

Biennial

Year ending

Oct 31, 1888

MINE INSPECTOR'S REPORT.

BRAZIL, IND., January 1, 1888.

To His Excellency, ISAAC P. GRAY,

Governor of Indiana:

SIR—In accordance with the statutes the ninth annual report of the Mine Inspector is submitted. This report is for the year ending October 31, 1888. It contains the estimated coal production, capital employed, list of non-fatal and fatal accidents, short account of scales tested, estimated number of persons employed in all coal mines, names and addresses of owners and location of mines that employ ten or more men, with a short description of their general condition. With the hope that the next General Assembly will make such changes in our laws that it will be possible for the Mine Inspector to secure such information for compilation in his report as is necessary to make the reports for Indiana more beneficial and interesting, and put them on an equality with those of other States.

Respectfully,

THOMAS McQUADE,

Inspector of Mines.

In previous reports complaints were made of disadvantages under which the Mine Inspector has to labor to get information that will enable him to arrive at reliable conclusions, and give such statistical information in his reports as the law requires, which is sought for by the public in general, and which would make these reports of more value to the State; but to date nothing in that direction has been done, consequently the same difficulty has to be met with in writing this report. In trying to get an accurate estimate of the coal production I have been assisted by figures furnished by parties who are presumed to

know what the production is (for such assistance I return thanks). With such information as was received the estimated coal production is 3,140,979 tons (of 2,000 pounds), showing a decrease of 76,732 tons as compared with last year. This decrease is caused to some extent by coal being displaced by natural gas in Indianapolis and other cities in this State. But the greatest cause of the decrease is due to the use of crude oil for fuel in Chicago. So extensive is the use of the oil in the city named that in one instance thirty-five flats of coal daily have been cut off. This oil seems to have affected Indiana more than any of the States, as the purposes for which our block coal was used is more accessible by oil than the coal produced by other States. Should this displacement of coal in the Chicago market continue Indiana's coal will have to seek new fields for consumption. During the recent campaign it was claimed by some that the tariff agitation, brought about by an attempt at needed and necessary changes in our tariff laws, caused a depression in the coal trade and compelled owners to close their mines. But now that the election is over I know of no one charging the depression and general dullness in the coal business to proposed tariff legislation. The prospect for coal business does not seem bright, and yet several new mines have been opened this year and more are being put down. In those new mines and coal lands there has been, at a low estimate, two hundred thousand dollars (\$200,000) invested this year. Several air and escape shafts were opened and fans have been erected at mines that have previously been ventilated by furnaces. Those changes point to a gradual improvement in the ventilation of our mines, and should be encouraged, for the improvements, though great they may be, will not be more than is actually required by those who are engaged in the laborious and dangerous task of mining coal.

Below is given a list of accidents, non-fatal and fatal, the number being thirty-eight, of which twenty-one are non-fatal and seventeen fatal. By examining the statements that accompany each accident it would seem that those accidents occurred in a natural and unavoidable way, but according to information received I am of the opinion that with proper care several might have been avoided. In the case of J. H. Allen, who was killed by the cage at Nickel Plate Mine, it seems that this life could have been saved if there was a system of uniform

signals to hoist and lower those cages by. Mr. Allen had used the signal to let the engineer know that he wanted to ascend the shaft, but was not on the cage. The engineer, supposing he was on the cage, began to hoist it to the surface. Mr. Allen, seeing the cage start from the bottom, attempted to get on it. In the attempt he was caught between the cage and the side of the shaft and was killed instantly. This accident could certainly have been avoided if this man, who was a stranger in the State, had known how to give the proper signal to the engineer. The other accidents mentioned below were caused mainly by falling slate in the places where the men were working. Thus it would seem that they were in the course of natural events almost unavoidable, but my experience has taught me to believe that many of them could be avoided if the men who work in mines would devote more time and attention to their safety and be less anxious to get out coal regardless of the dangers that surround them. Our laws should be so changed that the operators of mines would be required to report accidents of any kind to the inspector immediately after they occur, and in cases of fatal accidents the Inspector should be required to visit the place at once to investigate the cause.

ACCIDENTS NON-FATAL.

November 15, 1887. D. Davis injured by bank cars at Sharky's Mine in Vermillion County.

November 15, 1887. John Coleman injured by fall of slate in Mutual Mine, operated by Mutual Mining Company, in Daviess County.

November 23, 1887. George Schepfeman injured by piece of sherwheel falling down shaft at No. 9, owned by Brazil Block Coal Company, in Clay County.

December 1, 1887. Albert Deatz, leg broken by bank cars in Maple Valley Mine, owned by Cable & Co., in Daviess County.

March 20, 1888. William Chatam, arm broken while coupling cars at Gartsherre No. 2, owned by Brazil Block Coal Company, in Clay County.

March 20, 1888. Aleck Brown injured by fall of slate in Campbell Mine, owned by Brazil Block Coal Company, in Clay County.

April 24, 1888. Aleck Brown, leg broken by fall of Coal in Campbell Mine, owned by Brazil Block Coal Company, in Clay County.

May 7, 1888. Wm. Brown, back broken by fall of slate in Campbell Mine, owned by Brazil Block Coal Company, in Clay County.

May 7, 1888. James Rooney, collar bone broken by fall of coal in No. 2, owned by Brazil Block Coal Company, in Clay County.

July 1, 1888. Ed Roberts, leg broken by bank cars in Staunton Mine, operated by John Summers, in Clay County.

July 2, 1888. Robert Stewart, leg broken by fall of slate in Campbell Mine, owned by Brazil Block Coal Company, in Clay County.

July 1, 1888. Adam Herbrick, leg broken by fall of slate in No. 2 Coxville, owned by Brazil Block Coal Company, in Parke County.

July 10, 1888. William Carr, injured by fall of slate in No. 9, owned by Brazil Block Coal Company, in Clay County.

August 1, 1888. Alvin Skimt, collar bone broken by fiat cars at Pioneer Mine, owned by Curriesville Coal Company, in Sullivan County.

August 11, 1888. James Stone, leg broken by fall of coal in Dugger Mine, owned by Dugger & Neal, in Sullivan County.

August 18, 1888. William Bradley and S. Beach, burned by explosion of Gas in Pioneer Mine, owned by Curriesville Coal Company, in Sullivan County.

September 6, 1888. William Adams, back broke by descending cage in No. 1 Coxville, owned by Brazil Block Coal Company, in Parke County.

September 11, 1888. Thomas Barroman, leg broken by falling slate in Campbell Mine, owned by Brazil Block Coal Company, in Clay County.

September 15, 1888. French Cammel, leg broken by falling slate in Campbell Mine, owned by Brazil Block Coal Company, in Clay County.

October 20, 1888. Joseph Mitchell, leg broken by bank cars in Lyenton Mine, owned by Lyenton Coal Company, in Sullivan County.

ACCIDENTS FATAL.

November 25, 1887. John McGrill, killed by fall of slate and coal in First Avenue, owned by First Avenue Coal Company, in Vanderburgh County.

December 8, 1887. William Nichols and John Rider, jr., killed by falling slate in No. 9, owned by Brazil Block Coal Company, in Clay County.

December 17, 1887. William Dilman, killed by falling down shaft at First Avenue Mine, owned by First Avenue Coal Company, in Vanderburgh County.

January 20, 1888. Ed. Oston, fatally injured by being hit on the head while ascending First Avenue shaft, owned by First Avenue Coal Company, in Vanderburgh County.

March 7, 1888. Julius Rulius, killed by falling out of bucket while ascending shaft at No. 9, owned by Brazil Block Coal Company, in Clay County.

March 10, 1888. Jacob Cannon, killed by falling slate in Lancaster Mine, owned by the Lancaster Coal Company, in Clay County.

April 17, 1888. Amos Ruffi, killed by falling slate in No. 9, owned by Brazil Block Coal Company, in Clay County.

May 10, 1888. James Campbell, killed by falling slate in Lancaster Mine, owned by Lancaster Coal Company, in Clay County.

June 13, 1888. Frank Hudson, killed by falling slate in Echo Mine, owned by Diamond Coal Company, in Vanderburgh County.

June 26, 1888. Wm. Burnet, killed by boiler explosion at Rogers Mine, owned by Rogers Bros., in Pike County.

July 23, 1888. Joe Roxbury, killed by descending cage in No. 6, mine owned by Parke County Coal Company, in Parke County.

July 25, 1888. Abe Kennedy, killed by falling slate in Campbell Mine, owned by Brazil Block Coal Company, in Clay County.

August 7, 1888. Joe Targett, killed by falling from top to bottom vein in No. 9 Mine, owned by Brazil Block Coal Company, in Clay County.

August 14, 1888. Tony Kingshaff, by fall of coal in No. 6 Mine, owned by Cable & Co., in Daviess County.

August 18, 1888. J. H. Allen, killed by ascending cage at Nickel-Plate Mine, owned by Jackson Coal Company, in Clay County.

September 18, 1888. Thomas Buffton, killed by fall of slate at South Mine, owned by Gartsherre Coal Company, in Clay County.

TESTING OF SCALES.

Twenty-six scales were tested. Seventeen of this number were correct, and nine incorrect. The number tested this year is not so great as in former years, caused mainly by the expense of bringing weights to the mines, having to be paid by the persons desiring the test made. The complaints about injustices in weights, however, has not decreased, for more complaints reach me on that subject than on any one thing connected with mines. In many places the scales are not tested because the necessary expenses would not be paid. This is not because the men are not willing to pay when they get under the impression that anything is wrong with the scales, but it is because they fear that they will be discharged from the mine where they work, and perhaps prevented from getting work in other mines in that vicinity, if it becomes known that they have complained about the weights at the mines to the Inspector. Be it said to the credit of those whose scales have been tested this year, that the number incorrect is not so great as in former years. I believe that this is due to two causes: First, our operators of mines are paying more attention to their scales. Second, under the system of miners having to bear expense of bringing weights to any particular mine a meeting of the men, in most instances, must be held to determine whether or not they will pay the necessary expense. After those meetings are held the fellow whose scales are in question finds out what the men have done, and can, if he desires, have the scales regulated before it is possible for the Inspector with his weights to arrive. It is thus made possible for the scales, when tested, to be found correct and be so credited by the Inspector, and yet be incorrect for any length of time prior to the test being made. The laws should be changed regulating the weighing of coal. But it is unnecessary for me to dwell on this subject here, as I have spoken quite freely on it in previous reports. Suffice to say that such changes should be made as will secure justice to all parties interested.

Below is given dates, and names of owners of scales that have been tested.

November 1, 1887. Diamond Mine, owned by Zeller & Sigler, in Clay County, tested and found correct.

November 11, 1887. Fountain No. 2, owned by Coal Bluff Mining Company, in Vigo County, tested and found incorrect.

December 7, 1887. Fontanct No. 2, owned by Coal Bluff Mining Company, in Vigo County, tested twice and found on first test incorrect, second test correct.

December 15, 1887. Lyenton Mine, owned by Lyenton Coal Company, in Sullivan County, tested and found incorrect.

January 14, 1888. Peanut Mine, owned by E. L. Winklepleck, Clay County, tested and found incorrect.

January 18, 1888. Eureka Mine, P. Ehrliche & Co., in Clay County, tested and found incorrect; on second test found correct.

January 27, 1888. Watson No. 1, owned by Gartsherre Coal and Mining Company, in Clay County, tested and found correct.

January 30, 1888. Vigo Mine, owned by Myers & Davis, in Clay County, tested and found correct.

January 30, 1888. Gartsherre No. 2, owned by Brazil Block Coal Company, Clay County, tested and found correct. These are the scales used for loading flat cars. The scales used for loading the box cars were found incorrect.

February 20, 1888. Island City Mine No. 1, owned by Island Coal Company, in Green County, tested and found correct.

February 21, 1888. Prices Summit, owned by Dugger, Neil & Co., in Greene County, tested and found correct.

April 25, 1888. Churchill Mine, owned by Weaver, Todd & Co., in Clay County, tested and found correct.

June 9, 1888. No. 1 Mine, owned by Brazil Block Coal Company, Clay County, tested and found correct.

June 17, 1888. Foley's Mine, owned by Otter Creek Coal Company, in Vigo County, tested and found incorrect.

June 25, 1888. No. 8 Mine, owned by Brazil Block Coal Company, in Clay County, tested and found correct.

July 11, 1888. Ayrshire Mine, owned by D. E. Ingle, Pike County, tested and found correct. One set of scales used on top also found correct. Small scale No. 2 used on tipple, incorrect.

July 11, 1888. Whitman's Mine, owned by C. Townsend, in Pike County, tested and found correct. Small scales used on top were incorrect.

August 3, 1888. Chicago Mine, owned by Nickel Plate Coal Company, in Pike County, tested and found correct.

August 16, 1888. Churchill Mine, owned by Weaver, Todd & Co., Clay County, tested and found correct.

September 27, 1888. No. 4 Mine, owned by Parke County Coal Company, tested and found correct.

Before entering upon a short description of the mines, their location, etc., I desire to say that the recommendations made in previous reports looking to amendments of the mining law governing mines are approved, with the following suggestions:

First. The number of Inspectors should be increased.

Second. The office of the Inspector should be permanently located, and the equipments needed by the Inspector in the discharge of his duties should be furnished by the State.

Third. The Inspector should be given power to shut down a mine, or any part of a mine, that was not in a healthy or safe condition for the men to work.

Fourth. The Inspectors' expenses while discharging the duties of his office in any part of the State should be paid by the State, and an itemized statement of the same should be made to the Governor in his reports.

Fifth. The Inspector should be notified of all accidents, and he should be required to visit the scene of such accidents and inquire into their cause and compile such information in his report. I might go on and enumerate a number of other changes that should be made, but the world was not made in a day, and we can not expect all the changes that are necessary made in any one report; therefore I refrain from making any further suggestions at this time.

In previous reports some attention was given to different modes of ventilating mines, which it was hoped would be of some benefit to those engaged in mines, but no space is given to anything in that line in this report, because the writer believes that there are various sources from which the information may be had which is within the reach of all who desire it, and which is more instructive and complete than the best effort on my part would bring forth.

SUITS IN COURT.

It has been necessary to institute legal proceeding against some of those that are engaged in the operation of mines. Where this became necessary, I always regretted it, but did not hesitate to do what was necessary and within my power to enforce the laws. Some there are who have been tried and found guilty, and fined. Some have paid such fines and complied with the law immediately after, while others have taken an appeal to higher courts and do not comply with the law at all. Where a case has been appealed, I find it is a very hard matter to have it tried, as the coal companies seem to command the sympathy of the Prosecuting Attorney, and in many instances he does not press the suit to trial. As a consequence, there are cases pending in the courts that have been there for more than a year. If there is a remedy for those evils, it should be applied.

Below is given the names and location of mines, with a short description of their general condition.

CLAY COUNTY.

GARTSHERRE No. 1.

Owned by Brazil Block Coal Co. Located on the north branch of the T. H. & I. R. R., one and one-half miles north of Knightsville. This mine was operated on a small scale this year, and was shut down October 13. During the time the mine was in operation the laws were complied with.

GARTSHERRE No. 2.

Owned by Brazil Block Coal Co. Located one mile north of Harmony, on the Harmony branch of the T. H. & I. R. R. The general condition of the mine was good during the time it was operated. It was shut down October 13.

No. 5.

Owned by B. B. Coal Co. Located one and one-half miles west of Cardonia. Was worked out and abandoned about November 1.

No. 6.

Owned by B. B. Coal Co. Located one and one-half miles west of Cardonia. The mine was put down during 1887, through coal I and J. Coal I was not a success. The coal was full of faults, and the roof dangerous. It was finally abandoned. The lower vein, or coal J, is still in operation. The ventilation of the mine is fair.

No. 7.

Owned by B. B. Coal Co. Located one mile west of Cardonia. Was opened last year. Coal I and J are worked. Coal I will not last long, as the works are running into an old drift that was operated years ago by the Clay Coal Co. There seems to be a better prospect for coal J. It will probably last for several years. The condition of the mine is good.

No. 8.

Owned by B. B. Coal Co. Located one mile northwest of Perth, on a switch from the C. & S. C. R. R. This mine was opened last year. Coal I is worked. The condition of the mine is good.

No. 9.

Owned by B. B. Coal Co. Located four miles southeast of Knightsville. This mine was opened last year. The two veins I and J are being worked. The roof over coal I is very dangerous. More accidents happened in this mine since it was opened than in any other mine in the State in the same length of time. The ventilation in the top vein is not as good as we would like it, which is due to the air courses being allowed to fill with slate, from lack of being properly timbered. At the time of my last visit they were then at work making the necessary improvements, having a force of men employed at night to do the work. The bottom vein, or coal J, is in good condition.

No. 10.

Owned by B. B. Coal Co. Located two mile northwest of Perth. The shaft is 127 feet deep to coal I, and 165 feet deep to coal J. The company finished sinking this shaft October 1, 1888. On October 19 it was shut down indefinitely.

CHICAGO MINE.

Owned by B. B. Coal Co. Located at Carbon. This mine is very wet. It has been operated for years, consequently the coal now being worked is a long distance from the shaft. The air shaft is near the main hoisting shaft. Although the fan is a good one the air at the working faces of the mine is not good. The company put down a water shaft to pump the water out of the mine quite a distance from the main shaft, and I am informed they intend to remove the fan to this water shaft. When this is done it will make the air good in all parts of the mine. About the time the water shaft was completed the mine was shut down. The date of the discontinuance of work was October 13.

CAMPBELL MINE.

Owned by B. B. Coal Co. Located just north of Brazil. Is being rapidly worked out. All the men are working pillars, and it is thought the mine will be worked out and abandoned January 1, 1889.

CRAWFORD'S No. 1.

Owned by Crawford Coal Co. Located one mile northwest of Harmony. This company has almost finished coal J, or bottom vein. All the men now at work in it are working pillars. This company secured a lease on some coal land near this mine, and drove a tunnel from their works in the bottom vein to the top vein of the leased land, and are taking the coal out through the old works to the old shaft, where it is hoisted. An air shaft was made extending from the bottom vein to the top vein, that was intended to ventilate the new works with the fan at the hoisting shaft. When I was at the mine this fall I

found the arrangements to ventilate this new work were inadequate. I immediately called upon the superintendent in his office in Brazil, and he agreed to put down an air shaft from the surface, and to make such other improvements as was necessary to properly ventilate the mine. They are now at work sinking the air shaft.

CRAWFORD'S No. 2.

Owned by Crawford Coal Co. Located one-fourth of a mile south of No. 1. Is a shaft, and is eighty-two feet deep. It is ventilated by a fan. Coal J is worked, which is about three and one-half feet thick on an average. The general condition of the mine is good.

CRAWFORD'S No. 3.

Owned by Crawford Coal Company. Located one and one-half miles north of Brazil. This is a slope which was opened last year. Coal I is being worked. It is ventilated by a furnace; when last inspected it was well ventilated. This mine was idle during the summer, but is now in operation.

PEANUT MINE.

Owned by E. L. Winklepleck. Located one-fourth of a mile south-west of Knightsville. Was worked out and abandoned about June 1, 1888.

STAR MINE.

Owned by E. L. Winklepleck & Co. Located just south of Perth. Is a new mine that was opened last year by the Stewart Coal Co. The two veins, I and J, are worked. This shaft was opened without much regard for system. As a consequence in the top vein they had a creep which squeezed the pillars and compelled the Stewart Coal Company to abandon working this vein. The new company drove a shaft from the bottom vein up to the top, and are now working both veins. The ventilation of the mine is good.

PEANUT No. 2.

Owned by E. L. Winklepleck. Located in the town of Knightsville. Is a new mine which was sunk during the year. Coal I is being worked. The roof is bad and they are troubled with water from abandoned mines near where this shaft was sunk. They ventilate with a fan.

NICKLE PLATE.

Owned by the Jackson Coal Co. Located one and one-half miles north of Knightsville on the north branch of the T. H. & I. Railroad. The two seams, I and J, are still being worked. The ventilation of the mine is generally good. Having connected this with the Chicago mine, they now get a part of the air needed from the latter.

CHICAGO.

Owned by the Nickel Plate Coal Company. Located just east of Benwood. The mine is ventilated by a fan. Coal J. is worked. This mine is divided by local dips and hills into three different parts. Owing to these hills the mine is harder to ventilate than it would be if the mine was more level. At the time of my last visit the ventilation of the mine was not good, and upon calling the superintendent's attention to the matter he agreed to make some changes, which would undoubtedly be beneficial, and if the desired result was not attained by the proposed change he would then use a separate air shaft to air the northeast part of the workings. I do not know what was the result of the proposed change, but no complaints have been made to me since I visited the mine.

SOUTH SLOPE.

Owned by P. Ehrlich & Co. Located four miles south of Brazil. This company are now working machines in this mine. They mine in the fireclay, and are giving pretty good satisfaction. The leg machines were used at the time of my last visit. The ventilation of this mine was fair, but would be much better when an air course that was then being drove would connect with an entry that was only a few yards distant.

NEWBURG MINE.

Owned by P. Ehrlich & Co. Located at Newburg. Was worked out and abandoned about July 1, 1888.

EUREKA MINE.

Owned by P. Ehrlich & Co. Located one mile south of Brazil. Has not been in operation for several years until the beginning of this one, when it was cleaned up and again started. It was kept in operation until July, when the dump buildings were destroyed by fire. Since that time it has remained idle, the dump buildings not being rebuilt.

STAUNTON MINE.

Owned by Joseph Sumners. Located one mile west of Newburg. In May of this year this company erected a fan, which furnished plenty of air for all persons at work in the mine.

BRUSHVILLE MINE.

Owned by Gartsherre Coal and Mining Company. Located one-half mile west of Newburg, on the T. H. & I. Railroad. There has been no particular change in the working of this mine during the year. When last visited it was pretty well ventilated.

WATSON No. 7.

Owed by Gartsherre Coal and Mining Company. Located four miles south of Brazil. This mine is pretty well ventilated, and is almost finished. The men now at work in it are nearly all on pillars, and it is not expected that it will last another year. This company is sinking another shaft west of Brazil, which will be put in operation about January 1, 1889. They have two veins of coal in the new shaft, but do not expect to work both at the beginning.

VANDALIA MINE.

Owned by Zeller & Sigler. Located one and one-quarter miles west of Centre Point. This mine was shut down May 1, 1888, and remained idle for three months, starting again August 1, 1888. The bottom vein is still idle. The general condition of the mine is good.

DIAMOND No 2.

Owned by Zeller & Sigler. Located four miles southeast of Knightsville. This is a very extensive mine. When last visited parts of it were very poorly ventilated. This condition of things was due to lack of attention to air courses and breaks through. When the mine boss's attention was called to the facts, he put men at work to fix up the mine.

CHURCH HILL MINE.

Owned by Weaver, Todd & Co. Located one and one-half miles west of Center Point. When last visited the mine was not ventilated as well as it should be. The breaks through were not filled up; not bradished in many instances. The man in charge of the mine claimed this could not be helped, as the company could not get lumber when wanted, but that the much desired necessity was then on the way to the mine, and when it arrived that he would put on an extra force of men to do the work.

LITCHFIELD.

Owned by the Coal Bluff Mining Company. Located just north of Carbon. This is an old mine, and is being rapidly worked out, and will be abandoned during the year 1889. The ventilation of the mine is good.

VIGO.

Owned by Myers & Davis. Located one-half mile west of Perth. This mine was shut down for three months during the year, but has been running steady since October 1. During the month of February they erected a fan, and the mine was well ventilated for a time, but the main entry air course was entirely closed at the time of my last visit; as a consequence the air was bad in the mine. They had men at work driving a place to connect it with the fan. When this is done the air will be good.

JUMBO.

Owned by Watson, Little & Co. Located one mile north of Knightsville. This company drove a tunnel from their lower vein, coal J, to their upper vein, or coal I, which is now completed, but there are no men at work in the new opening. The lower vein is well ventilated, and there is a large force of men employed in it.

HARRISON MINE.

Owned by Chicago and Indiana Block Coal Company. Located two and one-half miles east of Clay City. This is a new mine which they finished sinking about April 1. It is ventilated by a fan. The escape shaft has no stairway in it yet, but it will be put in just as soon as the work can be done, neither are there safety catches on the cages, but they agreed to put them on by December 23.

MORRIS MINE.

Owned by John Morris. Located just north of Clay City. The present owner of this mine took charge of it some time in April of this year. Since that they have put down an air shaft and have generally improved the mine. At present they are ventilating by natural means, assisted by a pump exhausting in the main shaft. They intend to erect a fan in the spring. They were given ten days to put stairs in the escape shaft.

LANCASTER No. 2.

Owned by the Lancaster Coal Co. Located three and one-half miles east of Clay City. This mine has been credited to Owen County in previous reports, and while it is very near the line, yet I find it is in Clay County. Hence the change. The location of the fan was changed, and erected in another place. It now produces more air than formerly, and on my last visit to the mine the ventilation was fairly good. Some minor changes were suggested which were agreed to. When these are made there will be still further improvements in inside workings.

In addition to the mines already mentioned in this county, the Coal Bluff Mining Co. is opening a new mine near Lodi, on the I. & St. L. R. R., and a new company, whose name I did not learn, has sunk a new shaft just west of Weaver & Todd's mine. Woodruff & Turnkey are about to sink a shaft just south of Brazil, near what is called Hadleytown. In addition to those the Central Iron and Steel Co. are sinking a shaft two miles north of Brazil. There are a number of small mines that are run in the fall and winter, and in some instances employ twenty men, but work few, if any, in the summer.

DAVIESS COUNTY.

SULPHUR SPRINGS.

Owned by Cable & Kaufman. Located south of Washington one-half mile. At the time of my last visit the mine was working a small force of men. It is expected it will be worked out and abandoned about January 1, 1889.

EUREKA.

Owned by Cable & Kaufman. Located three quarters of a mile southeast of Washington. Is worked out and abandoned.

MAPLE VALLEY.

Owned by Cable & Kaufman. Located two miles southwest of Washington. On both my visits this mine was found in good working condition.

No. 4.

Owned by Cable & Kaufman. Located two miles south of Washington. The ventilation of this mine is good, and the law, in all particulars, is complied with.

BUCKEYE.

Owned by Cannel Coal Co. Located at Cannelburgh, on the O. & M. R. R. There has been very little entry driven in this shaft this year, and very few changes of any kind made, everything remaining about the same as last year.

WILSON'S.

Owned by Wilson Coal Co. Located near Montgomery, on the O. & M. R. R. On my first visit this year, to this mine, it was found in bad condition. The air was very bad, and brakes-through were made too far apart. When visited the last time quite a change had been made, and the evils complained of on my former visit had all been removed, and the general condition of the mine was good.

WILSON No. 2.

Owned by Wilson Coal Co. Located one and one-half miles northwest of Washington. This is a new mine that was opened in the latter part of 1887, but has not been operated very extensively since that time. This shaft is 67 feet deep; coal about six feet high. They had not completed their dump buildings when last visited, on September 22, but they expected to finish them at an early date so they could ship coal this winter.

No. 6.

Owned by Cable & Kaufman. Located three miles west of Washington. This mine was opened last year, but has not been operated very much. The coal is six and one-half feet thick, and is the same vein worked in the other mines owned by this company. It is ventilated by a fan. They have a slope for the men to get in and out. This company was sinking another shaft north of No. 6 about one and a half miles. The White River Valley Coal Company were also sinking a shaft south of Washington about six miles on the E. & I. Railroad.

MUTUAL No. 2.

Owned by Mutual Mining Company. Located one mile south of Cannelburg. The air was not good in the mine at the time of my last visit, but they were at work sinking an air shaft, which is sixty-five feet deep, and when completed they will put in a furnace or fan, which will supply sufficient air.

DUBOIS COUNTY.

ROSEBANK.

Owned by J. C. Frites. Located three miles north of Huntingburgh. This mine is operated on a small scale. On my first visit this year they had nineteen men employed, but on returning a second time they had less than ten men at work. They sunk a new air shaft last summer. The mine is well ventilated.

BARRONIANS.

Owned by Alexander Barronian. Located at Huntingburgh. This mine is also operated on a small scale. On my first visit to this mine there were seventeen men at work, but on my second visit there was less than ten. This mine has a very bad roof near the shaft and it is difficult to keep up. The ventilation is not good.

FOUNTAIN COUNTY.

The mines in this county that were reported in operation last year near Stringtown are all abandoned, except the small mines operated for local trade. The cause of this is the taking up of a part of the rails on the switch that runs from Covington down to the mines. It is not known whether the mines are abandoned forever or not, but everything seems to point that way. The only mine of any importance now in operation in this County is the

HARRISON MINE.

Owned by the Harrison Block Coal Company. Located one and one-half miles north of Veedersburg. This company began operations in July of this year. Since that time they have opened two slopes, and have about thirty men at work. The coal is about three feet and a half thick. The roof is soapstone of a very soft nature. They ventilate by furnace.

GREEN COUNTY.

ISLAND CITY No. 1.

Owned by Island Coal Company. Located one and one-half miles south of Linton on a branch of the I. & V. Railroad. This mine has about as much excavation made as any mine in the State. At the time of my last visit to this mine the amount of air required for the number of persons employed was not in circulation. The superintendent agreed to sink another air shaft and erect a fan just as soon as the work could be done.

No. 2.

Owned by Island Coal Company. Located one-half mile west of Linton; was opened last year. There are machines used here for mining the coal, which are giving satisfaction. They ventilate by fan. There is no escape shaft for the mine, but the Superintendent agreed to start to sink one on the Monday following my visit. When this is done the mine will be in first-class condition.

SUMMIT.

Owned by Dugger, Neal & Co. Located one and one-half mile west of Linton. The fan which ventilates this mine is not erected properly, and eventually will have to be rebuilt, it producing all the air for present wants. In other respects the mine is in good condition.

KNOX COUNTY.

INDIAN CREEK MINE.

Owned by Indian Creek Coal Co. Located one and one-quarter miles south of Bicknell, on a branch from the I. & V. R. R. At two different times during the year I went to inspect this mine, but found the miners on strike on both visits, and the mine idle; hence the mine was not inspected. There is no other mine in this county, to my knowledge, that has employed

enough men during the year to bring them under the requirements of the law. While drilling for gas at Vincennes, I am informed that two or three veins of coal of a good quality was struck, which ranged from four to six feet in thickness, at a depth of four hundred feet from the surface. It is said that a company will be formed to sink a shaft and develop the coal in the near future.

OWEN COUNTY.

The only mine in this county that came under the law was the Lancaster Mine, owned by the Lancaster Coal Company, and as this properly belonged to Clay County, and the change having been made, there is no mine now to report upon in this county.

PERRY COUNTY.

SIoux No. 1.

Owned by American Cannel Coal Company. Located two and one-half miles northeast of Cannelburg. There has only been a small force of men employed here during the year. Those now employed are working on pillars. There was not enough men employed to bring the mine under the requirements of the law.

SIoux No. 2.

Owned by American Coal Company. Located just a short distance from No. 1. Is also on the decline. When last visited the majority of the men were at work on pillars. The ventilation of the mine was short. In one entry the men were stopped from working until the company could make the necessary improvements. Since my second visit this year to this mine, I received a letter from a person whom I did not know, stating that an accident had happened, in which four men lost their lives. I answered the letter requesting particulars, but up to date have received no reply.

BURGENROTH.

Owned by Burgenroth Bros. Located one-half mile up the river from Troy. This mine was opened last year. When first visited this year the ventilation was poor, but they had just finished sinking an air shaft which they agreed to put a furnace in. When in that county, on my last trip, they were not working a sufficient number of men to bring them under the law.

PARKE COUNTY.

No. 4.

Owned by Parke County Coal Company. Located five miles from Rosedale. This mine is pretty near worked out, and will be abandoned in the spring of 1889. At the time of my last visit to this mine it was pretty well ventilated.

No. 5.

Owned by Parke County Coal Company. Located just west of Rosedale. Is being rapidly worked out, and it is not expected to be operated longer than the spring of 1889. When last inspected this mine was ventilated as well as it could be expected under the circumstances, which were unfavorable.

No. 6.

Owned by Parke County Coal Co. Located one mile north of Rosedale. Is a new mine which was opened last year. The coal is mined by machines. The mine is opened on a systematic plan, and is first-class in all respects.

No. 7.

Owned by Parke County Coal Co. Located five miles from Rosedale. This is a new mine which began operations about October 1.

BLACK DIAMOND.

Owned by Stevens Coal Co. Located one mile north of Carbon on a branch of the I. & St. L. Railroad. Was worked out and abandoned about June 1, 1888.

BLAINE SHAFT.

Owned by Brazil Block Coal Co. Located one and one-quarter miles northeast of Carbon. The ventilation in this mine is good, but the mine will not be operated long. Nearly all the men at work were drawing pillars at the time of my last visit. July 15 the engine house took fire and burned down. The dump buildings were saved by the efforts of the men who happened to be near the mine at that time. While they were at work saving the dump buildings one of the boilers exploded, but fortunately no one was hurt.

BLAINE SLOPES NOS. 2 AND 3.

Owned by B. B. Coal Co., located near Blaine shaft, are also nearly finished. In No. 2 all the men are at work on pillars, while in No. 3 there is but one entry going. The slopes are ventilated by the fan which is used to ventilate the shaft.

COXVILLE No. 1.

Owned by B. B. Coal Co. Located west of Coxville. This is a new mine which was opened last year. The company has machines in this mine, but they are not giving good satisfaction. This mine is well ventilated. All the laws are in all respects complied with.

COXVILLE No 2.

Owned by Brazil Block Coal Company. Located east of No. 1 half a mile. This mine was also opened last year. The coal is mined by hand. The roof is bad. The mine is well ventilated.

PIKE COUNTY.

AYRSHIRE MINE.

Owned by D. E. Ingle. Located about seven miles from Oakland City on the Air Line Railroad. The change in the location of the fan, made last year, resulted in a wonderful improvement in the ventilation of the mine, and it is well ventilated in all parts now with the exception of the first east entry. This entry is apart from the greatest portion of the works. There is an air shaft here that could be utilized to ventilate this portion of the mine. The boss has agreed to use it. When this is done the mine will be in fair condition.

WHITMAN.

Owned by C. Townsend. Located three miles east of Oakland City on the Air Line Railroad. Was visited twice and found in good condition. During the year they reopened the south side of the mine, and have nearly all their men at work on that side.

BLACKBURN.

Owned by S. Bettaman. Located three miles north of Petersburg on the line of the E. & I. Railroad. This mine is not worked very extensively. The coal is high and the excavation not large. The furnace furnishes an abundance of air for the number of persons employed.

ROGERS.

Owned by Rogers Bros. Located north of Blackburn. The boiler exploded at this shaft on June 26, killing one man and completely destroying the engine. From the date of the explosion up to within a few days previous to my last visit, September 19, the shaft was not operated. All the men being at work in the drift, which had been abandoned. The air was not good in this drift, but they did not expect to operate after the shaft was again ready, which would be about October 1, 1888.

SULLIVAN COUNTY.

 PIONEER.

Owned by Curriesville Coal Co. Located one-half mile north of Shelburn, on the E. & I. R. R. August 18 there was an explosion of gas, in which two men were severely burned. September 12 I visited the mine and found it in bad condition. The bank boss agreed to lay the mine idle until such times as he would be able to get the air courses cleared out and timbered properly. I have heard no complaints since my last visit.

SHELburn No. 2.

Owned by Shelburn Coal Coal Co. Located a short distance south of Shelburn. Was visited twice and found in good condition. Since my last visit, which was on September 12, they have put in machines, which, it is said, are giving good satisfaction.

HANCOCK.

Owned by Hancock & Konkle. Located four miles east of Sullivan on the line of the I. & I. S. R. R. This mine is in good condition. They have no escape shaft, but will begin sinking one at once.

LYENTON.

Owned by the Lyenton Coal Co. Located on the I. & I. S. R. R., six miles east of Sullivan. This mine was only inspected once. At the time I went there the shaft was idle and I did not go down. On my first visit the condition of the mine was good.

DUGGER.

Owned by Dugger & Neal. Located near Dugger. Was inspected twice and found in good condition.

CHAMPION.

Owned by Dugger & Neal. Located one mile southeast of Dugger is a new mine which was opened last year, but is about finished now. At the time of my last visit there was only six men at work. The company are thinking of sinking a shaft to a vein of coal directly underneath the one now in operation and then utilizing the dump buildings which are already there, and which have been used only little.

SUPERIOR.

Owned by Superior Coal Co. Located two miles west of Dugger. This is a new mine. It was opened last year; is ventilated by a fan. There are a great many dips in this mine and it is seriously troubled with rock rolls, which cut the coal almost out in many places. These rolls seriously interfered with the operation of the mine, and prevented the company from extending their works very rapidly.

NEW PITTSBURGH.

Owned by Pittsburgh Coal and Coke Co. Located ten miles southeast of Farmersburg, on a branch of the E. & T. H. R. R. No. 1 slope is still ventilated by a furnace. It has good air in it; is not operated on a very extensive scale. No. 2 slope, which is on the north side of the hill, is operated more extensively than No. 1, and is now being ventilated by a fan, which was erected last summer. This is one of the best ventilated mines in this State. In the latter part of 1887 this company opened another mine about half a mile from the two here mentioned, but it was never operated to any extent. It was idle during both my visits to the other mines.

VIGO COUNTY.

FOUNTAIN No. 1.

Owned by Coal Bluff Mining Co. Located at Fontanet, on the line of the I. & St. L. R. R. It was expected that this mine would be abandoned at the close of last year, but this is not the case, as they are now working more men than they have at any other time for two years. The condition of the mine is good.

FOUNTAIN No. 2.

Owned by the Coal Bluff Mining Co. Located one-half mile northwest of No. 1. The company put down an air shaft during the year, and erected a fan, which furnishes a good supply of air for all parts of the mine. This is a great improvement. Heretofore this mine was ventilated by the fan at No. 1 shaft, the air having to travel over old and abandoned works to reach No. 2. The company will put a stairway in their shaft and thus make an escape shaft for their men. Formerly the escape shaft for No. 1 was supposed to be an escape shaft for both mines, and in reality it was, but never a good one.

SOUTH MINE.

Owned by Coal Bluff Mining Company. Located one and one-half miles southeast of Coal Bluff. This mine was worked out and abandoned June 1, 1888.

KAYS.

Owned by Coal Bluff Mining Company. Located one-half mile south of Fontanet. Was visited twice. On my first visit I found nearly all the men at work on pillars, and the air was good except in two entries going south. On my last visit the mine was full of water. The fan formerly used at the South Mine is now used to ventilate this one.

EPPART MINE.

Owned by Coal Bluff Mining Company. Located one-half mile east of Kays. Was visited twice and found in good condition. It is almost worked out, and will be abandoned December 1, 1888.

NEW EDGAR.

Owned by Coal Bluff Mining Company. Located one mile southwest of Coal Bluff. This is a new mine which was opened in June. It is a shaft fifteen feet deep. The coal is six feet thick. It will be ventilated by a fan. This company is sinking another shaft south of Fontanet one-half mile.

SEELEYVILLE MINE.

Owned by P. Ehrlich & Co. Located at Seeleyville, on the T. H. & I. Railroad. The mine was found in good condition on both my visits.

FOLEY'S MINE.

Owned by Otter Creek Coal Company. Located three and one-half miles north of Cloverland. This mine was visited twice. In March they sunk an air shaft, and the mine was in pretty good condition. When visited the second time there were two new openings, and the men were divided among them until there was not a sufficient number in any of them to bring them under the law.

GRANT MINE.

Owned by Grant Coal Co. Located one mile east of Grant, on the I. & St. L. R. R. This mine has been in operation for several years, but was run on a small scale for some time. In the early part of this year the number of men employed was increased, until May 3 (the date of my visit) there were thirty-eight men employed. The ventilation at that time was poor. I asked that a new furnace be built at once, which was agreed to, and the bank boss promised to have the work done in ten days. Before the expiration of the ten days the mine was shut down, and since that time has not employed enough men to bring them under the requirements of the law.

In addition to the mines already mentioned in this county, Woodruff & Trunkey have put down a shaft near Grant, and John Triplet has opened a drift near the Foley mine, and the Stevens Coal Co. are opening a drift near the Eppart mine, on the C. & I. C. R. R.

VERMILLION COUNTY.

SHARKEY'S.

Owned by Sharkey Coal Co. Located one mile northwest of Clinton; is in good condition.

BROWN'S.

Owned by Wm. Brown. Located just northeast of Sharkey's. The ventilation of this mine is good when the doors are all kept shut.

NORTON CREEK, NOS. 1 AND 2.

Owned by Norton Coal Co. Located three miles northwest of Clinton. At the time of my visit to this mine there was an abundance of air to supply all the men employed, but it was not properly distributed. A committee of miners, with the bank boss and I, went around the mine. When we had examined the mine I suggested what ought to be done. After the bank boss had agreed to do the work, and the committee promising to inform me if it was not done, I left. Since that time I have had no complaints from this mine. No. 2 mine was shut down March 1, 1888. I am informed it will be abandoned, as the company intends to sink a mine to get the coal they expected to get from this one, but can not very well do it on account of the coal dipping away from the slope.

VANDEBURGH COUNTY.

INGLESIDE.

Owned by John Ingle & Co. Located just west of Evansville. During the year this company lost a lot of their works, which were located north of the shaft, by what is known as a creep, the rooms and entries caving in, or the top and bottom being squeezed together. Aside from this there is no material change in the mine. The air is good.

SUNNYSIDE.

Owned by Sunnyside Coal and Coke Company. Located north of Evansville. This company has put up a large air compressor, and have machines for drilling the coal. They claim it cheapens the cost of producing the coal. The ventilation is good.

UNITY.

Owned by the Sunnyside Coal and Coke Company. Located north of Evansville on the line of the P., D. & E. R. R. This mine has been operated on a small scale this year. The company seems to be giving special attention to connecting this and the Sunnyside mine by means of an entry from either mine. At the time of my last visit they had not yet made the connection. The air was good.

FIRST AVENUE.

Owned by the First Avenue Coal Company. Located north of Evansville. This company drove an entry north and connected the entries in which the men were at work at the time, making the air better than at any time since I have been Inspector. If they do not become careless there is no good reason why they should not have plenty of air.

ECHO MINE.

Owned by Diamond Coal Company. Located northeast of Evansville. This mine is not worked on any system; as a consequence the ventilation is not good. There were, however, at the time of my last visit, efforts being made to connect the west works with the fan. When this is done the air will be good, but not before.

WARRICK COUNTY.

FULLER MINE.

Owned by Robert Louder. Located one and one-half miles east of Boonville. The furnace, which was built last year, furnishes plenty of air for the number of persons employed. The condition of the mine is good.

DE FOREST.

Owned by B. Menden. Located three miles west of Boonville. A small force of men is employed here. The air was bad, and very few features of the law complied with.

No. 3.

Owned by Gowsley & Co. Located three and one-half miles west of Boonville. The general condition of the mine at the time of my last visit was bad.

The other mines in this County that have been spoken of in previous reports have not to my knowledge employed ten men at any time during the year, hence they are not mentioned.

Table Giving Name of Mine; also, Name and Address of all Mines in Vigo County that Employ Ten or More Men.

NAME OF MINE.	OPERATOR.	Address.	Kind of Mine.	Power Used.	Kind of Coal.	Seam Worked.	COAL THICKNESS.		Depth from Surface.	Average Number of Men Inside.	Average Number of Men Outside.	How Ventilated.
							Feet.	Inches.				
Fountain No. 1.	Coal B. M. Co.	Terre Haute.	Shaft.	Steam.	Bituminous.	L.	9	62	35	20	10	Fan.
Fountain No. 2.	Coal B. M. Co.	Terre Haute.	Shaft.	Steam.	Bituminous.	L.	9	60	162	30	3	Fan.
South Mine.	Coal B. M. Co.	Terre Haute.	Slope.	Steam.	Bituminous.	L.	9	6	30	3	3	Fan.
Kay.	Coal B. M. Co.	Terre Haute.	Slope.	Steam.	Bituminous.	L.	5	45	35	4	4	Fan.
Eppart.	Coal B. M. Co.	Terre Haute.	Drift.	Steam.	Bituminous.	L.	4	40	40	20	15	Fan.
New Edgar.	Coal B. M. Co.	Terre Haute.	Shaft.	Steam.	Bituminous.	L.	9	25	15	15	15	Fan.
Seelyville.	P. Ehrlich & Co.	Turner P. O.	Shaft.	Steam.	Bituminous.	L.	7	96	96	70	25	Furnace.
Foleys.	Otter Creek Coal Co.	Cloverland.	Drift.	Horse.	Bituminous.	L.	4	40	25	25	35	Furnace.
Grant.	Grant Coal Co.	Burnett.	Drift.	Steam.	Bituminous.	L.	4	35	35	35	35	Furnace.

Table Giving Name of Mine; also, Name and Address of Owners of all Mines in Vanderburgh County that Employ Ten or More Men.

NAME OF MINE.	OPERATOR.	Address.	Kind of Mine.	Power Used.	Kind of Coal.	Seam Worked.	COAL THICKNESS.		Depth from Surface.	Average Number of Men Inside.	Average Number of Men Outside.	How Ventilated.
							Feet.	Inches.				
Ingle side.	J. Ingle & Co.	Evansville.	Shaft.	Steam.	Bituminous.	K.	4	263	90	10	10	Fan.
Sunnyside.	Sunnyside Coal Co.	Evansville.	Shaft.	Steam.	Bituminous.	K.	4	266	40	8	8	Fan.
Unity.	Sunnyside Coal Co.	Evansville.	Shaft.	Steam.	Bituminous.	K.	4	257	19	4	4	Fan.
First Avenue.	First Avenue Coal Co.	Evansville.	Shaft.	Steam.	Bituminous.	K.	4	260	27	6	6	Fan.
Echo.	Diamond Coal Co.	Evansville.	Shaft.	Steam.	Bituminous.	K.	4	257	21	4	4	Fan.

Table Giving Name of Mine; also, Name and Address of Owners of all Mines in Warrick County that Employ Ten or More Men.

NAME OF MINE.	OPERATOR.	Address.	Kind of Mine.	Power Used.	Kind of Coal.	Seam Worked.	COAL THICKNESS.		Depth from Surface.	Average Number of Men Inside.	Average Number of Men Outside.	How Ventilated.
							Feet.	Inches.				
Fuller	R. Lowder	Booneville	Shaft	Steam	Bituminous	K.	9	9	45	17	3	Furnace.
De Forest	B. Menden	Evansville	Shaft	Steam	Bituminous	K.	6	95	88	15	2	Furnace.
No. 3	Grossly & Co.	Evansville	Shaft	Steam	Bituminous	K.	9	6	88	13	2	Furnace.

Table giving Name of Mine; also, Name and Address of Owners of all Mines in Pike County that employ ten or more Men.

NAME OF MINE.	OPERATOR.	Address.	Kind of Mine.	Power Used.	Kind of Coal.	Seam Worked.	COAL THICKNESS.		Depth from Surface.	Average Number of Men Inside.	Average Number of Men Outside.	How Ventilated.
							Feet.	Inches.				
Ayrshire	D. Ingle	Oakland	Slope	Steam	Bituminous	L.	4	8	65	138	12	Fan.
Whitman	C. Townsend	Whitman	Shaft	Steam	Bituminous	L.	4	50	50	60	10	Fan.
Blackburn	S. Bettaman	Blackburn	Slope	Steam	Bituminous	L.	6	40	40	23	6	Furnace.
Roger Bros.	Roger Bros.	Washington	Shaft	Steam	Bituminous	L.	7	80	80	30	4	Fan.

Table giving Name of Mine; also, Name and Address of Owners of all Mines in Sullivan County that Employ ten or more Men.

NAME OF MINE.	OPERATOR.	Address.	Kind of Mine.	Power Used.	Kind of Coal.	Seam Worked.	COAL THICKNESS.		Depth from Surface.	Average Number of Men Inside.	Average Number of Men Outside.	How Ventilated.
							Feet.	Inches.				
Pioneer	C. Coal Co.	Shelburn.	Shaft	Steam	Bituminous	L.	6	248	37	8	Fan.	
Shelburn No. 2	Shelburn Coal Co.	Shelburn.	Shaft	Steam	Bituminous	L.	4	248	32	5	Fan.	
Hancock	Hancock & Kohle.	Sullivan.	Shaft	Horse	Bituminous	L.	4	50	31	3	Furnace.	
Lynton	Lynton Coal Co.	Sullivan.	Shaft	Steam	Bituminous	L.	9	70	37	4	Furnace.	
Dugger	Dugger & Neil.	Dugger.	Shaft	Steam	Bituminous	L.	4	70	160	14	Fan.	
Superior	Superior Coal Co.	Dugger.	Shaft	Steam	Bituminous	L.	9	100	15	5	Fan.	
New Pittsburgh	P. C. & Coke Co.	New Pittsburgh.	Drift	Steam	Bituminous	L.	9	60	75	20	Fan.	

Table giving Name of Mine; also, Name and Address of Owners of all Mines in Vermillion County that Employ ten or more Men.

NAME OF MINE.	OPERATOR.	Address.	Kind of Mine.	Power Used.	Kind of Coal.	Seam Worked.	COAL THICKNESS.		Depth from Surface.	Average Number of Men Inside.	Average Number of Men Outside.	How Ventilated.
							Feet.	Inches.				
Sharky	Sharky Coal Co.	Clinton.	Drift.	Steam	Bituminous	L.	4	90	70	7	Furnace.	
Brown's	Brown.	Clinton.	Drift.	Horse	Bituminous	L.	4	70	32	4	Furnace.	
Norton Creek Nos. 1-2	Norton Creek Coal Co.	Clinton.	Drift.	Horse	Bituminous	L.	6	40	106	13	Furnace.	

Table giving Name of Mine; also Name and Address of Owners of all Mines in Knox County that Employ ten or more Men.

NAME OF MINE.	OPERATOR.	Address.	Kind of Mine.	Power Used.	Kind of Coal.	Seam Worked.	COAL THICKNESS.		Depth from Surface.	Average Number Men Inside.	Average Number Men Outside.	How Ventilated.
							Feet.	Inches.				
Indian Creek.	Indian Creek Coal Co.	Bicknell.	Shaft. . .	Steam . .	Bituminous . .	K.	4	4	95	60	4	Fan.

Table giving Name of Mine; also Name and Address of Owners of all Mines in Perry County that Employ ten or more Men.

NAME OF MINE.	OPERATOR.	Address.	Kind of Mine.	Power Used.	Kind of Coal.	Seam Worked.	COAL THICKNESS.		Depth from Surface.	Average Number Men Inside.	Average Number Men Outside.	How Ventilated.
							Feet.	Inches.				
Sioux No. 2.	A. C. Coal Co.	Cannelton	Drift. . .	Horse . .	Semi-Block . .	F.	3	3	150	48	12	Furnace.
Bergenroth	Bergenroth Bros	Troy	Shaft. . .	Steam . .	Bituminous . .	G.	3	3	140	20	2	

Table giving Name of Mine; also Name and Address of Owners of all Mines in Parke County that Employ ten or more Men.

NAME OF MINE.	OPERATOR.	Address.	Kind of Mine.	Power Used.	Kind of Coal.	Seam Worked.	COAL THICKNESS.		Depth from Surface.	Average Number Men Inside.	Average Number Men Outside.	How Ventilated.
							Feet.	Inches.				
No. 4	Parke County Coal Co .	Rosedale.	Shaft.	Steam	Semi-Block	L.	4	. 6	80	7	7	Fan.
No. 5	Parke County Coal Co .	Rosedale.	Shaft.	Steam	Bituminous	L.	5	. 6	80	10	10	Fan.
No. 6	Parke County Coal Co .	Rosedale.	Shaft.	Steam	Bituminous	L.	6	. 10	70	18	18	Fan.
Black Diamond	Stevens Coal Co	Carbon.	Slope.	Steam	Block	L.	8	. 10	38	10	2	Fan.
Blaine Shaft	B. B. Coal Co	Brazil	Shaft.	Steam	Block	J.	8	. 9	40	75	6	Fan.
Blaine Slopes 2 and 3.	B. B. Coal Co	Brazil	Slope.	Horse	Block	L.	4	. 6	30	38	1	Fan.
Cox No. 1.	B. B. Coal Co	Brazil	Shaft.	Steam	Bituminous	L.	5	. 6	100	100	10	Fan.
Cox No. 2.	B. B. Coal Co	Brazil	Shaft.	Steam	Bituminous	L.	5	. 6	50	95	5	Fan.

Table giving Name of Mines; also, Name and Address of all Mines in Daviess County that Employ Ten or More Men.

NAME OF MINE.	OPERATOR	Address.	Kind of Mine.	Power Used.	Kind of Coal.	Seam Worked.	COAL THICKNESS.		Depth from Surface.	Average Number of Men Inside.	Average Number of Men Outside.	How Ventilated.
							Feet.	Inches.				
Saltbur Spring	Cable & Kaufman	Washington	Shaft	Steam	Bituminous	L.	4	..	60	20	5	Fan.
Eureka	Cable & Kaufman	Washington	Slope	Horse	Bituminous	L.	3	..	48	10	3	Furnace.
Maple Valley	Cable & Kaufman	Washington	Shaft	Steam	Bituminous	L.	6	6	74	110	9	Furnace.
No. 4	Cable & Kaufman	Washington	Shaft	Steam	Bituminous	L.	4	..	70	120	12	Fan.
No. 6	Cable & Kaufman	Washington	Shaft	Steam	Bituminous	L.	6	6	49	23	3	Fan.
Rickeys	Canal Coal Co.	Cannelburg	Shaft	Steam	Cannel & Bitu.	I.	4	..	100	28	6	Fan.
Wilsons	Wilson Coal Co.	Washington	Shaft	Steam	Bituminous	L.	3	6	98	69	7	Fan.
Wilsons, No. 2	Wilson Coal Co.	Washington	Shaft	Steam	Bituminous	L.	6	..	67	10	1	Fan.
Mutual, No. 2	Mutual M. Co.	Cannelburg	Shaft	Steam	Cannel & Bitu.	L.	5	..	100	25	8	Fan.

Table giving Name of Mines; also, Name and Address of Owners of all Mines in Dubois County that Employ Ten or More Men.

NAME OF MINE.	OPERATOR.	Address.	Kind of Mine.	Power Used.	Kind of Coal.	Seam Worked.	COAL THICKNESS.		Depth from Surface.	Average Number of Men Inside.	Average Number of Men Outside.	How Ventilated.
							Feet.	Inches.				
Rosebank	J. C. Foote	Huntingburgh	Drift	Horse	Bituminous	L.	4	..	50	15	1	Furnace.
Barronian	A. Barronian	Huntingburgh	Shaft	Steam	Bituminous	L.	4	..	69	14	2	Fan.

Table giving Name of Mines; also, Name and Address of Owners of all Mines in Fountain County that Employ Ten or More Men.

NAME OF MINE.	OPERATOR.	Address.	Kind of Mine.	Power Used.	Kind of Coal.	Seam Worked.	COAL THICKNESS.		Depth from Surface.	Average Number of Men Inside.	Average Number of Men Outside.	How Ventilated.
							Feet.	Inches.				
Harrison	Harrison B. Coal Co	Veedersburgh . .	Slope . .	Steam . .	Block	I . . .	3	4	30	28	5	Furnace.

Table giving Name of Mines; also, Name and Address of Owners of all Mines in Greene County that Employ Ten or More Men.

NAME OF MINE.	OPERATOR.	Address.	Kind of Mine.	Power Used.	Kind of Coal.	Seam Worked.	COAL THICKNESS.		Depth from Surface.	Average Number of Men Inside.	Average Number of Men Outside.	How Ventilated.
							Feet.	Inches.				
Island City, No. 1 . . .	Island Coal Co	Linton	Shaft . .	Steam . .	Bituminous . .	L . . .	5	5	60	240	12	Fan.
Island City, No. 2 . . .	Island Coal Co	Linton	Shaft . .	Steam . .	Bituminous . .	L . . .	5	5	70	60	11	Fan.
Summit	Dugger, Neil & Co . . .	Dugger	Shaft . .	Steam . .	Bituminous . .	L . . .	5	6	76	68	9	Fan.

Table Giving Name of Mines; also Name and Address of Owners of all Mines in Clay County that Employ Ten or More Men.

NAME OF MINE.	OPERATOR.	Address.	Kind of Mine.	Power Used.	Kind of Coal.	Seam Worked.	COAL THICKNESS.		Depth from Surface in Feet.	Average No. of Men Employed Inside.	Average No. of Men Employed Outside.	How Ventilated.
							Feet.	Inches.				
Gart. No. 1.	B. B. Coal Co	Brazil	Shaft.	Steam	Block	J	3	105	35	5	Fan.	
Gart. No. 2.	B. B. Coal Co	Brazil	Shaft.	Steam	Block	J	3	130	275	10	Two fans.	
Gart. No. 3.	B. B. Coal Co	Brazil	Slope.	Steam	Block	J	3	75	30	4	Fan.	
Gart. No. 4.	B. B. Coal Co	Brazil	Shaft.	Steam	Block	J	3	90	105	6	Fan.	
Gart. No. 5.	B. B. Coal Co	Brazil	Shaft.	Steam	Block	J	3	70	161	7	Fan.	
Gart. No. 6.	B. B. Coal Co	Brazil	Shaft.	Steam	Block	J & J	3	95	235	10	Fan.	
Gart. No. 7.	B. B. Coal Co	Brazil	Shaft.	Steam	Block	J	4	100	230	10	Fan.	
Gart. No. 8.	B. B. Coal Co	Brazil	Shaft.	Steam	Block	J & J	4	167	12	8	Fan.	
Gart. No. 9.	B. B. Coal Co	Brazil	Shaft.	Steam	Block	J & J	4	80	80	5	Fan.	
Gart. No. 10.	B. B. Coal Co	Brazil	Shaft.	Steam	Block	J	3	106	35	5	Fan.	
Chicago.	B. B. Coal Co	Brazil	Shaft.	Steam	Block	J	3	107	63	5	Fan.	
Campbell.	B. B. Coal Co	Brazil	Shaft.	Steam	Block	J & J	4	82	165	7	Fan.	
Crawford's No. 1.	Crawford Coal Co	Brazil	Shaft.	Steam	Block	J	3	25	30	2	Furnace.	
Crawford's No. 2.	Crawford Coal Co	Brazil	Shaft.	Steam	Block	J	3	80	25	5	Fan.	
Crawford's No. 3.	Crawford Coal Co	Brazil	Slope	H. Power	Block	J	3	40	275	10	Fan.	
Pennut Mine	E. L. Winklepleck	Knightsville.	Shaft.	Steam	Block	J	3	75	20	4	Fan.	
Star.	E. L. Winklepleck	Knightsville.	Shaft.	Steam	Block	J	3	80	30	21	Fan.	
Peanut No. 2	E. L. Winklepleck	Knightsville.	Shaft.	Steam	Block	J	3	10	50	5	Fan.	
Nickel Plate	E. L. Winklepleck	Knightsville.	Shaft.	Steam	Block	J	3	40	25	4	Fan.	
Chicago.	Jackson C. & M. Co	Brazil	Shaft.	Steam	Block	J & J	3	102	214	8	Two fans.	
South Slope	A. P. Coal Co	Brazil	Shaft.	Steam	Block	J	3	40	275	10	Fan.	
Newburg	P. Ehrlich & Co	Turner P. O	Slope	Steam	Block	J	3	5	20	6	Fan.	
Eureka	P. Ehrlich & Co	Turner P. O	Shaft.	Steam	Bituminous	J	7	75	20	4	Fan.	
Stanton	J. Summers	Turner P. O	Shaft.	Steam	Block	J	3	80	15	3	Fan.	
Brushville	Gart. C. & Mining Co	Stanton	Shaft.	Steam	Bituminous	J	6	38	63	7	Fan.	
Watson's No.	Gart. C. & Mining Co	Brazil	Shaft.	Steam	Bituminous	J	6	60	83	8	Fan.	
Vandalia.	Ziller & Sigler.	Harmony	Shaft.	Steam	Block	J	3	50	57	6	Fan.	
Diamond.	Ziller & Sigler.	Harmony	Shaft.	Steam	Block	J & J	3	37	70	5	Fan.	
Church Hill	Weaver, Todd & Co	Center Point	Shaft.	Steam	Block	J	3	69	250	10	Fan.	
Litchfield.	Coal Bluff M. Co	Terre Haute.	Shaft.	Steam	Block	J	3	37	150	8	Fan.	
Jumbo.	Watson, Little & Co	Brazil	Shaft.	Steam	Block	J & J	3	90	41	3	Fan.	
Harrison	C. & I. B. Coal Co.	Terre Haute.	Shaft.	Steam	Block	J & J	4	70	245	3	Fan.	
Morris	John Morris.	Brazil	Shaft.	Steam	S. Block	J	4	90	50	9	Fan.	
Lancaster No. 2	Lancaster Coal Co	Clay City	Shaft.	Steam	Block	J	4	72	44	3	Fan.	
							4	60	161	15	Fan.	

Number of Mines and Men Employed in Each County.

COUNTIES.	No. of Mines.	No. of Men Employed Inside.	No. of Men Employed Outside.
Clay	45	3,110	213
Daviess	15	438	61
Dubois	10	60	12
Fountain	10	73	14
Green	9	398	39
Gibson	3	6	3
Knox	3	65	7
Martin	3	15	3
Owen	5	30	5
Perry	12	114	20
Parke	17	639	70
Pike	18	291	50
Sullivan	13	439	70
Spencer	10	35	10
Vigo	17	563	65
Vermillion	5	220	30
Vanderburgh	5	197	32
Warrick	12	75	12
Warren	2	17	2
Total	217	6,685	718