed.

The remainder of the mines in this county are small mines, slopes and strip pits. The small mines produce coal for the local trade in and around Scammon and Weir.



Twenty-fourth Annual Report.

65

LEAVENWORTH COUNTY.

Leavenworth county is the third largest coal-producing county in the state. During the calendar year 1916 it produced 210,685 tons of coal, or 3.65 per cent of the state's production. There are at present only two mines operating in this county besides the Kansas State Penitentiary mines. One mine is operated by the Carr Coal and Mining Company and the other by the Home-Riverside Company. The work in Leavenworth is mined on the long-wall system, and no black powder is used to break the coal. Dynamite is used to break the top to make sufficient room for haulage ways. There were 696 men employed in coal production during the year.

OSAGE COUNTY.

Osage county produces 124,926 tons of coal, or 2 per cent of the state's production. The mines in this county are worked by the long-wall system and there were 640 men employed in and around the mines of this county during the calendar year of 1916.

LINN COUNTY.

During the calendar year 1916 there was 14,592 tons of coal produced in the mines of Linn county, and 87 men were employed to produce it. It is a very hard matter to get the coal reports from these mines, and it is probable that there was more coal produced in the county than was reported. The coal produced in this county is .20 per cent of the state's production.

FRANKLIN COUNTY.

The mines in Franklin county are all drift openings, with the exception of one shaft, and we do not get any reports from them.

INSPECTION OF GYPSUM MINES AT BLUE RAPIDS, KAN.

I was requested by Hon. P. J. McBride, commissioner of labor of Kansas, to visit the gypsum mines in Kansas. On July 24, 1916, Dr. J. J. Rutledge, of the United States Bureau of Mines, Hon. P. J. McBride, commissioner of labor, and myself visited the surface plants of the gypsum mines located near Blue Rapids.

On July 25, 1916, we visited the underground workings of the U. S. Gypsum Company, which is located one and one-half miles southeast of Blue Rapids. This mine was opened in September, 1915, and is an up-to-date mine. The opening to the mine is a slope. The gypsum lies in a level bed and dips a little to the southwest. The vein is from six to nine feet high and the gypsum is of a very good grade. The vein is underlaid by a very hard flint, like bottom rock. The top or roof over the gypsum consists of about six to twelve inches of blue slate, and over that a red rock and limestone.

The drilling is done by hand, by an electric Jeffries drilling machine. Eighteen holes are drilled into the face, each about six feet deep, which are charged with an average of about sixty-five sticks of 40 per cent gelatin, and fired by electricity. The shots are fired twice a day, and in some places black powder is used.

At present there are about twenty working places in the mine and only about twenty men employed. The men work in pairs. Eight men are employed loading the gypsum, and the average gypsum loaded by this number of men is about 125 tons for a ten-hour day. The cars are all steel, and they hold about 4500 pounds of gypsum. The loaders leave the cars standing where loaded, and one horse is used to haul the cars to

5—Mine—1328

State inspector of coal mines reports

66

State Inspector of Coal Mines.

and from the parting, and a steel rope pulls the cars out of the slope and dumps them into a hopper in the gypsum plant, and then lets the empty cars down in the slope.

The miners belong to the Western Federation of Miners, and ten hours constitute a day's work. Loaders are paid by the ton, and men employed as drillers are paid by the day and receive \$3.50 for ten hours' work. The working places are driven parallel with one another, and crosscuts are made about every fifty feet. The workings are about twenty feet wide, and steel rails are used.

To ventilate the mine one extra slope or drift is driven from the surface, and a steel fan is stationed over this slope or drift. The air was good, and we had no complaints about it. All electric conduits are in rubber-covered wire, and there was not an accident of any kind to any men employed in the mine from September 1, 1915, when it was opened, up to July 1, 1916.

STATEMENT OF BLUE VALLEY MILL.

U. S. Gypsum Company, Blue Rapids, Kan.

MILL.

Number of days operated.....	107
Number of accidents	2

MINE.

Number of days operated.....	176
Amount of rock mined (tons).....	15,253
Cans of powder used (25-pound cans).....	138
Cases of dynamite used (50-pound cases).....	287
Number of accidents	None
Average number of miners	12
Number of top men	None

COAL PRODUCTS.

SUMMARY OF COAL PRODUCTION OF KANSAS, 1916.

COUNTIES.	Tons produced by deep mines.	Tons produced by strip mines.	Tons of 2000 lbs.	Per cent of state's production.	Number of employees.		Grand total.
					Deep mines.	Strip mines.	
Crawford.....	4,526,172	422,085	4,948,257	72.50	7,737	446	8,183
Cherokee.....	1,078,200	358,416	1,436,616	21.10	1,594	365	1,959
Leavenworth.....			210,685	3.65			696
Osage.....			124,926	2.00			640
Linn.....			14,592	.20			87
Other counties and small mines.....			40,000				210
Totals.....	5,604,372	780,501	6,775,076		9,331	811	11,775



Twenty-fourth Annual Report.

67

COAL PRODUCTION FROM 1869 TO 1916 IN SHORT TONS, AVERAGE NUMBER OF EMPLOYEES, AVERAGE NUMBER OF DAYS WORKED, NUMBER OF TONS PRODUCED FOR EACH FATAL ACCIDENT, AND NUMBER OF FATAL ACCIDENTS.

YEAR.	Number of fatal accidents.	Name of mine inspector.	Total short tons produced.	Average number of men employed.	Average number of days worked.	Number of tons produced for each fatal accident.
1869*			36,891			
1870*			32,938			
1871*			41,000			
1872*			44,800			
1873*			56,000			
1874*			85,000			
1875*			150,000			
1876*			225,000			
1877*			300,000			
1878*			375,000			
1879*			460,000			
1880*			771,000			
1881*			840,000			
1882*			750,000			
1883*			900,000			
1884.....	3	E. A. Seammon.....	1,100,000			366,666
1885†.....	9	J. R. Braidwood.....	1,440,057	4,175		160,006
1886.....			1,350,000			
1887†.....	7	G. W. Findlay.....	1,570,079			224,297
1888†.....	††	J. T. Stewart.....	1,700,000			
1889†.....	12	J. T. Stewart.....	2,112,166	5,956		176,013
1890†.....	8		2,516,054	4,523	210	314,506
1891†.....	13		2,753,722	6,201	222	211,824
1892†.....			3,007,276	6,559	208	
1893.....	15	A. C. Gallagher.....	2,881,931	9,851	147	192,128
1894.....	26	A. C. Gallagher.....	3,611,214	10,088	164	138,893
1895.....	10	Bennet Brown.....	3,190,843	9,021	161	319,084
1896.....	12	Bennet Brown.....	3,191,748	8,807	170	265,979
1897.....	6	George T. McGrath..	3,291,806	8,699	152 1/4	549,467 3/4
1898.....	17	George T. McGrath..	3,860,405	8,122	170 3/4	227,094
1899.....	16	Edward Keegan.....	4,096,895	10,198	186 1/4	256,056
1900.....	20	Edward Keegan.....	4,269,716	10,673	193	213,845
1901.....	10	Edward Keegan.....	4,896,121	9,506	180	479,612
1902.....	30	D. R. Casselman.....	5,230,433	9,315	170	174,347
1903.....	36	D. R. Casselman.....	5,540,647	9,972	186	153,907
1904**.....	16	James A. Orr.....	2,732,499	10,347	92	170,781
1905.....	36	James A. Orr.....	6,374,671	12,109	183	176,322
1906.....	30	Frank Gilday.....	5,754,616	10,175	166	191,820
1907.....	52	Frank Gilday.....	6,591,013	11,957	204	126,750
1908.....	31	Frank Gilday.....	5,588,016	11,334	179	180,258
1909.....	38	Frank Gilday.....	5,727,653	10,542	190	150,728
1910.....	25	Frank Gilday.....	5,135,391	10,619	165	205,415
1911*.....	††	Leon Besson.....	6,254,228	10,918	††.....	††
1912.....	37	Leon Besson.....	6,350,396	11,264	197	171,578
1913.....	28	Francis Keegan.....	7,090,579 1/2	12,506	196	253,235
1914.....	34	Francis Keegan.....	7,186,918	12,498	200	211,380
1915.....	28	Jno. Pellegrino.....	6,687,521	11,451	176	238,840
1915***.....	15	Jno. Pellegrino.....	3,651,284	12,996	105	243,419
1916.....	54	Jno. Pellegrino.....	6,775,076	11,775	192	125,468

* Production of coal from 1869 to 1884 and for 1911, taken from the United States Geological Survey.

† One report made for two years.

†† No report made; statistics for that year taken from the United States Geological Survey.

** One-half year's report. Reports changed from the calendar year ending December 31 to fiscal year ending June 30.

††† Explosion at mine No. 2 Frontenac. No record was made of loss of life, but it is known that forty-five lives were lost.

†††† Records destroyed.

*** Report for last half of year 1915. Reports changed from fiscal to calendar year, ending December 31.



State inspector of coal mines reports

COAL-MINING INDUSTRY IN CRAWFORD COUNTY FOR THE CALENDAR YEAR ENDING DECEMBER 31, 1916.

Office No.	Quarter.	Name of operator.	Postoffice address.	Name or number of mine.	Name of superintendent.	Location of mine.
1	First....	Jackson & Walker Coal & Mfg. Co.	Frontenac.....	9	Joseph Fletcher.....	1 mile northeast of Frontenac.
1	Second...	do.....	do.....	9	do.....	do.
1	Third....	do.....	do.....	9	do.....	do.
1	Fourth...	do.....	do.....	9	do.....	do.
2	First....	Jackson & Walker Coal & Mfg. Co.	Frontenac.....	11	Joseph Fletcher.....	5 miles north of Pittsburg.
2	Second...	do.....	do.....	11	do.....	do.
2	Third....	do.....	do.....	11	do.....	do.
2	Fourth...	do.....	do.....	11	do.....	do.
3	First....	Jackson & Walker Coal & Mfg. Co.	Frontenac.....	14	Henry Wilson, lessee.....	Capaldo.
3	Second...	do.....	do.....	14	do.....	do.
3	Third....	do.....	do.....	14	do.....	do.
3	Fourth...	do.....	do.....	14	do.....	do.
4	First....	Jackson & Walker Coal & Mfg. Co.	Frontenac.....	15	Joseph Fletcher.....	1 mile south of Capaldo.
4	Second...	do.....	do.....	15	do.....	do.
4	Third....	do.....	do.....	15	do.....	do.
4	Fourth...	do.....	do.....	15	do.....	do.
5	First....	Western Coal & Mfg. Co.....	Pittsburg.....	10	Phil Roeser.....	1 mile east of Cherokee.
6	First....	Western Coal & Mfg. Co.....	Pittsburg.....	13	Phil Roeser.....	1/2 mile west of Yale.
6	Second...	do.....	do.....	13	do.....	do.
6	Third....	do.....	do.....	13	do.....	do.
6	Fourth...	do.....	do.....	13	do.....	do.

68

State Inspector of Coal Mines.



State inspector of coal mines reports

7	First...	Western Coal & Mfg. Co.....	Pittsburg.....	14	Phil Roeser.....	1 mile northwest of Fleming.
7	Second...	do.....	do.....	14	do.....	do.
7	Third...	do.....	do.....	14	do.....	do.
7	Fourth...	do.....	do.....	14	do.....	do.
8	First...	Western Coal & Mfg. Co.....	Pittsburg.....	15	Phil Roeser.....	1 mile northwest of Fleming.
8	Second...	do.....	do.....	15	do.....	do.
8	Third...	do.....	do.....	15	do.....	do.
8	Fourth...	do.....	do.....	15	do.....	do.
9	First...	Western Coal & Mfg. Co.....	Pittsburg.....	16	Phil Roeser.....	1/4 mile west of Franklin.
9	Second...	do.....	do.....	16	do.....	do.
9	Third...	do.....	do.....	16	do.....	do.
9	Fourth...	do.....	do.....	16	do.....	do.
10	First...	Western Coal & Mining Co.....	Pittsburg.....	18	Phil Roeser.....	Franklin.
10	Second...	do.....	do.....	18	do.....	do.
10	Third...	do.....	do.....	18	do.....	do.
10	Fourth...	do.....	do.....	18	do.....	do.
11	First...	Western Coal & Mining Co.....	Pittsburg.....	19	Phil Roeser.....	Franklin.
11	Second...	do.....	do.....	19	do.....	do.
11	Third...	do.....	do.....	19	do.....	do.
11	Fourth...	do.....	do.....	19	do.....	do.
12	First...	Wear Coal Co.....	Pittsburg.....	17	Charles Davis.....	7 miles northwest of Pittsburg.
12	Second...	do.....	do.....	17	do.....	do.
12	Third...	do.....	do.....	17	do.....	do.
12	Fourth...	do.....	do.....	17	do.....	do.
13	First...	Wear Coal Co.....	Pittsburg.....	19	Charles Davis.....	13 1/2 miles north of Dunkirk.
13	Second...	do.....	do.....	19	do.....	do.
13	Third...	do.....	do.....	19	do.....	do.
13	Fourth...	do.....	do.....	19	do.....	do.

Twenty-fourth Annual Report.



COAL-MINING INDUSTRY IN CRAWFORD COUNTY FOR THE CALENDAR YEAR ENDING DECEMBER 31, 1916—CONTINUED.

Office No. . . .	Quarter.	Name of operator.	Postoffice address.	Name or number of mine.	Name of superintendent.	Location of mine.
14	First . . .	Wear Coal Co.	Pittsburg	20	Charles Davis	3 miles northwest of Pittsburg.
14	Second . . .	do.	do.	20	do.	do.
14	Third . . .	do.	do.	20	do.	do.
14	Fourth . . .	do.	do.	20	do.	do.
15	First . . .	Wear Coal Co.	Pittsburg	21	Charles Davis	1 mile west of Franklin.
15	Second . . .	do.	do.	21	do.	do.
15	Third . . .	do.	do.	21	do.	do.
15	Fourth . . .	do.	do.	21	do.	do.
16	First . . .	Central Coal & Coke Co.	Kansas City	45	W. C. Ernhart	Ringo.
16	Second . . .	do.	do.	45	do.	do.
16	Third . . .	do.	do.	45	do.	do.
16	Fourth . . .	do.	do.	45	do.	do.
17	First . . .	Central Coal & Coke Co.	Kansas City	46	W. C. Ernhart	3½ miles west of Pittsburg.
17	Second . . .	do.	do.	46	do.	do.
17	Third . . .	do.	do.	46	do.	do.
17	Fourth . . .	do.	do.	46	do.	do.
18	First . . .	Central Coal & Coke Co.	Kansas City	48	W. C. Ernhart	Nelson.
18	Second . . .	do.	do.	48	do.	do.
18	Third . . .	do.	do.	48	do.	do.
18	Fourth . . .	do.	do.	48	do.	do.
19	First . . .	Central Coal & Coke Co.	Kansas City	49	W. Ernhart	3¼ miles northeast of Frontenac.
19	Fourth . . .	do.	do.	49	do.	do.

70

State Inspector of Coal Mines.



20	Fourth...	Central Coal & Coke Co.....	Kansas City.....	50	W. C. Ernhart.....	Ringo.
21	Fourth...	Central Coal & Coke Co.....	Kansas City.....	51	W. C. Ernhart.....	Ringo.
22	First....	Sheridan Coal Co.....	Mulberry.....	3	E. M. Roberts.....	East of Breezy Hill.
22	Second...	do.....	do.....	3	do.....	do.
22	Third....	do.....	do.....	3	do.....	do.
22	Fourth...	do.....	do.....	3	do.....	do.
23	First....	Sheridan Coal Co.....	Mulberry.....	5	E. M. Roberts & Joe Davis, lessees..	1½ miles south of Mulberry.
23	Second...	do.....	do.....	5	do.....	do.
23	Fourth...	do.....	do.....	5	Moler & Davis, lessees.....	do.
24	First....	Sheridan Coal Co.....	Mulberry.....	8	E. M. Roberts.....	2 miles northwest of Fuller.
24	Second...	do.....	do.....	8	do.....	do.
24	Third....	do.....	do.....	8	do.....	do.
24	Fourth...	do.....	do.....	8	do.....	do.
25	First....	Sheridan Coal Co.....	Mulberry.....	10	E. M. Roberts.....	1 mile west of Mulberry.
25	Second...	do.....	do.....	10	do.....	do.
25	Third....	do.....	do.....	10	do.....	do.
25	Fourth...	do.....	do.....	10	do.....	do.
26	First....	Sheridan Coal Co.....	Mulberry.....	11	E. M. Roberts.....	½ mile northwest of Gross.
26	Second...	do.....	do.....	11	do.....	do.
26	Third....	do.....	do.....	11	do.....	do.
26	Fourth...	do.....	do.....	11	do.....	do.
27	First....	Sheridan Coal Co.....	Mulberry.....	15	E. M. Roberts.....	1½ miles northwest of Croweburg.
27	Second...	do.....	do.....	15	do.....	do.
27	Third....	do.....	do.....	15	do.....	do.
27	Fourth...	do.....	do.....	15	do.....	do.



COAL-MINING INDUSTRY IN CRAWFORD COUNTY FOR THE CALENDAR YEAR ENDING DECEMBER 31, 1916—CONTINUED.

Office No.	Quarter.	Name of operator.	Postoffice address.	Name or number of mine.	Name of superintendent.	Location of mine.
28	First....	Howe Coal Co.....	Mulberry.....	9	E. M. Roberts.....	1 mile north of Mulberry.
28	Second....	do.....	do.....	9	do.....	do.
28	Third....	do.....	do.....	9	do.....	do.
28	Fourth....	do.....	do.....	9	do.....	do.
29	First....	McCormack Coal Co.....	Mulberry.....	4	E. M. Roberts.....	3½ miles southwest Mulberry.
29	Fourth....	do.....	do.....	4	Crawford County Coal Co., lessees ..	do.
30	First....	McCormack Coal Co.....	Mulberry.....	7	E. M. Roberts.....	1¼ miles west of Breezy Hill.
30	Second....	do.....	do.....	7	do.....	do.
30	Third....	do.....	do.....	7	do.....	do.
30	Fourth....	do.....	do.....	7	do.....	do.
31	First....	Dickinson Coal Co.....	Mulberry.....	6	E. M. Roberts.....	½ mile west of Breezy Hill.
31	Second....	do.....	do.....	6	do.....	do.
31	Third....	do.....	do.....	6	do.....	do.
31	Fourth....	do.....	do.....	6	do.....	do.
32	First....	Faulkner Coal Co.....	Mulberry.....	12	E. M. Roberts.....	Gross.
32	Second....	do.....	do.....	12	do.....	do.
32	Third....	do.....	do.....	12	do.....	do.
32	Fourth....	do.....	do.....	12	do.....	do.
33	First....	Faulkner Coal Co.....	Mulberry.....	14	E. M. Roberts.....	Gross.
33	Second....	do.....	do.....	14	do.....	do.
33	Third....	do.....	do.....	14	do.....	do.
33	Fourth....	do.....	do.....	14	do.....	do.

72

State Inspector of Coal Mines.



State inspector of coal mines reports

34	First...	J. R. Crowe Coal & Mining Co.	Weir.....	14	R. A. Gray.....	Croweburg.
34	Second...	do.....	do.....	14	do.....	do.
34	Third...	do.....	do.....	14	do.....	do.
34	Fourth...	do.....	do.....			
35	First...	J. R. Crowe Coal & Mining Co.	Weir.....	15	R. A. Gray.....	Croweburg.
35	Second...	do.....	do.....	15	do.....	do.
35	Third...	do.....	do.....	15	do.....	do.
35	Fourth...	do.....	do.....			
36	Fourth...	J. R. Crowe Coal & Mining Co.	Weir.....	16	R. A. Gray.....	Croweburg.
37	First...	Clemens Coal Co.	Pittsburg.....	4	Frank Thomas.....	½ mile west of Mulberry.
37	Second...	do.....	do.....	4	do.....	do.
37	Third...	do.....	do.....	4	do.....	do.
37	Fourth...	do.....	do.....			
38	First...	Clemens Coal Co.	Pittsburg.....	10	Frank Thomas.....	3 miles northeast of Pittsburg.
39	First...	Clemens Coal Co.	Pittsburg.....	11	Frank Thomas.....	Mulberry.
39	Second...	do.....	do.....	11	do.....	do.
39	Third...	do.....	do.....	11	do.....	do.
39	Fourth...	do.....	do.....			
40	First...	Clemens Coal Co.	Pittsburg.....	15	Frank Thomas.....	Pittsburg.
40	Second...	do.....	do.....	15	do.....	do.
40	Third...	do.....	do.....	15	do.....	do.
40	Fourth...	do.....	do.....			
41	First...	Clemens Coal Co.	Pittsburg.....	16	Frank Thomas.....	Pittsburg.
41	Second...	do.....	do.....	16	do.....	do.
41	Third...	do.....	do.....	16	do.....	do.
41	Fourth...	do.....	do.....			

Twenty-fourth Annual Report.



COAL-MINING INDUSTRY IN CRAWFORD COUNTY FOR THE CALENDAR YEAR ENDING DECEMBER 31, 1916—CONTINUED.

Office No.	Quarter.	Name of operator.	Postoffice address.	Name or number of mine.	Name of superintendent.	Location of mine.
42	Fourth...	Clemens Coal Co.....	Pittsburg.....	18	Frank Thomas.....	4 miles west of Pittsburg.
43	First....	Hamilton Coal Co.....	Weir.....	6	Stewart Hamilton.....	¼ mile west of Cherokee.
43	Second...	do.....	do.....	6	do.....	do.
43	Third....	do.....	do.....	6	do.....	do.
43	Fourth...	do.....	do.....	6	do.....	do.
44	First....	Hamilton Coal Co.....	Weir.....	7	Stewart Hamilton.....	Radley.
44	Second...	do.....	do.....	7	do.....	do.
44	Third....	do.....	do.....	7	do.....	do.
44	Fourth...	do.....	do.....	7	do.....	do.
45	First....	Hamilton Coal Co.....	Weir.....	8	Stewart Hamilton.....	1½ miles northeast of Arma.
45	Second...	do.....	do.....	8	do.....	do.
45	Third....	do.....	do.....	8	do.....	do.
45	Fourth...	do.....	do.....	8	do.....	do.
46	First....	Girard Coal Co.....	Pittsburg.....	7	Geo. Mack.....	¼ mile west of Radley.
46	Second...	do.....	do.....	7	do.....	do.
46	Third....	do.....	do.....	7	do.....	do.
46	Fourth...	do.....	do.....	7	do.....	do.
47	First....	Pittsburg Northern Coal Co.....	Pittsburg.....	8	Geo. Mack.....	1 mile northeast of Franklin.
47	Second...	do.....	do.....	8	do.....	do.
47	Third....	do.....	do.....	8	do.....	do.
47	Fourth...	do.....	do.....	8	do.....	do.

74

State Inspector of Coal Mines.



48	First....	Girard Fuel Co.....	Pittsburg.....	9	Geo. Mack.....	1½ miles northeast of Arma.
48	Second....	do.....	do.....	9	do.....	do.
48	Third....	do.....	do.....	9	do.....	do.
48	Fourth....	do.....	do.....	9	do.....	do.
49	First....	Nevius Coal Co.....	Pittsburg.....	6	Ed Nevius.....	½ mile south of Radley.
49	Third....	do.....	do.....	6	do.....	do.
50	First....	Nevius Coal Co.....	Pittsburg.....	1	Ed. Nevius.....	3½ miles west of Pittsburg.
51	First....	J. R. Burnett Coal Co.....	Pittsburg.....	1	J. N. Price, lessee.....	¾ mile south of Curranville.
51	Second....	do.....	do.....	1	Henry Wilson, lessee.....	do.
51	Third....	do.....	do.....	1	do.....	do.
51	Fourth....	do.....	do.....	1	do.....	do.
52	First....	F. E. Doubleday Coal Co.....	Pittsburg.....	6	F. E. Doubleday.....	Coalvale.
52	Second....	do.....	do.....	6	do.....	do.
52	Third....	do.....	do.....	6	do.....	do.
52	Fourth....	do.....	do.....	6	do.....	do.
53	First....	Katy Coal Co.....	Kansas City.....	2	Jama. Humble.....	1 mile southeast of Radley.
53	Second....	do.....	do.....	2	do.....	do.
53	Third....	do.....	do.....	2	do.....	do.
53	Fourth....	do.....	do.....	2	do.....	do.
54	First....	Spencer-Newland Coal Co.....	Mulberry.....	7	Chris Newland.....	1 mile south of Mulberry.
54	Second....	do.....	do.....	7	do.....	do.
54	Third....	do.....	do.....	7	do.....	do.
54	Fourth....	do.....	do.....	7	do.....	do.
55	First....	Geo. F. McGrath Coal Co.....	Pittsburg.....	1	Geo. T. McGrath.....	4 miles southwest of Pittsburg.
55	Second....	do.....	do.....	1	do.....	do.
55	Third....	do.....	do.....	1	do.....	do.
55	Fourth....	do.....	do.....	1	do.....	do.



COAL-MINING INDUSTRY IN CRAWFORD COUNTY FOR THE CALENDAR YEAR ENDING DECEMBER 31, 1916—CONTINUED.

Office No...	Quarter.	Name of operator.	Postoffice address.	Name or number of mine.	Name of superintendent.	Location of mine.
56	First....	Klondike Coal Co.....	Pittsburg.....	1	James Price.....	1½ miles north of Pittsburg.
56	Second....	do.....	do.....	1	do.....	do.
56	Third....	do.....	do.....	1	do.....	do.
56	Fourth....	do.....	do.....	1	do.....	do.
57	First....	Broadhurst & Coughnor Co.....	Pittsburg.....	1	E. Broadhurst.....	Kirkwood.
58	First....	Electric Coal Co.....	Weir.....	1	F. S. Berry.....	Weir Junction.
58	Second....	do.....	do.....	1	do.....	do.
58	Third....	do.....	do.....	1	Ed. Wilson, lessee.....	do.
58	Fourth....	do.....	do.....	1	do.....	do.
59	First....	Shipman Bros.....	Pittsburg.....	1	C. Shipman.....	2 miles north of Pittsburg.
59	Third....	do.....	do.....	1	do.....	do.
59	Fourth....	do.....	do.....	1	do.....	do.
60	First....	Geo. Mertz.....	Pittsburg.....	4	Geo. Mertz.....	City Limits.
60	Second....	do.....	do.....	4	do.....	do.
60	Third....	do.....	do.....	4	do.....	do.
60	Fourth....	do.....	do.....	4	do.....	do.
61	First....	Superior Coal Co.....	Pittsburg.....	1	Aug. Degasperri.....	City Limits.
61	Second....	do.....	do.....	1	do.....	do.
61	Third....	do.....	do.....	1	do.....	do.
61	Fourth....	do.....	do.....	1	do.....	do.

76

State Inspector of Coal Mines.



State inspector of coal mines reports

62	First...	Moser Coal Co.	Frontenac	1	Theo. Moser	3 miles north of Pittsburg.
62	Second...	do	do	1	do	do.
62	Third...	do	do	1	do	do.
62	Fourth...	do	do	1	do	do.
63	First...	Frontenac Coal Co.	Frontenac	1	Owen Lavery	3 miles northwest of Pittsburg.
63	Second...	do	do	1	do	do.
63	Third...	do	do	1	do	do.
63	Fourth...	do	do	1	do	do.
64	First...	Dopking & Wachter Co.	Frontenac	1	Pete Wachter	Northwest of Frontenac.
64	Second...	do	do	1	do	do.
64	Third...	do	do	1	do	do.
64	Fourth...	do	do	1	do	do.
65	First...	Brown Bros. Coal Co.	Pittsburg	1	John Brown	City Limits.
65	Second...	do	do	1	do	do.
65	Third...	do	do	1	do	do.
65	Fourth...	do	do	1	do	do.
66	First...	Sinclair Coal Co.	Weir	1	W. H. Barret	Weir Junction.
66	Fourth...	do	do	1	do	do.
67	First...	Wilson Bros. Coal Co.	Pittsburg	5	Geo. Wilson	24th and Joplin streets.
67	Second...	do	do	5	do	do.
67	Third...	do	do	5	do	do.
67	Fourth...	do	do	5	do	do.
68	First...	Whetstone Freides Coal Co.	Pittsburg	1		City Limits.
68	Second...	do	do	1		do.
68	Third...	do	do	1		do.
68	Fourth...	do	do	1		do.
69	First...	Walker & Gibson	Pittsburg	1	Walker	Northeast of Pittsburg.
69	Second...	do	do	1	do	do.
69	Third...	do	do	1	do	do.
69	Fourth...	do	do	1	do	do.

Twenty-fourth Annual Report.

77



COAL-MINING INDUSTRY IN CRAWFORD COUNTY FOR THE CALENDAR YEAR ENDING DECEMBER 31, 1916—CONTINUED.

Office No.	Quarter.	Name of operator.	Postoffice address.	Name of number of mine.	Name of superintendent.	Location of mine.
70	First....	Union Coal Co.....	Pittsburg.....	1	Edward Grobe.....	2½ miles northeast of Pittsburg.
71	Third....	C. B. Jenkins Coal Co.....	Gross.....	1	C. B. Jenkins.....	Gross.
72	Third....	Demars Coal Co.....	Pittsburg.....	1	J. W. Demars.....	City Limits.
72	Fourth....	do.....	do.....	1	do.....	do.
73	Third....	Stephensen & Johnson.....	Pittsburg.....	1	Stephenson.....	1 mile west of Pittsburg.
74	Second....	Laughborn Coal Co.....	Pittsburg.....	1	H. Laughborn.....	City Limits.
74	Third....	do.....	do.....	1	do.....	do.
74	Fourth....	do.....	do.....	1	Patrick Slaven, lessee.....	do.
75	First....	Tripp & Enberg.....	Pittsburg.....	1	A. Enberg.....	Twenty-third and Olive streets.
75	Second....	do.....	do.....	1	do.....	do.
75	Third....	do.....	do.....	1	do.....	do.
75	Fourth....	do.....	do.....	1	do.....	do.
76	First....	Jones & Davis Coal Co.....	Frontenac.....	1	Ed Jones.....	½ miles west of Frontenac.
76	Second....	do.....	do.....	1	do.....	do.
76	Third....	do.....	do.....	1	do.....	do.
76	Fourth....	do.....	do.....	1	do.....	do.
77	First....	Canal Fuel Co.....	Pittsburg.....	14	Frank Thomas.....	Chicopee.
77	Second....	do.....	do.....	14	do.....	do.
77	Third....	do.....	do.....	14	do.....	do.
77	Fourth....	do.....	do.....	14	do.....	do.

78

State Inspector of Coal Mines.



78	First....	Clemens Coal Co.....	Pittsburg.....	1	Frank Thomas.....	1 1/2 miles northeast of Pittsburg.
78	Second....	do.....	do.....	1	do.....	do.
78	Third....	do.....	do.....	1	do.....	do.
78	Fourth....	do.....	do.....	1	do.....	do.
79	First....	Ellsworth Kloner.....	Pittsburg.....	111	S. P. Darrow.....	2 miles south of Chicopee.
79	Second....	do.....	do.....	111	do.....	do.
79	Third....	do.....	do.....	111	do.....	do.
79	Fourth....	do.....	do.....	111	do.....	do.
80	First....	Smith, Scott & White.....	Pittsburg.....	109	Geo. Wickware.....	2 miles south of Chicopee.
80	Second....	do.....	do.....	109	do.....	do.
80	Third....	do.....	do.....	109	do.....	do.
80	Fourth....	do.....	do.....	109	do.....	do.
81	First....	Patton Coal Co.....	Frontenac.....	22	Chas. Fletcher.....	1 1/2 miles northwest of Frontenac.
81	Second....	do.....	do.....	22	do.....	do.
81	Third....	do.....	do.....	22	John Haynes.....	do.
81	Fourth....	do.....	do.....	22	do.....	do.
82	First....	Nesh Coal Co.....	Pittsburg.....	1	A. A. Hemmel.....	2 3/4 miles northeast of Pittsburg.
82	Second....	do.....	do.....	1	do.....	do.
82	Third....	do.....	do.....	1	do.....	do.
82	Fourth....	do.....	do.....	1	do.....	do.
83	First....	Whitmer Coal Co.....	Pittsburg.....	1	D. H. Whitmer.....	2 miles northwest of Pittsburg.
83	Second....	do.....	do.....	1	do.....	do.
83	Third....	do.....	do.....	1	do.....	do.
83	Fourth....	do.....	do.....	1	do.....	do.
84	First....	J. J. Stephenson Coal Co.....	Pittsburg.....	2	W. H. Stephenson.....	Midway.
84	Second....	do.....	do.....	2	do.....	do.
84	Third....	do.....	do.....	2	do.....	do.
84	Fourth....	do.....	do.....	2	do.....	do.
85	First....	Anderson Coal Co.....	Pittsburg.....	1		

Twenty-fourth Annual Report.



COAL-MINING INDUSTRY IN CRAWFORD COUNTY FOR THE CALENDAR YEAR ENDING DECEMBER 31, 1916—CONTINUED.

Office No.	Quarter.	Railroad connection.	Kind of opening.	Kind of power.	Tons of coal produced.				Average number of employees.				
					Lump.	Nut and slack.	Mine run.	Quarterly totals.	Miners.	Under-ground day men.	Total underground.	Top men.	Quarterly totals.
1	First	Santa Fe	Shaft	Steam			39,176	39,176	142	46	188	13	201
1	Second	do	do	do			37,783	37,783	135	46	181	14	195
1	Third	do	do	do			22,381	22,381	129	38	167	13	180
1	Fourth	do	do	do			33,312	33,312	127	48	175	13	188
				Totals			132,652	132,652	133	44	177	16	193
2	First	Santa Fe	Shaft	Steam			41,200	41,200	152	60	212	17	229
2	Second	do	do	do			42,013	42,013	170	59	229	16	245
2	Third	do	do	do			38,224	38,224	170	62	232	15	247
2	Fourth	do	do	do			41,963	41,963	172	60	232	17	249
				Totals			163,400	163,400	166	60	226	16	242
3	First	Santa Fe	Shaft	Steam			7,325	7,325	27	5	32	2	34
3	Second	do	do	do			8,263	8,263	38	6	44	2	46
3	Third	do	do	do	3,030	1,009		4,039	30	6	36	3	38
3	Fourth	do	do	do	2,090	697		2,787	12	2	14	3	17
				Totals	5,120	1,706	15,588	22,414	22	5	27	2	29
4	First	Santa Fe	Shaft	Steam			23,359	23,359	79	20	99	8	107
4	Second	do	do	do			24,012	24,012	72	21	93	8	101
4	Third	do	do	do			18,826	18,826	68	20	88	8	96
4	Fourth	do	do	do			20,048	20,048	63	19	82	8	90
				Totals			86,245	86,245	70	20	90	8	98
5	First	Mo. Pacific	Shaft	Steam	931	2,340		3,271	80	10	90	6	96
				Totals	931	2,340		3,271	80	10	90	6	96
6	First	Mo. Pacific	Shaft	Steam	9,754	9,422		19,176	120	22	142	8	150
6	Second	do	do	do	3,230	3,089		6,319	118	42	160	29	189
6	Third	do	do	do	5,309	5,009		10,318	98	26	124	7	131
6	Fourth	do	do	do	8,346	8,199	42	16,587	98	28	126	8	134
				Totals	26,639	25,719	42	52,400	109	29	138	13	151

80

State Inspector of Coal Mines.

Kansas Memory

State inspector of coal mines reports



KANSAS
HISTORICAL
SOCIETY

6—Mine—1828

7	First	Mo. Pacific	Shaft	Steam	8,494	19,586		28,080	170	38	208	10	218
7	Second	do	do	do	4,314	8,510		12,824	172	94	266	30	296
7	Third	do	do	do	7,229	14,540		21,769	177	38	215	7	222
7	Fourth	do	do	do	10,613	17,108	1,631	29,352	167	37	204	8	212
				Totals	30,650	59,744	1,631	92,025	171	52	223	14	237
					21,142	26,724	2,041	49,907	240	50	290	12	302
8	First	Mo. Pacific	Shaft	Steam	4,649	3,343	3,157	10,149	239	50	289	16	305
8	Second	do	do	do	17,641	19,771	2,146	39,558	230	52	282	10	292
8	Third	do	do	do	21,512	27,213	2,016	50,741	233	47	280	9	289
8	Fourth	do	do	do									
				Totals	64,944	77,051	9,360	151,355	235	50	285	12	297
					10,862	28,359	1,847	41,068	180	35	215	12	227
9	First	Mo. Pacific	Shaft	Steam	1,590	5,623		7,213	182	75	257	32	289
9	Second	do	do	do	7,740	21,326	437	29,503	167	32	199	10	209
9	Third	do	do	do	13,478	21,313	4,204	38,995	163	35	198	8	206
9	Fourth	do	do	do									
				Totals	33,670	76,621	6,488	116,779	173	44	217	15	232
					20,514	10,484	10,328	41,326	250	40	290	12	302
10	First	Frisco	Shaft	Steam	269	972		1,241	250	75	325	32	357
10	Second	do	do	do	21,162	13,287	7,602	42,051	240	36	276	11	287
10	Third	do	do	do	27,374	15,849	4,499	47,723	243	49	292	9	301
10	Fourth	do	do	do									
				Totals	69,319	40,592	22,429	132,340	245	50	295	16	311
					30,849	21,637	43	52,529	200	38	238	10	248
11	First	Mo. Pacific	Shaft	Steam	6,015	10,615	1,125	17,791	206	83	289	32	321
11	Second	do	do	do	25,607	13,556	2,676	41,839	240	45	285	10	295
11	Third	do	do	do	32,143	9,685	7,865	49,693	241	47	288	9	297
11	Fourth	do	do	do									
				Totals	94,614	55,529	11,709	161,852	221	53	275	15	290
					11,157	25,727	2,177	39,061	155	25	180	9	189
12	First	Mo. Pacific, Santa Fe	Shaft	Steam	4,039	8,584		13,051	151	25	176	9	185
12	Second	do	do	do	6,097	15,619	698	22,414	141	25	166	9	175
12	Third	do	do	do	8,563	20,914	1,325	30,802	150	25	175	9	184
12	Fourth	do	do	do									
				Totals	29,856	70,844	4,628	105,328	149	25	175	9	184
					6,322	19,696	5,329	31,347	156	28	184	10	194
13	First	Mo. Pacific	Shaft	Steam	6,373	8,529	1,096	15,993	152	28	180	10	190
13	Second	do	do	do	9,166	18,780	1,840	29,786	151	28	179	10	189
13	Third	do	do	do	16,562	17,386	5,516	39,464	156	28	184	10	194
13	Fourth	do	do	do									
				Totals	38,423	64,391	13,781	116,595	153	28	181	10	191

Twenty-fourth Annual Report.



COAL-MINING INDUSTRY IN CRAWFORD COUNTY FOR THE CALENDAR YEAR ENDING DECEMBER 31, 1916—CONTINUED.

Office No.	Quarter.	Railroad connection.	Kind of opening.	Kind of power.	Tons of coal produced.				Average number of employees.				
					Lump.	Nut and slack.	Mine run.	Quarterly totals.	Miners.	Under-ground day men.	Total under-ground.	Top men.	Quarterly totals.
14	First	Frisco	Shaft	Steam	8,529	3,456	179	12,164	46	9	55	5	60
14	Second	do	do	do	2,653	881		3,534	35	9	44	5	49
14	Third	do	do	do	3,329	943	153	4,425	30	9	39	5	44
14	Fourth	do	do	do	3,026	1,132	878	5,036	26	7	33	4	37
				Totals	17,537	6,412	1,210	25,159	34	8	42	5	47
15	First	Frisco	Shaft	Steam	23,840	13,014	2,712	39,566	201	26	227	9	236
15	Second	do	do	do	1,153	1,361	656	3,170	196	26	222	9	231
15	Third	do	do	do	7,149	9,712	8,459	25,320	180	26	206	9	215
15	Fourth	do	do	do	17,633	7,320	15,328	40,281	188	26	214	9	223
				Totals	49,775	31,407	27,155	108,337	191	26	217	9	226
16	First	Frisco	Shaft	Steam	26,479	19,592	1,501	47,572	243	57	300	32	332
16	Second	do	do	do	14,895	8,687		23,582	208	51	259	39	288
16	Third	do	do	do	25,312	25,725		51,037	236	54	290	28	318
16	Fourth	do	do	do	31,301	26,901	2,975	61,177	265	57	322	26	348
				Totals	97,987	80,905	4,476	183,308	238	54	292	21	313
17	First	Frisco	Shaft	Steam	11,874	4,231	1,541	17,646	60	24	84	22	106
17	Second	do	do	do	5,794	4,571	1,031	11,096	39	17	56	20	76
17	Third	do	do	do	4,770	1,995	1,395	8,160	33	12	45	17	62
17	Fourth	do	do	do	4,171	926	470	5,567	14	7	21	14	35
				Totals	26,609	11,423	4,437	42,469	36	15	51	18	69
18	First	Frisco	Shaft	Steam	16,452	37,502	2,769	56,723	238	41	279	29	308
18	Second	do	do	do	20,786	26,403	2,191	49,380	221	44	265	25	290
18	Third	do	do	do	13,712	21,842	4,057	39,611	205	40	245	24	269
18	Fourth	do	do	do	15,889	24,314	8,392	48,595	202	47	249	29	278
				Totals	66,839	110,061	17,409	194,309	214	43	257	27	284
19	First	Frisco	Shaft	Steam	4,263	3,549	85	7,897	44	17	61	18	79
19	Fourth	do	do	do	1,252	1,275		2,527	25	7	32	10	42
				Totals	5,515	4,824	85	10,424	34	12	46	14	60

82

State Inspector of Coal Mines.

State inspector of coal mines reports



83
Twenty-fourth Annual Report.



COAL-MINING INDUSTRY IN CRAWFORD COUNTY FOR THE CALENDAR YEAR ENDING DECEMBER 31, 1916—CONTINUED.

Office No.	Quarter.	Railroad connection.	Kind of opening.	Kind of power.	Tons of coal produced.				Average number of employees.				
					Lump.	Nut and slack.	Mine run.	Quarterly totals.	Miners.	Under-ground day men.	Total under-ground.	Top men.	Quarterly totals.
28	First	K. C. S.	Shaft	Steam	15,485	11,436		26,921	126	24	150	9	159
28	Second	do.	do.	do.	15,021	9,386		24,407	118	23	141	9	150
28	Third	do.	do.	do.	12,214	8,833		21,047	113	23	136	9	145
28	Fourth	do.	do.	do.	19,994	12,971		32,965	128	23	151	9	160
			Totals		62,714	42,629		105,343	121	23	144	9	153
29	First	Frisco	Shaft	Steam	2,454	8,954		11,408	66	10	76	7	83
29	Fourth	do.	do.	do.	3,614	3,806		7,420	40	9	49	6	55
			Totals		6,068	12,760		18,828	53	9	62	6	68
30	First	K. C. S. & Mo. Pacific	Shaft	Steam	8,239	15,667	1,303	25,209	114	17	131	7	138
30	Second	do.	do.	do.	8,507	16,133	243	24,883	111	17	128	7	135
30	Third	do.	do.	do.	5,459	18,335		23,794	123	19	146	7	153
30	Fourth	do.	do.	do.	5,754	20,817		26,571	133	19	152	7	159
			Totals		27,959	70,952	1,546	100,457	120	18	138	7	145
31	First	K. C. S.	Shaft	Steam	6,763	19,933	2,444	29,130	159	28	187	8	195
31	Second	do.	do.	do.	9,868	17,813	1,144	28,825	153	28	181	8	189
31	Third	do.	do.	do.	5,824	18,729	894	25,447	132	26	158	8	166
31	Fourth	do.	do.	do.	8,663	17,755	343	26,761	122	25	147	8	165
			Totals		31,108	74,230	4,825	110,163	141	22	163	8	171
32	First	Frisco	Shaft	Steam	10,742	5,113	157	16,012	82	9	91	6	97
32	Second	do.	do.	do.	10,052	4,690		14,742	75	9	84	6	90
32	Third	do.	do.	do.	6,923	4,975	1,344	13,242	72	10	82	7	89
32	Fourth	do.	do.	do.	8,163	4,962		13,125	70	9	79	7	86
			Totals		35,880	19,740	1,501	57,121	75	9	84	6	90
33	First	Frisco	Shaft	Steam	10,518	6,394	43	16,955	76	12	88	5	93
33	Second	do.	do.	do.	10,849	3,848		14,697	76	12	88	5	93
33	Third	do.	do.	do.	8,223	5,836	470	14,529	74	11	85	6	91
33	Fourth	do.	do.	do.	8,980	5,833	165	15,028	74	12	86	6	92
			Totals		38,570	21,961	678	61,209	75	12	87	6	93

84

State Inspector of Coal Mines.