# REPORT

# State Mine Inspector

YEAR ENDING OCTOBER 31, 1890.

TO THE GOVERNOR.

INDIANAPOLIS:
B. BURFORD, CONTRACTOR FOR STATE PRINTING AND BIN

891.

THE STATE OF INDIANA, EXECUTIVE DEPARTMENT, INDIANAPOLIS, December 20, 1890.

Received by the Governor, examined and referred to the Auditor of State for verification of the financial statements.

Transmitted to the Secretary of State for publication, upon the order of the Board of Commissioners of Public Printing and Binding.

WILLIAM B. ROBERTS,

Private Secretary.

Filed in the office of the Secretary of State of the State of Indiana, January 17, 1891.

CLAUDE MATTHEWS,

Secretary of State.

To His Excellency, ALVIN P. HOVBY,

Governor of Indiana:

Six—I herewith transmit my report as Mine Inspector for the year ending October 31, 1890.

It summarizes, as fully as I could ascertain, the facts concerning the output, capital, and men employed, together with fatal and non-fatal accidents, in the mines of the State that are subject to inspection.

I have also included a short account of each mine visited, giving the condition, capacity, and style of mining at each, and now submit the result of my labors in the hope that it will help to increase the knowledge of and interest in the development of the great wealth and power that lies hidden in the coal fields of Indiana.

Respectfully,

THOS. R. TISLOW,

Inspector of Mines.



To the Governor:

A combination of adverse circumstances for the past two or three years has borne heavily upon the mining industry of this State. A series of warm winters greatly lessened both local and foreign demand. The discovery and rapid development of the great Natural Gas Belt of the State almost annihilated the sale of other fuel in the sections where found and in the adjacent territory where pipe lines supplied gas, and in several localities strikes and lockouts greatly diminished the output. Notwithstanding these serious drawbacks, the coal production of the year has increased about 573,500 tons as compared with 1887, no doubt almost wholly due to the opening of a vast number of new mines. It is highly gratifying to be able to say that the outlook is favorable for a prosperous season both for miners and mine operators.

The previous stagnation has been, in a measure, beneficial for many obvious reasons; some old mines have been worked out and abandoned, and it has happened in this industry, as it happens to all in a rapidly growing country like this, that the demand has overtaken the supply, and with the better feeling among miners and operators now prevailing, it can only happen that business in the coal industry of the State will be fairly active the ensuing year.

It ought to be stated also that the reputation of Indiana coal is rising. Block coal has of course been always highly esteemed, but the bituminous coal, as wider developments are made, shows such an extensive range of quality that it is rapidly becoming a favorite coal in the commercial centers sufficiently near to permit its transportation.

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I desire to commend the recommendation of my predecessors as to amendments of the mining laws, and to suggest that stringent legislation be enacted requiring reports of casualties to be made to the proper officer.

I hope I may be pardoned for referring to the unfortunate condition of affairs in this office by litigation over the construction of the legislation relating to it. I was greatly hampered and embarrassed by lack of funds and lack of assistance, and what has been accomplished has been done with great effort, under circumstances most adverse.

#### ACCIDENTS.

A perusal of the subjoined list shows that in a vast majority of cases injuries result from falling slate, and investigation convinces me that nearly or quite all were avoidable, and due to carelessness of the men themselves or to the mine foreman. Long immunity from injury produces in men a contempt of danger, and they neglect to take due precaution. They delay setting props, or the mine boss delays sending them in. They venture under roofs or coal they know to be dangerous; and so accidents happen. An examination of the list shows that the laws of the State have been wastly beneficial, in that their enforcement has eliminated that class of accidents formerly so common, due to defective shatts, machinery and ventilation.

The following is a list of fatal accidents:

February 16, 1890. A man whose name I could not learn, killed by fall of slate in Mine No. 6, owned by Cabel & Kauffman, Washington, Daviess County.

March 11, 1890. Man, name unknown, killed by falling slate in Wilson & Co.'s mine, in Daviess County.

March 15, 1890. Mers Collenburg, killed by falling slate in Lyonton Coal Co.'s mine, in Sullivan County.

September 26, 1890. Wm. Harvey, killed by fall of slate, and at same time, Wallace Hinton and Henry Lively were injured. The last two were not miners, but were visiting Harvey at the time the casualty occurred. Henry Lively had a leg broken in several places and was otherwise bruised so that it was thought he would die, but I have not learned if he did.

November 2, 1890. Michael Eskone, killed by falling slate in Lancaster Mine No. 2, owned by Lancaster Coal Co., Clay County.

#### ACCIDENTS NOT FATAL.

January 1, 1890. Wm. Perry, leg broken by fall of slate in Jumbo Mine, owned by Watson & Little, Clay County.

January 20, 1890. Richard Cushman, leg broken by fall of roof in the mine of Lyonton Coal Co., Sullivan County.

February 16, 1890. At Mine No. 6, operated by Cabel & Kauffman, Daviess County, a man (name not learned) had both thighs broken by fall of slate.

February 25, 1890. T. W. Miller, collar bone broken by fall of roof.

March 1, 1890. Caleb Augborn, leg broken at Church Hill Mine, of Weaver, Todd & Co., Clay County.

March 20, 1890. Thomas O'Connor, leg broken by fall of roof in Mine No. 1, owned by Coal Bluff Mining Co., Vigo County.

March —, 1890. Man (name not learned) had an arm broken by fall of roof in Sullivan Mine, owned by C. P. Eldrick & Co., Vigo County.

April 12, 1890. John Brashear, leg broken by fall of slate in Mine No. 10, owned by the Brazil Block Coal Co., Clay County.

April 15, 1890. John Boweray, leg broken by fall of roof in Diamond Mine, owned by Coal Bluff Mining Co., Vigo County. June 3, 1890. Richard Murphy, spine injured in Cox Mine,

No. 1, operated by B. B. Coal Co., Parke County.

August 25, 1890. George Mantua, crushed and ribs broken by falling slate in mine owned by Rogers & Bro., Pike County.

August —, 1890. M. W. Gore and Fred Dexter, badly burned by explosion of a keg of powder in Louder & Wooley's mine at Boonville, Warrick County.

September —, 1890. Elmer Jones, injured by flying coal from a shot in Louder & Wooley's mine, at Boonville, Warrick County.

September 30, 1890. Frederick Daniel, collar bone broken and internally injured by fall of roof in Rogers Bro.'s mine, Pike County.

October 15, 1890. John Hubbard and John Vaughn, injured by fall of slate in Mine No. 6, operated by Caleb & Kauffman, Daviess County.

November 2, 1890. Wm. Green, leg broken by fall of slate in Ayrshire mine, owned by David Ingle & Bro., Pike County. Total fatal, 7; total not fatal, 15.

#### MINES AND MINING.

The following is a list of the names and localities of the various mines, given by counties, with a brief description of their general character, condition, and method of operation:

#### CLAY COUNTY.

#### FORTNER MINE.

Located three-fourths of a mile west of Turner; operated by P. Ehrlich & Co.; capital invested, \$10,000; estimated monthly output, 3,000 tons; opened in 1889; Bituminous; seam L, 7 feet thick; 50-foot shaft; fan ventilation; men employed—inside, 50, outside, 5; steam plant; style of mining, rooms and pillars; air, scales and machinery good.

#### ANCHOR MINE, No. 1.

Located one-half mile south of Perth; operated by Coal Bluff Mining Co. This mine has two veins—upper vein, 4 feet thick; lower, 3 feet 3 inches. Shaft, 85 feet; block coal; 30 men employed inside, 2 outside; style of mining, rooms and pillars; steam plant; scales and machinery in good order; mine well ventilated.

#### EAGLE MINE.

Located at the town of Eagle; operated by the Jackson Hill Coal and Coke Co.; style of mining, rooms and pillars; fan ventilation, air good; averages 60 men inside and 7 outside.

#### Anchor Mine, No. 2.

Located one-half mile south of Perth; operated by Coal Bluff Mining Co.; 2 seams of coal, both block, upper one 4 feet, lower one 33 inches; 85-foot shaft; ventilation good; steam plant; 30 men employed inside of mine, 2 outside; style of mining, rooms and pillars.

#### POTTER MINE.

Located on Vandalia Railroad; post-office, Brazil; operated by the Crawford Coal Co. Capital, \$2,357.51. Estimated output, 60,000 tons of fire clay and 50,000 tons of block coal per month.

#### CRAWFORD No. 2.

Located one mile northeast of Knightsville. Operated by the Crawford Coal Co.; block coal; seam 3 feet thick; 90-foot shaft; well ventilated by fan; 119 men employed inside, 10 outside; style of mining, rooms and pillars; steam plant; scales and machinery in good order. This mine did not run full time.

#### CHICAGO MINE.

Located at Benwood, on T. H. & I. R. R. Operated by the Nickel Plate Coal Mining Co.; opened in 1887; shaft, 37 feet; seam, 3 feet 5 inches; block coal; fan ventilation good; steam plant. Style of mining, rooms and pillars. Scales and machinery in good order. This mine was not working full force when I visited it.

#### CRAWFORD No. 1.

Located 2½ miles north of Brazil. Operated by Crawford Coal Co. This is a double mine, but seam "I" is worked out, and seam "L" is now being worked. Seventeen men are employed inside and 1 outside; ventilation fairly good; style of mining, rooms and pillars; steam plant. Scales and machinery in good order.

#### SOMERS MINE.

Located at Staunton. Operated by Joseph Somers; bituminous; seam, 4 feet; shaft, 40 feet; ventilated by fan; air good; 45 men employed inside and 7 outside. Scales and machinery in good order. This mine has a slope for the ingress and egress of the employes.

#### CORKERY MINE, No. 6.

Located one mile west of Cardonia. Operated by Daniel Corkery. Only 3 men were employed at the mine when I visited it.

#### NICKEL PLATED MINE.

Located on T. H. & I. R. R., one and a half miles north of Knightsville. Operated by the Jackson Coal Mining Co.; block coal in both seams, which are  $3\frac{1}{2}$  feet thick respectively; shaft, 31 feet; good ventilation by fan; 250 men employed inside, 8 outside; style of mining, rooms and pillars; steam plant. Scales and machinery in good order. This mine has only run about half the year.

#### DIAMOND No. 2.

Located four miles south of Knightsville. Operated by Zeller & Sigler; opened in 1887; block coal; seam,  $3\frac{1}{2}$  feet; shaft, 67 feet; fan ventilation. Air only sufficient for number of men at present employed—170 inside, 9 outside. Style of mining, rooms and pillars. Steam plant; scales and machinery well kept.

#### HARRISON.

Located two and one-half miles east of Clay City. Operated by Chicago & Indiana Block Coal Co. Opened in 1880; block coal; seam, 4 feet; ventilation by fan, and air is good; 150 men employed inside and 25 outside. This mine employs 14 Harrison and 1 Legg machine. All the machinery, steam plant, and scales are in good condition. Style of mining, rooms and pillars.

#### No. 3.

Located three and one-half miles east of Clay City. Operated by Lancaster Block Coal Co.; opened in 1889; block coal; seam, 4 feet; shaft, 50 feet. Good ventilation by fan; 25 men employed inside and 3 outside; style of mining, rooms and pillars; steam plant; scales and machinery in good order.

#### No. 8.

Located three and one-fourth miles northwest of Perth. Operated by Brazil Block Coal Co.; block coal; shaft, 35 feet. Men employed, inside 180, outside 10; style, rooms and pillars; steam plant; good ventilation; scales and machinery in first rate condition.

#### No. 9.

Located seven miles south of Knightsville. Owned and operated by Brazil Block Coal Co.; block coal; two seams, upper, 4 feet thick, lower, 3 feet 2 inches; shafts, 70 and 96 feet respectively. Fan ventilation and air good; 45 men employed inside and 8 outside. Scales and machinery in good order. The roof in the upper seam of this mine is not good.

#### IRON AND STEEL COMPANY.

Located one and one-fourth miles north of Brazil. Owned by Major Collins. Abandoned.

#### No. 7.

Located one mile west of Cardonia; operated by the Brazil Block Coal Co., opened in 1887; seams "I" and "J" are worked at a depth of 96 feet; fan ventilation, and air good; 120 men employed inside and 7 outside; style, rooms and pillars; steam plant; scales and machinery good. This mine is very wet.

#### BONANZA.

Located one and one-half miles north of Brazil; operated by N. and C. Schrepperman; block;  $3\frac{1}{2}$  foot seam; ventilated by fan fairly well. At time of visit, scales and machinery were in good order.

#### No. 10.

Located three-fourths of a mile north of Perth, on the I. & St. L. R'y. Operated by Brazil Block Coal Co. This mine has two veins—top vein  $4\frac{1}{2}$  feet, lower vein 3 feet; shaft, 132 feet to top vein, 165 to lower; block coal; 45 men employed in top vein and 15 in the lower one; 8 men outside. This mine employs 7 Harrison and 2 Legg machines. Air, scales and machinery good.

#### GARTSHERRE MINE No. 1.

Located on Vandalia R'y. Postoffice, Brazil. Owned and operated by the Gartsherre Coal and Mining Co. Bituminous; seam, 7 feet 2 inches; shaft, 50 feet; well ventilated by fan; 37 men inside, 7 outside. Style, rooms and pillars; steam plant. Scales and machinery in good condition.

#### GARTSHERRE MINE No. 2.

Located one mile east of Harmony. Owned and operated by Brazil Block Coal Co. Block coal, 3 feet 3 inches thick; shaft, 120 feet; good air by fan; 275 men inside, 9 outside. Style, rooms and pillars; steam plant. Scales and other machinery in good condition. This is an old mine, working seam "L."

#### CHURCH HILL MINE.

Located one and one-half miles west of Center Point. Owned and operated by Weaver, Todd & Co. Opened in 1887. Simmer block coal, 3 feet 4 inches thick; shaft, 40 feet; 13 men employed inside and 6 outside. Style, rooms and pillars; steam plant. Scales and machinery in good order, and the ventilation is fair. This is a double-seam mine, but coal "L" is almost worked out and they have driven an incline up to coal "I."

#### MORRIS MINE.

Located one-half mile north of Clay City. Owned and operated by Morris & Sheridan; opened in 1889; seam "L," block coal, 3 feet 4 inches in depth; shaft, 49 feet; good fan ventilation. Sixty-three men employed inside and 3 outside; style, rooms and pillars; steam plant; scales and machinery in good order.

#### DIAMOND MINE.

Located one-fourth of a mile north of Clay City. Owned and operated by John Andrews & Co. Simmer block coal, 4 feet in depth; shaft, 77 feet; fan ventilation; good air; 50 men inside and 8 outside; steam plant; style, rooms and pillars; machinery in good order. This mine has not worked full time. No greater number than 50 men should be employed inside this mine unless the facilities for ventilating are enlarged.

#### DIAMOND MINE.

Located three-fourths of a mile north of Clay City. Operated by Mosier & Co. Opened in 1890. Simmer block coal, 4½ feet thick. Shaft 110 feet; good fan ventilation. This is a new shaft, and when I was there had not yet engaged in thorough operation.

#### KNIGHTSVILLE MINE.

Located east of Brazil. This mine has been almost worked out and will soon be abandoned.

#### JUMBO MINE.

Located two and one-half miles northeast of Brazil. Operated by Watson & Little. Opened in 1886. Block coal; shaft 80 feet to lower vein; slope from thence to upper vein; well ventilated by fan; 155 men employed inside and 8 outside; style, rooms and pillars; plant, steam and electricity. Coal "L" and "I" is worked in this mine. Scales and machinery are in first-class condition.

#### OTTER CREEK MINE.

Located one mile north of Carbon, on the I. & St. L. R'y. Operated by the Brazil Block Coal Co. Scales and machinery in good order and the air is excellent.

#### NELLEY MINE.

Located at Hadleytown, on T. H. & I. R'y. Operated by Otter Creek Coal Co. Simmer block coal, 4½ feet thick. Good fan ventilation; 45 men employed inside and 4 outside; scales and machinery good.

#### WATSON No. 3.

Located two miles southeast of Brazil. Operated by Gartsherre Coal and Mining Co. Block coal, 3 feet 10 inches in depth; shaft, 52 feet; steam plant; style, rooms and pillars; 46 men employed inside and 4 outside. Scales and machinery in good order. Well ventilated.

#### DAVIESS COUNTY.

#### WILSON & Co.'s MINE.

Located one mile west of Washington. Opened in 1887; bituminous; seam "L," 6 feet thick; shaft, 45 feet; ventilation by fan. Air good for number of men employed—30 inside, 4 outside; style, rooms and pillars; steam plant. Machinery in good order.

#### No. 6.

Located two miles west of Washington. Operated by Cabel & Kauffman; opened in 1887; bituminous; seam "L," 5 feet thick; shaft, 42 feet; fan ventilation; air good. Employs 55 men inside and 7 outside; style, rooms and pillars; steam plant. Scales and machinery in good order.

#### No. 4.

Located one and one-fourth miles south of Washington. Operated by Cabel & Kauffman; opened in 1885; bituminous; seam "L," 3 feet thick; shaft, 44 feet; fairly ventilated by fan. Employs 40 men inside and 12 outside; style, rooms and pillars; steam plant. Scales and machinery in good condition.

#### MAPLE VALLEY.

Located three miles southwest of Washington. Operated by Cabel & Kauffman; opened in 1874; bituminous; seam "L," 5 feet thick; shaft and slope, 40 feet. Fan ventilation sufficient for number of men employed—105 inside and 8 outside; style, rooms and pillars; steam plant. Scales and other machinery in good order.

#### No. 7.

Located one and one-half miles west of Washington. Operated by Cabel & Kauffman; opened in 1882; bituminous; seam "L," 6 feet thick; shaft, 65 feet; fan ventilation. Air sufficient for number of men employed—19 inside and 9 outside; style, rooms and pillars; steam plant. Scales and machinery in good order.

#### WILSON MINE.

Located one-half mile west of Montgomery. Operated by Wilson Coal Co.; bituminous; seam "L," 4 feet thick; shaft, 96 feet; ventilation good; 28 men employed inside and 6 outside. Scales and machinery in good condition.

#### MUTUAL No. 2.

Located one mile south of Cannelburg. Operated by the Mutual Mining Co. Cannel coal; vein  $4\frac{1}{2}$  feet deep; shaft, 100 feet. Style, pillars and rooms; ventilated by fan; air good; 28 men employed inside and 6 outside. Scales and machinery in good order.

#### BUCKEYE.

Located at Cannelburg. Operated by Cabel & Penner. Cannel coal;  $4\frac{1}{2}$  feet thick; shaft, 98 feet. Style, rooms and pillars; ventilated by fan; air good for number of men employed—25 inside and 6 outside; steam plant. Scales and machinery in fair condition.

#### GREENE COUNTY.

#### ISLAND CITY No. 1.

Located one and one-half miles south of Linton. Owned by Island City Coal Co. P. H. Pinney, bank boss. Bituminous; seam "L"; ventilated by fan; air good; steam plant. Scales and machinery in first-class condition. Employs 122 men inside the mine and 12 outside. This mine complies with the law in every respect.

#### ISLAND CITY, No. 1.

Located one mile and a third south of Linton, on a branch of the I. & V. R. R.; operated by the Island City Coal Co.; bituminous, "L."; depth of coal, 6 feet; ventilated by fan; air good for the number of men working; men employed—inside, 96; outside, 20; steam plant; style of mining, rooms and pillars; scales and machinery in good condition.

#### No. 2.

Located one-half mile west of Linton. Operated by the Island City Coal Co. Opened in 1887. Bituminous; seam "L," 4 feet 10 inches thick; shaft, 96 feet; ventilated by fan; 82 men employed inside and 14 outside. Steam plant, using 14 Harrison machines, and one Legg. I consider this as one of the best ventilated mines in the State, and it has splendid roof and floor.

#### KNOX COUNTY.

#### INDIAN CREEK COAL CO.

Located one and one-half miles south of Bicknell, on the I. & V. Ry. Operated by the Indian Creek Coal Co. This mine was shut down when I visited it in June, and I did not go inside.

#### PROSPECT MINE.

Located at Vincennes. Leased and operated by Augustus Evering. I visited this mine August 2, and on inspection found bad air, as the air shaft had not yet been put down. I found from measurement that the operator had excavated the number of square yards necessary, and ordered him to at once complete the shaft, which he agreed to do. The machinery was good and running smoothly. This coal is "K," 3 feet 6 inches thick; shaft, 355 feet. Employs from 12 to 15 men, and has a fine prospect. Since my first visit the air shaft has been completed, and the operator now considers his mine safe. This is a new mine and had not yet got in full working trim when I last visited it.

#### SULLIVAN COUNTY.

#### NEW PITTSBURG.

Located 10 miles south of Farmersburg, on E. & T. H. Ry.; owned and operated by the Pittsburg Coal and Coke Co.; opened in 1886; bituminous; seam "L," 7 feet thick. This mine has two slopes, north and south; ventilated by fan; air good; employs 50 men inside and 12 outside; steam plant; style, rooms and pillars; scales and machinery in good order. Employs 12 Harrison machines.

#### HANCOCK MINE.

Located at Farnesworth, on the I. & I. S. Ry., four miles east of Sullivan; operated by Hancock & Conkle; opened in 1880; bituminous; seam "L," 4 feet thick; shaft, 74 feet; ventilated by furnace; 9 men employed inside and 3 outside; steam plant; style, rooms and pillars; scales and machinery in good order; condition of mine very good.

2-MINE INSP.

#### LYONTON.

Located at Lyonton, on the I. & I. S. Ry.; opened in 1883; bituminous; seam 6 feet thick; shaft, 45 feet; ventilated by fan; air good for present demand; employs 75 men inside and 7 outside; steam plant; style, rooms and pillars; scales and machinery in good order.

#### DUGGER.

Located at Dugger, on the I. & I. S. Ry., owned and operated by Dugger & O'Neal; opened in 1880; bituminous; "L,"  $5\frac{1}{2}$  feet thick; shaft, 100 feet; 120 men employed inside and 10 outside; steam plant; style, rooms and pillars; scales and machinery O. K. This mine has a splendid roof, and is in good condition throughout.

#### SHELBURN.

Located at Shelburn, on the E. & T. H. Ry.; operated by the owners, the Shelburn Coal Co.; opened in 1885; bituminous; seam 5 feet in depth; shaft 200 feet; ventilated by fan; air good; men employed, 30 inside and 7 outside; style, rooms and pillars; steam plant; scales and other machinery in good condition. This mine employs 2 Legg and 1 Harrison machine.

#### PITTSBURG COAL AND COKE Co.

Located at Hymera; owned and operated by the Pittsburg Coal and Coke Co.; opened in 1890; bituminous; seam "L," 5 feet thick; shaft, 50 feet; ventilated by fan; air good; 35 men employed inside and 4 outside; steam plant; scales and machinery in good condition.

#### CURRIEVILLE.

Located one-half mile north of Shelburn, on E. & I. Ry.; owned and operated by Shelburn Coal Co.; opened in 1870. This mine works two seams—top seam, 4 feet; lower seam, 6 feet. Shaft to top vein is 195 feet; to lower vein, 230 feet; ventilated by fan; sufficient air is furnished for number of men employed in mine. Number of men employed, 40 inside, 12

outside. Employs 1 Legg and 6 Harrison machines; style of mining, rooms and pillars; scales and machinery in good order. The company gives every evidence of a strict compliance with the mining laws.

#### BUNKER HILL.

Located on the I. & I. S. Ry., owned and operated by Hancock & Conkel; opened in 1880; bituminous; seam "K," 5 feet 6 inches in depth; shaft, 72 feet; ventilated by fan.

This mine of Hancock & Conkel's is situated in the coal fields of Indiana, near the southeastern boundary line of Sullivan county, five miles from the city of Sullivan, the county seat, and on the line of the Indiana & Illinois Southern Railway, five miles from direct line to Chicago, connecting with the Evansville & Terre Haute and Chicago & Eastern Illinois Railways. The mine is worked at comparatively little expense, not having any natural disadvantages to encounter, such as "rolls," "horse-backs," superfluous water, bad roofing, etc. This happy state of affairs is owing to the mine having been properly located, thus avoiding the faults so commonly found in mines working seam "K." This mine has three workable veins of coal, seam "X" being first, at a depth of 30 feet, with a soapstone roof, and having an average depth of 3 feet 4 inches, good, clean, and of a very fair quality of coal. Underlying this vein a 9-foot vein of workable fire-clay is found. This clay, having been tested, is of excellent quality for the manufacture of fire-brick and tile. Beneath this clay, and before reaching coal "K," now being worked, is found the following stratas:

Limestone, 5 feet; Gray shale, 3 feet; Black slate, 16 feet;

coming to coal "K" at a depth of 72 feet 4 inches from the surface. They find seam "K" to be 5 feet 6 inches in depth, and of excellent quality for steam and domestic purposes. It has been tested throughout Indiana and Illinois, and in the Chicago market, and is found to be superior to that produced by the same vein in any other section of the county, probably due to the lack of faults already mentioned, and to its comparative freeness from copperas rock. This seam has been worked by Hancock & Conkel for eight years, and the mine, for quality of coal and ease of production, is as good as any in

the State, and is in splendid condition. Seam "L" is now being worked ten miles further east, underlying seam "K" at a depth of 80 feet, and showing a uniform thickness of 6 feet of clean coal, thus proving Bunker Hill a three vein mine, as follows: Seam "X," 3 feet 4 inches, at a depth of 30 feet; seam "K," 5 feet 6 inches, at a depth of 72 feet, and seam "L," 6 feet, at a depth of 152 feet. Having a steam plant for putting out coal, and markets throughout Indiana and Illinois, and especially the Chicago market, the mine is perhaps on as sound a basis, and has as fine prospects for financial gain as any now operated within the borders of the State.

#### VANDERBURG COUNTY.

#### SUNNYSIDE.

Located at Evansville, and owned and operated by the Sunnyside Coal and Coke Co.; opened in 1881; bituminous; seam K, 4 feet thick; shaft 260 feet; ventilated by fan; air good; employs 100 men inside and 10 outside. The manager, Mr. Wooly, is a practical miner, and consequently keeps the mine machinery in A 1 order, both inside and outside. This mine lost one man during the past year, Frank Wise, by his car falling and catching him under it.

#### UNITY MINE.

Located at Evansville, and operated by the Sunnyside Coal Co.; bituminous; seam K, 4 feet thick; shaft 260 feet; ventilated by fan; air good; employs 90 men inside and 9 outside. This mine was idle when I visited it, and expected to remain idle until July 1, or until the machinery, etc., was fully repaired. The coal produced here is of the same quality as that mined at Sunnyside.

#### DIAMOND MINE.

Located at Evansville; owned and operated by the Diamond Coal Mining Co.; seam K, 4 feet thick; shaft 260 feet; ventilated by fan; air good; employs 31 men inside and 10 outside. This coal has not been analyzed. The average price for mining is 75 to 85 cents. No complaint of scales. Prospect good.

#### INGLESIDE.

Located just west of Evansville, on the Belt Railway; owned and operated by J. Ingle & Co.; bituminous; seam "K," 4 feet thick; shaft, 265 feet; ventilated by fan; air good; employs 64 men inside and 10 outside. This mine is one of the oldest in the State, being opened about the year 1850. I know of no other mine in the State that has been in continuous operation for so long a period. I found everything in and about this mine in good order; the men were all satisfied, and the coal supply will last for years yet.

#### FIRST AVENUE MINE.

Located at Evansville, on Belt Railway; owned and operated by the First Avenue Coal Co.; bituminous; seam "K," 4 feet thick; shaft, 266 feet; ventilation by fan. By running the fan at a higher rate than when I visited the mine, they can have all the air they want. This mine is an old one, and employs 40 men inside and 8 outside. Scales and machinery were in fine order. Outlook good.

#### VIGO COUNTY.

#### STAR MINE, No. 2.

Located at Fontanet; operated by Coal Bluff Mining Co.; opened in 1888; bituminous; seam "L," 5 feet thick; shaft, 50 feet; ventilated by fan; air good; 93 men employed inside and 5 outside; style, rooms and pillars; steam plant; scales and machinery in good order.

#### FOUNTAIN, No. 1.

Located at Fontanet, on the I. & St. L. Ry.; operated by Coal Bluff Mining Co.; opened in 1881; bituminous; seam "L," 6 feet 6 inches thick; shaft, 60 feet; ventilated by fan; air good; employs 10 men inside and 2 outside; style, rooms and pillars; steam plant; scales and machinery in good order. This mine is almost worked out, and they were drawing the pillars when I was there.

#### HERCULES MINE.

Located at Fontanet; owned and operated by Coal Bluff Mining Co.; opened in 1885; bituminous; seam "L," 6 feet 6 inches thick; shaft, 90 feet; ventilated by fan; air good; 144 men employed inside and 15 outside; style, rooms and pillars; steam plant; employs 5 Legg and 1 Ingersoll machine; scales and machinery in good order.

#### EDGAR MINES.

Located one mile southwest of Coal Bluff; opened in 1888; owned and operated by Coal Bluff Mining Co.; bituminous; seam 6 feet thick, shaft, 28 feet; ventilated by fan; air good, 64 men employed inside and 9 outside; style, rooms and pillars; steam plant; scales and machinery in good order.

#### DIAMOND MINE.

Located three-fourths of a mile south of Coal Bluff; operated by the Coal Bluff Mining Co.; opened in 1889; bituminous; seam L, 6 feet thick; shaft, 70 feet; ventilated by fan; air good; 9: men employed inside and 7 outside; style, rooms and pillars; steam plant; scales and machinery in good condition.

#### PLAT MINE.

Located one mile east of Lodi; owned and operated by Coal Bluff Mining Co.; opened in 1889; block coal, top seam of which is 4 feet thick and lower seam  $3\frac{1}{2}$  feet; shaft, 100 feet to first seam, 130 feet to second; ventilated by fan; air good; employs 65 men inside and eight outside; steam plant; style, rooms and pillars; works 8 Harrison and two Legg machines; scales and machinery in good order.

#### BRUNETTE MINE.

Located at Brunette; owned and operated by Woodruff & Trunkey; opened in 1889; bituminous; seam L, 6 feet thick; shaft, 78 feet; ventilated by fan; air good; 40 men employed inside and 5 outside; style, rooms and pillars; steam plant; scales and machinery in good condition.

# SEELEYVILLE MINE.

Located at Seeleyville, on T. H. & I. R'y; owned and operated by P. Ehrich & Co.; opened in 1882; bituminous; seam L, 7 feet thick; shaft, 110 feet; ventilated by fan; air good; 50 men employed inside and 8 outside; style, rooms and pillars; steam plant; scales and machinery in good order.

#### FOUNTAIN COUNTY.

#### HARRISON MINE.

Located 1½ miles north of Veedersburg; owned and operated by Harrison Block Coal Co. Miners imformed me that this mine had shut down indefinitely on account of bad roof and ill ventilation, and so I did not visit it.

#### PARKE COUNTY.

## No. 6.

Owned and operated by the Parke County Coal Co.; located one mile west of Rosedale; opened in 1887; thickness of coal, 6 feet; bituminous, "L"; 81-foot shaft; ventilated by fan; air good; men employed—inside, 250; outside, 21. This mine uses 24 Harrison machines; steam plant; condition of scales and all other machinery is excellent.

#### No. 8.

Owned and operated by the Parke County Coal Co; located one-half mile west of No. 6; opened in 1889; thickness of coal, 6 feet; bituminous, "L"; 125-foot shaft; ventilated by fan; air good; men employed—inside, 70; outside, 15; uses 15 Harrison machines; style of mining, rooms and pillars; steam plant; condition of scales and other machinery is good.

# WILLIAM P. HARRISON MINE.

Located one mile west of Sand Creek, and owned and operated by William P. Harrison. This mine was opened in 1850; depth of coal, 3 feet 6 inches; bituminous; slope; ventilated by furnace; air good; men employed—inside, 18; outside, 9. Mine in fair shape, and operator is conscientiously complying with the spirit of the law.

# COAL MINE AT MINCHELL POST-OFFICE (ROSEDALE).

Operated by the Parke County Coal Co.; opened in 1888; depth of coal, 3 feet 8 inches; bituminous; L; 98-foot shaft; fan ventilation; air sufficient for number of men employed—95 inside, 9 outside; style of mining, rooms and pillars; steam plant; scales, machinery and apparatus in good condition.

Near this mine is an old abandoned shaft, full of water. Blasts in the new mine had cracked the wall between it and the old one, and, as the bottom of the working mine is lower than that of the unused one, it was feared the wall would give way and engulf the men. I was ordered to the scene on June 11, ult., and on investigation found the mine unsafe. Ordered a coffer dam, V-shaped, to be erected, that the men might have sufficient warning in case the water in volume broke through. The order was complied with, and safety assured. A letter from the Bank Committee, three weeks afterward, informed me that the water in the old mine had been drained off, and all danger from that source averted.

# Coxville, No. 1.

Operated by Brazil Block Coal Co.; located one-half mile east of Rosedale; depth of coal, 6 feet; bituminous; I, 90-foot shaft; fan ventilation; air good; men employed—inside, 200;

outside, 11. This mine has 10 Harrison machines. Style of mining, rooms and pillars; steam plant. Operators apparently complying with the statutes.

#### Coxville, No. 2.

Located at Coxville; operated by Brazil Block Coal Co.; mine opened in 1887; bituminous, L; depth of coal, 5 feet 6 inches; 30-foot shaft; fan ventilation; air perfect; men employed—inside, 75; outside, 5; steam plant; scales and machinery in good condition.

#### SAND CREEK, No. 2.

Located a short distance northwest of Sand Creek; operated by the Wyandotte Coal and Mining Co.; opened in 1877; depth of coal, 3 feet 10 inches; bituminous; drift, L; furnace ventilation; air cut off by "gob" pile on fire and a roof cave in; but at the time of my visit there, in June, they were putting up "bradishes" to smother the fire, and cutting a new air shaft to the furnace, which had been fireless for two years. A letter from the company stated that this work was accomplished in sixty days after my visit. The mine and its apparatus is in ill shape.

#### PIKE COUNTY.

#### AYRSHIRE MINE.

Owned and operated by David Ingle & Brother; located at Ayrshire, a station on the L., E. & St. L. R. R., about seven miles south of Petersburg, the capital of the county; 56-foot slope; men employed—inside, 56; outside, 8.

This mine produces a most excellent steam and coking coal; it is also very fine for domestic use. In connection with the mine are 54 coke ovens, producing as good coke as is made in the West. Some of the ovens, however, are idle, as it is not found profitable to use anything but slack for coking. The head works and machinery are in good condition, and the mine is well ventilated by fan. Seam worked "L," 5 feet 6 inches thick.

#### ROGERS' MINE.

Owned and operated by Rogers Bros.; located on White River, at crossing of Evansville & Indianapolis Railway. Mine in fair condition, but extremely difficult to drain and keep dry. Seam "K," which is here from 7 to 8 feet thick, and a very good steam coal. The shaft is 40 feet deep, ventilated by fan; good air; men employed—35 inside; 4 outside; scales and machinery first-class.

#### BLACKBURN MINE.

Located on the E. & I. R. R., about three miles northeast of Petersburg; slope; seam, "K," 7 to 9 feet in thickness; men employed—inside, 28; outside, 5; ventilated by furnace; ample air.

On February 28, last, this mine was flooded by overflow from White River, at which time it was operated by the lessee, Mr. S. Bettaman, who refused to provide pumps and clear the mine of the deluge. Mr. F. B. Posey, the owner, then had pumps constructed, under my supervision, and drained the mine. He has been operating it continuously since then, at its full capacity.

Blackburn Mine has splendid roofing, and makes but little water, and is a fat coking coal, much esteemed for domestic use and steam. In connection with the mine are 9 coke ovens to work up the slack, which makes a bright, heavy, laminated coke, very strong and firm, but containing too much sulphur for foundry use.

#### LITTLE'S MINE.

Located at Little's Station, on the E & I. R. R.. This is the same coal worked at Rogers and Blackburn mines, of the same general thickness and quality. The mine is owned and operated by S. W. Little, and it and its appurtenances are in good condition. On my first visit to this mine complaint was made of bad air, but, at my suggestion, a fan was put in, and an ample supply of good air obtained. On June 20, ult., tested scales here, and found them correct.

#### WARRICK COUNTY.

#### LOUDER & WOOLEY'S MINE.

Located one forth of a mile east of Boonville; opened in 1870; owned and operated by Louder and Wooley; bituminous; seam "K,"  $6\frac{1}{2}$  feet thick; shaft, 42 feet; ventilated by furnace; splendid air; employs 22 men inside and 4 outside. This mine is on the Boonville branch of L., E. & St. L. Ry. Scales and machinery are in good order.

#### ROBERT GOUGH MINE.

Located one-fourth of a mile east of Boonville; owned and operated by Robert Gough; opened in 1874; bituminous; seam "K,"  $6\frac{1}{2}$  feet thick: shaft, 42 feet; ventilated by furnace; air good; employs 18 men inside and 4 outside; steam plant; apparatus in good order.

#### STAR MINE.

Located within one-half mile of Newburgh, on the E. S. & N. Ry. (Dummy Line), and Ohio River; owned by C. F. Hopkins and Mr. Parson, leased to John Ingle & Co., and operated by John Archibald; bituminous; seam "K;" shaft, 125 feet; furnace ventilation; air good; 10 men inside and 2 outside; apparatus in good order.

# DAVISON'S MINE.

Located on L. E. & St. L. Ry., near Boonville; operated by Gosler & Swormstedt; post-office address, Evansville; bituminous; "K," 5 feet thick; shaft, 90 feet; furnace ventilation; air good; 20 men inside and 2 outside; style, rooms and pillars; steam plant; scales, wire rope, etc., in good order; James Lord, bank boss, De Forrest, Ind.

Nota Bena.—The collieries of Indiana, with one exception, employ steam for hoisting, etc. The exception is Jumbo Mine, Clay County, which uses both steam and electricity.

Rooms and pillars is the almost universal method employed in mining, Sunnyside Mine, Vanderburgh County, being the only one, I believe, that departs from that style and adopts the cheap, but rather questionable, mode of "long wall" work.

Capital and output will be found in tabular statement in the closing pages of this report.

#### MINOR MINES.

The following mines have, by force of circumstances, been brought to my notice. They are being worked periodically in a small way, and devote their output wholly for local demand.

Mrs. Jane Posey this year put a 75 foot shaft down on her farm,  $2\frac{1}{2}$  miles east of Petersburg, Pike County, and found bituminous coal 9 feet thick. This is a fine steam coal, but operations at the mine are meagre and not yet systematized.

At Otwell, 10 miles east of Petersburg, Pike County, a 90 foot shaft has been put down. A good steam coal,  $4\frac{1}{2}$  feet thick, was found. This, too, is a new mine and has not been developed.

Elijah Smith is working a drift mine 3 miles east of Petersburg, Pike County. The seam is 6 feet thick, and the coal is of excellent quality.

John W. Bradfield is getting out fine coal from a 7 foot vein on his farm, 4 miles northeast of Pertersburg, Pike County.

Jerome B. Borer mines a fair quality of steam and domestic coal found in a 5 foot vein on the farm of Samuel H. Stuckey, 1½ miles north of Petersburg, Pike County. This mine, for length of time worked each year, makes quite a respectable showing in output. This mine also produces a fine quality of fire clay.

Malott's Mine,  $2\frac{1}{2}$  miles southwest of Petersburg, Pike County; seam is  $4\frac{1}{2}$  feet thick; good bituminous coal; 35 foot shaft.

McMurray's mines, 4 miles east of Petersburg, Pike County; has been opened about ten years; bituminous; coal  $4\frac{1}{2}$  feet thick; slope.

Wash. Massey's mine, located at Massey's Bridge, on Patoka River, about 10 miles southwest of Petersburg, Pike County; bituminous; seam, 13 feet thick, and of excellent quality; drift.

#### Crow's MINE.

Located 3 miles west of Winslow, Pike County, on the Oakland City wagon road. This mine has a 5 foot vein of good coal, and is easily worked by slope.

#### CARR'S MILL MINE.

Located 11 miles southwest of Petersburg, Pike County; bituminous; vein, 4 feet thick, reached by slope. Last summer a party consisting of a man, his wife and son were one day eating dinner just inside the mouth of the slope, when the roof caved in and crushad the life out of each one of them. Could not learn the names of the victims of the disaster.

#### FRISCO MINES.

Located at Frisco, Gibson County; bituminous; seam,  $4\frac{1}{2}$  feet thick; shaft; steam plant; opened last winter.

#### MONROE CITY MINES.

Located at Monroe City, Knox County; opened last summer; seam, 5 feet thick; shaft, 70 feet; bituminous; steam plant.

#### GRIFF'S MINES.

Located  $\frac{3}{4}$  of a mile northeast of Morgan's Ferry, Knox County; drift;  $4\frac{1}{2}$  feet thick; P. O., Petersburg.

Hundreds of small mines are being operated in Indiana, but it has been impossible for either me or my deputy to learn their names, character, location, etc. Their history, or decription, would be of local interest only.

#### DUBOIS COUNTY.

Through the courtesy of Hon. John L. Bretz, present member of congress, I have been furnished the following interesting facts concerning the coal industry of this county:

Geo. Freeman operates a  $3\frac{1}{2}$  foot seam of coal on his farm, 1 mile southeast of Jasper; slope. This is a bituminous coal, and is used by local blacksmths and for domestic purposes.

Wm. Bretz mines a vein similar in all respects to the one just mentioned. Located near the county seat, Jasper.

Jos. Lory,  $\frac{1}{2}$  mile east of St. Authony, operates a  $3\frac{1}{2}$  foot vein of drift coal.

Mrs. Rachel Hopkins, near Jasper, mines the same vein.

These mines employ from four to six men part of the year. They supply only the local demand. There are two seams of coal in this county, the top strata alone being worked, being a drift through the hills. The lower vein is about 200 feet further down. Borings show it to be about 7 feet thick, and it is evidently the same seam found at Vincennes. All the minet are on or near the L., E. & St. L. R'y.

#### PERRY AND VERMILLION COUNTIES.

Because of imformation to the effect that the mines in these counties were not being operated, and on account of lack of time, neither myself nor deputy has visited them. It is hardly probable that much mining is being carried on in either of these counties, and no complaint has come up from them. However, they will be visited by myself or duputy as soon as opportunity affords, which will probably be about December of this year.

#### ABANDONED MINES.

A majority of the mines in the list following have been worked out and permanently abandoned:

#### WHITMAN'S.

Owned by C. Townsend; located in Pike County, 3 miles east of Oakland City.

#### CHAMPION.

Owned by Dugger & O'Neal; located 1 mile southeast of Dugger, Sullivan County.

#### SUPERIOR.

Owned by Superior Coal, Co.; located 2 miles west of Dugger, Sullivan County.

#### SYNDICATE.

Located at Farmersburg, Sullivan County. Shut down at present, but will be opened by another company.

#### SOUTH MINE.

Owned by Coal Bluff Mining Co.; located 12 miles southeast of Coal Bluff, Vigo County.

#### KAYS.

Owned by Coal Bluff Mining Co.; located  $\frac{1}{2}$  mile south of Fontanet, Vigo County.

#### EPPART MINE.

Owned by Coal Bluff Mining Co.; located ½ mile east of Key's, Vigo County.

#### LITCHFIELD.

Owned by Coal Bluff Mining Co.; located just north of Carbon, Clay County.

#### VIGO MINE.

Owned by Myers & Davis; located  $\frac{1}{2}$  mile west of Perth, Clay County.

#### CORNELL NUMEN MINE.

Located 2 miles north of Brazil, Clay County.

#### No. 5.

Owned by Parke County Coal Co.; located just west of Rosedale, Parke County.

# BLACK DIAMOND.

Owned by Stevens Coal Company; located 1 mile north of Carbon, Parke County.

#### BLAINE SHAFT.

Owned by the Brazil Block Coal Co.; located 14 miles northeast of Carbon, Parke County.

#### BLAINE SLOPES, Nos. 2 AND 3.

Owned by the Brazil Block Coal Co.; located near Blaine Shaft, in Parke County.

#### VANDALIA MINE.

Located 13 miles west of Center Point; owned by Zeller & Sigler. Abandoned last year.

#### LANCASTER No. 2.

Located  $3\frac{1}{2}$  miles east of Clay City; operated by the Lancaster Block Coal Co.; Simmer block coal,  $4\frac{1}{2}$  feet thick; shaft, 90 feet; worked out. This mine is in Clay County.

#### CRAWFORD No. 3.

Owned by the Crawford Coal Co.; located 1½ miles north of Brazil, Clay County.

#### PEANUT MINE.

Owned by E. L. Winklepleck; located \( \frac{1}{4} \) of a mile west of Knightsville, Clay County.

#### PEANUT No. 2.

Owned by E. L. Winklepleck; located at the town of Knightsville, Clay County.

#### SULPHUR SPRINGS.

Owned by Cable & Kauffman; located  $\frac{1}{2}$  mile south of Washington, Daviess County.

#### EUREKA.

Owned by Cabel & Kauffman; located \( \frac{1}{3} \) of a mile southeast of Washington, Daviess County.

#### ROSEBANK.

Owned by J. C. Frites; located 3 miles north of Huntingburg, Dubois County.

#### SUMMIT.

Owned by Dugger, O'Neal & Co.; located  $1\frac{1}{2}$  miles west of Linton, Greene County.

# Tabulated Statement for Clay County.

NAMES OF MINES.	Amount of Capital Invested.	Tonnage Output for 1890.	No. of Men Employed Inside.	
Fortner	\$10,000 00	78,000	50	
Anchor No. 1	5,000 00	40,000	30	
Eagle	10,000 00	108,000	60	7. 11. 12. 11.
Eagle	5,000 00	40,000	30	2
Potter	2,357 51	500,000	400	20
Crawford No. 2	20,000 00	84,000	119	10
Chicago	100,000 00	924,000	490	26
Somers	5,000 00	36,000	45	
Corkery No.6	1,000 00	25,000	13	4
Nickel Plate	200,000 00	720,000	250	
Diamond No. 2	10,000 00	326,000	170	9
Harrison	25,000 00	300,000	150	25
No.3	8,000 00	62,000	25	8
No.8	30,000 00	120,000	108	10
No.9	15,000 00	30,000	45	8
Iron and Steel No. 7	20,000 00	225,000	120	
Bonanza	10,000 00	140,000	120	8
No. 10	8,000 00 ]	60,000	60	
Gartsherre No. 1	9,000 00	.33,000	37	
" No.2	30,000 00	184,000	275	9
Church Hill	10,000 00	98,000	13	•
Morris	8,000 00	10,000	63	
Diamond Mine No.1	15,000 00	180,000	50	
" No.2	35.000 00	360,000	175	
Jumbo	40,000 00	300,000	155	
Nelley No.3	10,000 00	86,400	45	4
Watson No.3	10,000 00	37,000	46	

Total number of mines in Clay County, 28.

## Tabulated Statement for Daviess County.

	N	A M	E	3	OF	1	11	NI	cs.								Amount of Capital Invested.	Tonnage Output for 1890.	No. of Men Employed Inside.	Employed
Wilson Mutual, No.	٠,٠	X.															\$500,000 00	30,000	28	. 6
Buckeye	z .	•	•	•	•	٠	•	•	•	•	•	•	٠	•	٠	•	8,000 00	2,000 48,000	28 25	6
Buckeye Maple Valle	ÿ .				i												12,000 00	72,000	105	Š
No.7																	14,000 00	15,000	19	9
No.4 Wilson & Co No.6			:	•	:	:	:	:	:	:	•		:	:	:	:	13,000 00 10,000 00	75,000 53,000	140 30	12
No.6																	10,000 00	75,000	55	7

Total number of mines in Daviess County, 8.

## Tabulated Statement for Knox County.

	Names of Mines.	Amount of Capital Invested.	Tonnage Output for 1890.	No. of men Employed Inside.	No. of men Employed Outside.
Prospect Indian Creek		\$8,000 00	4,000	20	3

Total number of mines in Knox County, 2.

3-MINE INSP.

# Tabulated Statement for Greene County.

NAMES OF MINES.	Amount of Capital Invested.	Tonnage Output for 1890.	No. of Men Employed Inside.	No. of Men Employed Outside.
Island City, No. 1	\$100,000 00 8,000 00	100,000 185,000	122 82	12 4

Total number of mines in Greene County, 2.

# Tabulated Statement for Parke County.

Names of Mines.	Amount of Capital Invested.		No. of Men Employed Inside.	Employed
No. 6. No. 8. W. P. Harrison Sand Creek, No. 2 Island City Parke County Coal Co. Cox, No. 1 Cox, No. 2	5,000-00 5,000-00 8,000-00 8,000-00	250,000 84,000 21,600 15,000 80,000 100,000 80,000 24,000	70 18 13 96 95 200	21 15 20 20 11

Total number of mines in Parke County, 8.

# Tabulated Statement for Dubois County.

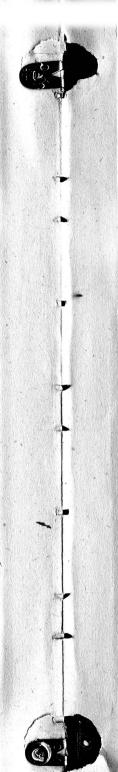
NAME OF MINE.	Amount	Tonnage	No. of Men	No. of Men
	of Capital	Output	Employed	Employed
	Invested.	for 1890.	Inside.	Outside.
Bauroman	\$10,000 00	96,000	10	3

Total number of mines in Dubois County, 1.

# Tabulated Statement for Pike County.

	N	AM	Œ	S (	of	M	ſr	N K	8.					Amount of Capital Invested.	Output	No. of Men Employed Inside.	Employed
Rogers Blackburn. Little Ayrshire		• • • • •									 	 	W.	\$15,000 00 10,000 00 17,000 00 20,000 00	25,000 18,000 60,000 90,000	18 50	909008

Total number of mines in Pike County, 4.



# Tabulated Statement for Sullivan County.

NAMES OF	MINES.	Amount of Capital Invested.		No. of Men Employed Inside.	Employed
New Pittsburg		50,000 00	97,000 17,200 145,000 220,400 30,000 108,000 32,400 50,400	50 9 75 120 30 35 40 25	12 3 7 10 7 4 12

Total number of mines in Sullivan County, 8.

# Tabulated Statement for Vanderburg County.

	1	1.	 4 E	cs	c	F	11	N	E	3.					Amour of Capi Investe	tal	Output	Emp	loyed	No. of Men Employed Outside.
First Avenue Diamond Ingleside Sunnyside Unity															\$20,000 15,000 25,000 30.000 25,000	00 00 00	70,000 25,800 125,000 50,000 40,000		40 31 64 100 90	8 10 10 10

Total number of mines in Vanderburg County, 5.

# Tabulated Statement for Vigo County.

Names of Mines.	Amount of Capital Invested.	Tonnage Output for 1890.		No. of Men Employed Outside.
Star, No. 2 Fountain, No. 1 Hercules Brunette Edgar Diamond Plat Seeleyville	15,000 00 15,000 00 15,000 00 15,000 00	22,000 15,000 275,000 36,000 12,000 192,000 36,000 27,000	93 10 144 40 64 99 65 50	5 2 15 5 9 7 8 8

Total number of mines in Vigo County, 8.

# Tabulated Statement for Warrick County.

Names of Mines.	Amount of Capital Invested.	Tonnage Output for 1890.	Employed	No. of Men Employed Outside.
Louder & Wooley	 \$4,000 00 5,000 00 5,000 00	26,400 18,000 15,000	22 18 10	4 4 2

Total number of mines in Warrick County, 3.

#### RECAPITULATION.

	COUNTIES.	Number of Mines.	Estimated Capital.	Estimated Tonnage.	Men Employed.
Knox Parke Pike		28 8 1 2 2 2 8 4 8 5 8 8 3	\$672,000 77,700 10,000 18,000 5,000 690,000 62,000 190,000 50,000 131,000 14,000	5,460,000 400,000 96,000 285,000 5,000 654,600 193,000 700,000 300,000 723,000 59,400	3,536 488 15 220 20 698 183 443 290 600
Total		 77	\$2,081,000	8,676,000	6,55