

REPORT OF STATE INSPECTOR OF MINES.

OFFICE OF INSPECTOR OF MINES,
INDIANAPOLIS, INDIANA, March 4, 1905.

Prof. W. S. Blatchley, State Geologist:

DEAR SIR: I have the honor to submit to you herewith my sixth annual report as Inspector of Mines, covering the calendar year of 1904, and being the Twenty-sixth Annual Report of this Department and the fourteenth made to the Department of Geology and Natural Resources.

I trust it will receive your approval and be found worthy of consideration by the public.

JAMES EPPERSON,
Inspector of Mines.

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ANNUAL REPORT.

STATISTICS OF COAL AND GENERAL INFORMATION PERTAIN- ING TO THE MINES OF INDIANA FOR THE YEAR ENDING DECEMBER 31, 1904.

This report includes, or covers, the following subjects or topics arranged in the order enumerated: Conditions of Coal Trade, Labor Conditions, Mine Accidents and Statistics. Under Conditions of Coal Trade a general review of the coal business for the past year is given as fully as possible. Under the head of Labor Conditions we include strikes that have occurred, Terre Haute and Brazil Agreements and other conditions relating to labor. Under Mine Accidents various tables are given exhibiting the cause, number and frequency of accidents to mine employes; also, accidents to mine property. Under the statistical part of the report numerous tables are presented showing the production of the different kinds and grades of coal, amount of wages paid to employes, the number of persons employed in the different capacities, number of mules used, number of mining machines, tables of averages, comparative tables, directory of mines and a table showing the geological number of coal seam mined and character of roof and floor at each mine in the State.

In the following summary will be found most of the important totals for the State for the year:

Number of counties having shipping mines.....	14
Number of coal companies operating mines.....	137
Number of mines working more than ten men.....	210
Number of new coal companies organized.....	23
Number of new mines opened.....	42
Number of mines abandoned.....	10
Number of pick miners employed.....	8,806
Number of machine runners.....	380
Number of machine helpers.....	380
Number of loaders.....	3,046
Number of inside day and monthly men employed.....	3,449
Number of outside day and monthly men employed.....	1,777

Total number of all mine employes.....	17,838
Number of mules used	1,421
Number of electric chain machines.....	291
Number of compressed air punching machines.....	104
Total number of mining machines.....	395
Number of electric motors	30
Number of dynamos	67
Number of compressors	28
Total number days mines have been operated.....	29,641
Total tons of hand-mined block coal.....	640,567
Total tons machine-mined block coal.....	86,505
Total tons block coal	727,072
Total tons bituminous hand-mined coal	5,645,663
Total tons bituminous machine-mined coal	3,499,660
Total tons bituminous coal produced	9,145,322
Total tons hand-mined coal produced	6,286,230
Total tons machine-mined coal produced	3,586,174
Total tons of coal produced	9,872,404
Total tons of coal consumed in Indiana.....	5,304,906
Total tons of coal shipped outside of the State.....	4,567,898
Amount of wages paid to miners	\$5,865,033 63
Amount of wages paid to outside day and monthly men....	1,146,871 64
Amount of wages paid to inside day and monthly men....	2,153,499 11
Total amount of wages paid to all employes.....	9,165,404 64
Amount of money spent on improvements.....	74,230 85
Total number of fatalities	34
Total number of serious accidents.....	132
Total number of minor accidents	81
Total number of accidents to employes	247
Total number of accidents to mine property	12

TABLE

Showing by Months and by Counties the Number of Tons Mined and Wages Paid to Employes for the Year 1904 at Mines Employing More Than Ten Men.

MONTH.	CLAY COUNTY.		DAVIESS COUNTY.	
	Tonnage.	Wages.	Tonnage.	Wages.
January	104,907	\$132,870 31	16,571	\$17,219 75
February	108,216	126,532 89	17,966	18,934 77
March	106,755	120,422 21	16,595	18,441 37
April	52,917	64,912 26	12,094	13,937 42
May	45,839	58,474 10	8,083	10,559 79
June	47,761	63,653 30	8,004	9,224 32
July	58,563	72,955 20	6,289	7,282 67
August	75,311	103,159 60	9,076	10,115 20
September	73,606	98,997 53	9,004	9,346 90
October	80,796	96,979 95	9,786	10,213 49
November	85,406	99,323 42	10,201	11,113 08
December	89,966	106,705 05	10,601	10,068 46
Total	20,043	\$1,142,523 33	133,270	\$146,498 49

MONTH.	FOUNTAIN COUNTY.		GIBSON COUNTY.	
	Tonnage.	Wages.	Tonnage.	Wages.
January	4,335	\$5,406 02	8,567	\$8,819 99
February	4,653	5,447 31	8,302	9,305 31
March	3,223	3,541 27	9,405	11,677 81
April	2,506	2,898 66	3,611	5,626 15
May	4,329	4,307 17	2,596	3,427 45
June	5,050	5,163 78	2,509	3,874 21
July	3,564	4,020 36	4,894	5,229 07
August	0,154	6,238 52	6,251	6,345 64
September	5,677	5,989 87	7,080	7,101 08
October	5,785	6,150 09	9,871	9,672 99
November	4,935	5,474 29	10,392	9,463 03
December	5,699	5,654 98	11,937	10,689 41
Total	55,910	\$60,392 32	85,595	\$90,082 24

MONTH.	GREENE COUNTY.		KNOX COUNTY.	
	Tonnage.	Wages.	Tonnage.	Wages.
January	222,437	\$197,602 37	15,423	\$14,875 84
February	237,798	203,292 05	16,993	13,828 59
March	249,538	209,745 93	17,716	14,573 05
April	127,737	114,415 75	8,954	8,034 49
May	134,897	123,378 63	6,596	6,034 55
June	148,185	136,901 16	6,106	6,127 30
July	142,064	127,684 63	6,032	6,817 34
August	172,028	150,905 82	7,250	6,840 21
September	179,531	155,535 16	12,932	9,697 53
October	201,426	176,976 64	15,040	13,521 90
November	243,257	192,360 79	17,998	15,005 25
December	248,066	193,106 07	19,528	17,367 75
Total	2,307,964	\$1,984,305 00	150,567	\$132,132 80

REPORT OF STATE GEOLOGIST.

MONTH.	PARKE COUNTY.		PERRY COUNTY.	
	Tonnage.	Wages.	Tonnage.	Wages.
January	89,378	\$111,191 33	206	\$312 76
February	90,981	109,821 64	269	414 63
March	85,605	103,779 41	1,217	1,273 58
April	41,890	57,410 68	1,268	1,153 64
May	33,833	45,503 05	705	815 49
June	48,696	58,724 04	735	762 94
July	56,039	72,157 14	753	793 71
August	80,281	100,041 00	854	819 78
September	77,339	93,397 17	566	607 20
October	74,594	78,500 98	204	291 79
November	81,797	80,569 91	235	361 39
December	82,944	82,220 69	263	352 50
Total	843,377	\$993,317 04	7,275	\$7,959 41

MONTH.	PIKE COUNTY.		SULLIVAN COUNTY.	
	Tonnage.	Wages.	Tonnage.	Wages.
January	37,681	\$33,896 09	124,036	\$124,590 87
February	40,127	35,091 77	128,765	120,135 13
March	37,770	32,657 25	122,629	114,904 07
April	26,772	17,956 19	87,717	84,676 99
May	23,773	16,114 83	86,855	80,270 53
June	16,633	15,968 89	92,116	86,293 15
July	7,558	4,242 16	166,189	95,545 04
August	29,600	21,526 05	138,270	126,575 94
September	36,247	26,158 07	145,026	135,059 76
October	36,682	32,993 20	167,372	138,219 22
November	43,312	35,295 06	192,034	156,571 95
December	42,956	26,203 67	205,539	174,903 74
Total	349,133	\$298,108 23	1,589,974	\$1,437,746 39

MONTH.	VANDERBURGH COUNTY.		VERMILLION COUNTY.	
	Tonnage.	Wages.	Tonnage.	Wages.
January	22,972	\$23,345 17	89,782	\$76,470 09
February	24,640	24,983 24	99,033	80,363 62
March	18,533	18,527 48	120,724	90,845 90
April	14,252	14,590 43	48,262	37,144 65
May	9,542	10,230 47	82,471	68,324 61
June	7,646	10,458 99	89,169	73,043 92
July	10,179	10,242 27	74,469	72,035 52
August	15,012	20,536 99	82,951	70,471 59
September	29,226	25,813 64	95,829	94,692 13
October	29,745	27,320 03	102,229	84,640 90
November	27,703	24,699 95	119,265	96,210 46
December	27,175	23,761 62	117,566	86,806 86
Total	237,625	\$234,911 18	1,131,750	\$931,049 25

MONTH.	VIGO COUNTY.		WARRICK COUNTY.	
	Tonnage.	Wages.	Tonnage.	Wages.
January	147,039	\$136,986 67	33,140	\$20,688 50
February	160,376	144,866 67	31,404	19,794 41
March	173,749	148,753 82	37,316	22,167 90
April	100,488	83,087 32	20,796	15,396 36
May	113,303	103,127 63	19,867	12,463 96
June	108,443	92,927 70	21,690	13,661 06
July	115,020	108,516 61	23,280	14,016 40
August	152,554	124,473 21	25,889	16,113 07
September	139,754	126,103 34	26,696	16,292 01
October	154,109	133,727 48	37,355	18,577 85
November	171,755	148,139 43	27,214	21,027 19
December	182,431	142,450 52	37,253	22,219 34
Total	1,719,021	\$1,491,498 04	341,900	\$212,418 54

CONDITION OF COAL TRADE.

The coal business in general throughout the State for the year 1904 was not as profitable to the mine owner as it was during the preceding five or six years. The selling price of coal has been very low, ranging from 90 cents to \$1.20 per ton for mine run coal at the mine, and a majority of the mines, especially during the spring and summer months, were operated less than half time. The total production, which reached 9,872,404 gross tons, shows a decrease of 120,149 tons, or a fraction over 1 3-10 per cent. under 1903. This was a very small decrease in production, and to those not conversant with the situation it would seem should not distress the business to any considerable extent; yet, considering the fact that forty-two new mines have gone into operation during the year, which have helped to furnish an over-production, it can be readily understood why the mines have not been operated so steadily and why prices have been low. The large increase in the number of new mines and the consequent increased demand for cars and transportation facilities created thereby being more than the railroads could meet, was largely responsible for the depressed condition of the business. The aggregate wages paid in 1904 was \$9,165,404.38, an increase over 1903 of \$15,832.26, or a fraction over 1-10 of 1 per cent. The fact that this report shows a decrease in production and an increase in expenditure may seem strange. The following reasons, however, will explain the situation thoroughly, viz.: There is a fixed operating expense at each mine, whether the mine is in operation or not, and where a mine, has been operated but eight or ten days during the month there is a large balance to be charged for operating expense for the days the mine has been idle. One other reason for the increase in expenditures was the fact that a majority of the new companies have reported as wages large sums of money paid to employes during the time of developing their property and before the mine had reached a producing capacity worth mentioning.

The total number of employes for 1904 was 17,838 an increase of 2,710 employes over 1903, and the average wage table shows the average earnings to be \$465.03 per miner, \$624.38 per inside

day and monthly men and \$645.96 per outside day and monthly men. Considering the number of days the mines were idle and time lost from other causes the above figures speak very favorable for the earning capacity of persons employed at Indiana mines.

NEW DEVELOPMENT.

The year 1904 marks the greatest period in the development of mining properties in the history of the State. During that period twenty-three new coal companies were organized and forty-two new mines opened and developed, which are distributed in the different counties as follows:

Clay County, five new coal companies and fourteen new mines, nine block and five bituminous; Greene County, two new companies and three new mines; Gibson County, one new company and one new mine; Knox County, two new companies and two new mines; Parke County, two new mines; Perry County, one new company and one new mine; Sullivan County, seven new companies and eleven new mines; Vermillion County, one new company and two new mines; Vigo County, three new companies and five new mines; Warrick County, one new company and one new mine.

In addition to the new mines opened, three of the older ones, viz., the Keystone, at Shelburn; Hymera No. 1 and the Island Valley No. 2, have been sunk to seams at a lower depth. As shown by the table of new mines, twenty-two are hand, or pick, mines; twenty electric chain machine mines, and three compressed air punching machine mines, the greater number of which, especially those in the bituminous field, have been equipped with the latest improved machinery of all kinds, such as box car loaders, shaker screens, self-dumping cages, etc., and should approximately increase the coal-producing capacity of the State at least 20 per cent.

We submit herewith a table exhibiting, by counties, the names of the companies operating these new mines, the names of the mines, the railroad on which they are located, the geological number and thickness of coal seams, by feet and inches; size and depth of shaft, kind of machines used, when mines were opened and when first shipment of coal was made.

TABLE OF NEW MINES.

BLOCK COAL MINES.

CLAY COUNTY.

NAME OF COMPANY.	NAME OF MINE.	RAILROADS.	Geological Number of Seam.	Thickness of Seam.	Depth of Shaft.	Size of Shaft.	Machine or Pick Mine.	Kind of Machine.	Date of Development.	First Shipment.
Zellar, McClellan & Co.....	Superior No. 4.....	S. Branch Vandalia	IV	3-8	90	8x21	Pick	.....	1-20, '04	9-20, '04
Brazil Block Coal Co.....	Brazil Block No. 4.....	C. & E. I.....	III	4-0	160	8x17	Machine..	Elec. chain.	8-1, 1900	9-20, '04
Crawford Coal Co.....	Crawford No. 2.....	S. Branch Vandalia	IV	3-9	68	8x20	Pick	.....	8-8, '04	.....
Crawford Coal Co.....	Crawford No. 4.....	S. Branch Vandalia	IV	4-0	80	7x16	Pick	.....	7-20, '04	11-25, '04
Crawford Coal Co.....	Crawford No. 8.....	S. Branch Vandalia	III	3-9	80	8x20	Pick	.....	7-7, '03	11-25, '04
Crawford Coal Co.....	Crawford No. 9.....	C. & E. I.....	IV	4-0	86	7x18	Pick	.....	6-1, '03	11-4, '04
Dan Davis Coal Co.....	Dan Davis.....	S. Branch Vandalia	IV	3-8	57	8x20	Pick	.....	5-1, '04	8-1, '04
Lower Block Vein Coal Co.....	Lower Block.....	T. H. & I.....	IV	3-9	48	8x16	Pick	.....	11-15, '03	1-1, '04
Indiana Block Coal Co.....	Indiana Block.....	E. & I.....	IV	3-0	58	8x20	Pick	.....	9-1, '03	1-1, '04

VIGO COUNTY.

Domestic Block Coal Co.,.....	Domestic Block.....	C. & E. I.....	IV	4-0	108	8x15	Pick.....
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TABLE OF NEW MINES—Continued

BITUMINOUS MINES.

CLAY COUNTY.

NAME OF COMPANY.	NAME OF MINE.	RAILROADS.	Geological Number of Seam.	Thickness of Seam.	Depth of Shaft.	Size of Shaft.	Machine or Pick Mine.	Kind of Machine.	Date of Development.	First Shipment.
Jasonville Coal Co.....	Gold Knob.....	S. I.....	III	6-3	203	8-6x16	Machine..	Elec. chain.	9-10,'03	7-2,'04
Vivian Coal Co.....	Vivian No. 4.....	S. I.....	III	5-6	107	9x15	Machine..	Elec. chain.	5-15,'03	12-8,'04
Vivian Coal Co.....	Vivian No. 5.....	S. I.....	IV	5-0	43	9x15	Machine..	Elec. chain.	7-15,'03	1-1,'04
Island Valley Coal Co.....	Island Valley No. 4..	S. I.....	IV	4-10	104	8x16	Machine..	Elec. chain.	5-1,'03	12-8,'04
Coal Bluff Mining Co.....	Glen No. 2.....	C. & E. I.....	IV	4-0	85	8x16	Pick.....	.....	10-1,'03	7-25,'04

GREENE COUNTY.

Pennsylvania Ind. C. Co.....	Pennsylvania.....	S. I.....	III	7-6	217	9x16	Pick.....	.....	1903	7-10,'04
Coal Bluff Mining Co.....	Twin.....	I. & V.....	IV-V	.....	152	9x30	Machine..	Elec. chain.	11-5,'02	1903
North Linton Coal Co.....	North Linton.....	S. I.....	IV	4-2	68	9x14	Pick.....	.....	8-1,'03	Jan., '04
Island Valley Coal Co.....	Island Valley No. 2..	I. & V.....	V	7-6	.....	.....	Machine..	Comp. air puncher..	.....	.....

GIBSON COUNTY.

Fort Branch Coal Co.....	Fort Branch.....	E. & T. H.....	VI	5-0	262	9x17	Pick.....	5-14,'04	12-1,'04
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KNOX COUNTY.

Enterprise Coal Co.....	Enterprise.....	I. & V.....	VI	4-3	154	11x7	Machine..	Comp. air puncher..	6-1, '03	1-2, '04
Big Muddy Coal Co.....	Big Muddy.....	I. & V.....	VI	4-6	210	8x16	Machine..	Elec. chain.	5-16, '04	11-12, '04

PARKE COUNTY.

Mecca Coal Co.....	Mecca No. 4.....	C. & I. C.....	III	6	.....	8x19	Machine..	Elec. chain.	9-12, '03	2-22, '04
Mecca Coal Co.....	Mecca No. 3.....	C. & I. C.....	III	5	166	9x18	Machine..	Elec. chain.	7-2, '03	2-28, '04

PERRY COUNTY.

Lincoln Coal Co.....	Lincoln.....	Southern (Cannel- ton Branch).....	II	3-4	Slope.....	Pick.....	See note
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SULLIVAN COUNTY.

Coal Bluff Mining Co.....	Shirley Hill.....	Monon.....	VI	5-6	110	9x16	Pick.....	9-0, '03	6-20, '04
New Pittsburg Coal Co.....	Phoenix No. 4.....	E. & T. H.....	VI	6-0	.....	8-8x18-8	Machine..	Elec. chain.	4-1, '04	11-15, '04
Keystone Coal Co.....	Shelburn.....	E. & T. H.....	V	6-0	326	.....	Machine..	Elec. chain.	See note	.....
Jackson Hill Coal Co.....	Jackson Hill No. 4.....	Branch E. & T. H., Farmersburg.....	VI	5-6	155	8x18	Pick.....	.....	11-19, '03	5-19, '04
Hymers Coal Co.....	Hymers No. 3.....	.....	V	.....	.....	.....	.....	.....	.....	11-1, '04
Reliance Coal Co.....	Reliance.....	E. & T. H.....	VI	5-0	237	8x24	Machine..	Elec. chain.	.....	.....
Kettle Creek Coal Co.....	Kettle Creek.....	E. & T. H.....	VI	5-3	152	7-4x16	Machine..	Elec. chain.	5-18, '04	8-1, '04
Linton Bituminous Coal Co.....	Hamilton.....	Farmersburg Branch E. & T. H.....	III?	6-6	255	9x16	Machine..	Comp. air puncher..	11-1, '03	10-0, '04
Linton Semi-Block Coal Co.....	Wolford.....	S. I.....	III?	6-5	242	9x18	Machine..	Elec. chain.	9-0, '03	9-0, '04
Keller Coal Co.....	Virginia.....	E. & T. H.....	VI	6-0	200	9x18	Machine..	Elec. chain.	11-10, '03	9-15, '03
Union Coal Co.....	Union.....	E. & T. H.....	VI	5-6	235	9x19	Machine..	Elec. chain.	9-0, '03	9-0, '04
Clover Leaf Coal Co.....	Clover Leaf.....	I. C.....	IV	5-9	306	8x19	Machine..	Elec. chain.	No coal shipped.	.....
Hymers Coal Co.....	Hymers No. 1.....	Branch E. & T. H., Farmersburg.....	III?	.....	.....	.....	Machine..	Elec. chain.	.....	.....

TABLE OF NEW MINES—Continued.

BITUMINOUS MINES—Continued.

VERMILLION COUNTY.

NAME OF COMPANY.	NAME OF MINE.	RAILROADS.	Geological Number of Seam.	Thickness of Seam.	Depth of Shaft.	Size of Shaft.	Machine or Pick Mine.	Kind of Machine.	Date of Development.	First Shipment.
Maple Valley Coal Co.....	Maple Valley.....	C. & E. I.....	VI	6-6	.....	8-6x17-6	Pick.....	.....	9-15, '03	5-0, '04
McClellan, Sons & Co.....	Buckeye No. 2.....	C. & E. I.....	VII	4-8	149	8x20	Pick.....	.....	5-20, '04	9-1, '04

VIGO COUNTY.

Vigo County Coal Co.....	Ray No. 2.....	Vandalia.....	VI	7-4	95	8x20	Machine.	Comp. air puncher..	9-1, '03	1-14, '04
Miami Coal Co.....	Miami No. 3.....	C. & E. I.....	VI	7-0	85	8x18	Pick.....	.....	5-1, '04	9-10, '04
Forrest Park.....	Forrest Park.....	Big Four.....	VI	6-5	150	8-8x20	Machine.	Elec. chain.	5-8, '04	8-10, '04
Indiana Fuel Co.....	Riverside.....	C. & E. I.....	VII	4-8	110	9x19	Pick.....	.....	5-1, '04	8-9, '04

WARRICK COUNTY.

Chandler Coal Co.....	Chandler.....	Southern.....	V	5	120	8x15	Pick.....	5-15, '04	8-16, '04
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IMPROVEMENTS.

The monthly reports of coal companies made to this office during the year just ended show an aggregate of \$74,230.85 as having been expended on improvements of various kinds made in different mines. The following, while not representing the total amount of money expended, shows some of the most extensive improvements made:

CLAY COUNTY.

The Brazil Block Coal Company installed a ten-foot high-speed fan, encased in steel, at their No. 8 Mine, which has made great improvement in the ventilation of that mine.

GREENE COUNTY.

The Island Coal Company have installed electric motor haulage in their Island No. 1 Mine.

The L. T. Dickerson Coal Company have installed electric motor haulage in their Glenburn mine, and have also made extensive changes in the arrangement of the shaft bottom, thereby increasing the capacity of the mine, as well as reducing the operating expense of handling the coal.

The Black Creek Coal Company have also installed electric motor haulage in their Black Creek Mine.

PIKE COUNTY.

The S. W. Little Coal Company have installed electric motor haulage in their S. W. Little Mine, and have made other extensive improvements in and around the mine. Prior to the introduction of the motors this mine was using twenty-one mules and producing 600 tons of coal per day. At the present time they are producing 800 tons per day and using eleven mules, which indicates a large saving in operating expenses.

VANDERBURGH COUNTY.

The Ingle Coal Company have retimbered the hoisting shaft at their Ingle Mine, and have sunk a new manway during the year.

The Crescent Coal Company have installed a new set of first motion hoisting engines, built a new engine room and have remodeled the tippie at their Unity Mine. This mine is now the largest producer in the county.

The Sunnyside Coal Company have retimbered the hoisting shaft at the Sunnyside Mine and built a new tippie, in addition to extensive repairs in the interior of the mine.

WARRICK COUNTY.

The Charles Menden Coal Company have equipped their De Forrest Mine with compressed air punching machines, and have installed a ten-foot ventilating fan. The ventilation here had previously been furnished by a furnace. Since the installing of the fan conditions have improved very much.

CHANGES IN OWNERSHIP OF MINING PROPERTIES.

The Fortner Mine, located near Turner, in Clay County, formerly owned by the C. Ehrlich Coal Company, was sold to the Star Union Coal & Oil Company in May. The mine, for some reason, has been operated but two months by the present owners.

The Little Giant Mine, owned by the L. T. Dickason Coal Company, changed hands in October, and is now the property of the Coal Bluff Mining Company. This mine is located on the Monon branch of the I. C. Railroad, in Sullivan County.

The Rhodes Mine, located on the C. & E. I. R. R., near Clinton, in Vermillion County, formerly the property of the Rhodes Coal Company, was sold in January to J. K. Deering & Co., of Chicago, who are now operating it to its full capacity.

The Star No. 2 Mine, located at Newburg, in Warrick County, owned by the John Archibald Coal Company, was purchased during the spring by the Ohio River Coal Company. This mine has been operated for a number of years as a local mine, furnishing employment for less than ten miners. Since changing hands the present company have sunk a manway and made numerous other improvements, with a view of increasing the output, and about thirty miners are now employed.

ABANDONED MINES.

Ten mines were abandoned during the year, six of which were block and four bituminous mines. We give herewith a list of the names of abandoned mines, companies operating same, date of abandonment, and the counties in which the mines were located:

CLAY COUNTY.

Brazil Block Coal Company, Diamond No. 5; mine abandoned September 15.

Zellar, McClellan & Co., Lawrence No. 6; mine abandoned May 30.

Crawford Coal Company, Crawford No. 2; mine abandoned June 8.

Crawford No. 7; abandoned during the month of November.

Eureka Block Coal Company, Eureka No. 3; mine abandoned during the month of January.

DAVIESS COUNTY.

Cabel & Kaufman Coal Company, Cabel No. 9; mine flooded and abandoned in March.

Daviess County Coal Company, Montgomery No. 2; mine abandoned March 5.

PARKE COUNTY.

New Century Coal Company, New Century; mine abandoned in May.

Crawford Coal Company, McIntosh No. 3, or Crawford No. 10; mine abandoned May 9.

SULLIVAN COUNTY.

Hymera Coal and Mining Company, Hymera No. 1; mine abandoned No. V coal seam May 1 and sunk to No. IV.

VIGO COUNTY.

Coal Bluff Mining Company, Union; mine abandoned in March.

NOTE.—The Hymera Coal and Mining Company have mined out and abandoned two coal seams at their Hymera No. 1 mine, coal No. V and No. VI.

TABLE

Showing by Counties the Name of Mine, Number of Tons Screened, Slack and Nut and Mine Run Coal, Total Tons of all Grades of Coal Produced, and the Distribution Thereof; the Production of Block and Bituminous Coal, Each Being Shown Separately, as is the Machine and Pick or Hand Mined Coal.

BLOCK COAL MACHINE MINES.

CLAY COUNTY.

NAME OF MINE.	MACHINE MINED.				PICK MINED.				DISTRIBUTION.		WAGES PAID.			
	Tons of Screened Coal.	Tons of Slack and Nut.	Tons of Mine Run.	Total Tons of all kinds of Coal Produced.	Tons of Screened Coal.	Tons of Slack and Nut.	Tons of Mine Run.	Total Tons of all kinds of Coal Produced.	Indiana.	Other States.	To Miners.	To Inside Day Men.	To Outside Day Men.	Total Wages.
Brazil Block No. 1.	7,260	1,447	.....	8,707	4,973	1,020	.....	5,993	7,784	6,916	\$10,776 20	\$10,696 48	\$6,378 41	\$27,851 09
Brazil Block No. 8.	10,776	2,157	.....	12,933	11,181	2,245	.....	13,426	2,281	24,078	19,081 21	23,935 48	8,398 59	51,415 28
Diamond No. 5.	2,788	661	.....	3,449	9,375	1,665	.....	11,040	5,355	9,034	11,897 01	6,360 61	4,480 15	22,737 77
Gart No. 10.	4,054	810	.....	4,864	24,001	4,805	.....	28,806	4,425	29,245	27,473 13	10,960 54	6,647 28	45,088 96
Total	24,878	4,975	.....	29,853	49,530	9,735	.....	59,265	19,845	69,273	\$69,227 55	\$51,953 11	\$25,904 43	\$147,093 09

PARKE COUNTY.

Brazil Block No. 12.	21,816	4,492	.....	26,308	10,379	2,079	.....	12,458	5,839	32,927	\$30,099 89	\$25,067 78	\$9,038 89	\$64,206 56
Mary	28,004	2,340	.....	30,344	2,977	.....	.....	2,977	1,477	31,844	26,655 52	18,011 40	9,075 89	53,742 81
Total	49,820	6,832	.....	56,652	13,356	2,079	.....	15,435	7,316	64,771	\$56,755 41	\$43,079 18	\$18,114 78	\$117,949 37
Total Machine Block	74,698	11,807	.....	86,505	62,886	11,814	.....	74,700	27,161	134,044	\$125,982 96	\$95,040 29	\$44,019 21	\$265,042 46

BITUMINOUS MACHINE MINES.

VANDERBURGH COUNTY.

Ingleside.....	60	.....	1,576	1,636	1,445	.....	16,484	17,929	18,811	754	\$12,620 94	\$3,041 11	\$4,040 05	\$19,702 10
Sunnyside.....	.....	.....	107	107	18,398	9,964	14,096	42,458	33,142	9,423	11,202 47	17,236 05	13,378 14	41,816 66
Total	60	.....	1,683	1,743	19,843	9,964	30,580	60,387	51,953	10,177	\$23,823 41	\$20,277 16	\$17,418 19	\$61,518 76

GREENE COUNTY.

Black Creek.....	34,553	18,745	19,503	72,801	21,352	11,719	12,355	45,426	67,518	50,709	\$60,277 74	\$25,216 58	\$10,788 10	\$96,282 42
Island No. 1.....	.....	.....	52,529	52,529	.....	.....	69,580	69,580	52,529	69,580	63,039 92	31,073 83	9,531 18	103,644 93
Island No. 2.....	33,054	10,794	37,403	81,251	33,968	11,937	38,399	84,304	84,304	81,251	93,398 71	32,295 34	15,425 39	141,119 44
Giltmour.....	.....	.....	98,108	98,108	.....	.....	.....	.....	52,683	45,425	53,588 32	20,842 52	6,315 15	80,745 90
Hoosier No. 1.....	12,738	11,482	19,028	43,248	.....	.....	.....	.....	29,232	14,016	16,097 71	14,270 52	9,094 07	39,462 30
Hoosier No. 2.....	4,257	1,941	5,337	11,535	.....	.....	.....	.....	11,535	.....	5,532 42	4,434 33	1,473 00	11,439 75
Island Valley No. 2.....	8,776	4,317	5,376	18,469	3,993	2,734	152	6,879	14,555	10,793	10,625 83	8,257 47	6,510 04	25,393 34
Midland.....	30,963	12,288	10,923	54,174	150	29	38	217	46,588	7,803	27,187 62	8,208 09	14,902 74	50,288 45
Summit No. 2.....	19,045	25,012	54,185	98,242	32,421	.....	.....	32,421	83,931	46,732	49,417 75	27,153 41	13,454 23	90,025 39
Glenburn.....	19,404	8,769	27,489	55,662	15,542	8,500	19,025	43,067	89,303	9,426	64,929 31	25,061 85	10,035 43	100,026 59
Tower Hill.....	31,381	12,589	824	44,794	9,781	3,662	583	14,026	39,024	19,796	30,002 49	13,797 85	6,887 42	50,687 76
Green Valley.....	43,112	39,157	31,564	113,833	37	.....	.....	37	67,175	46,695	59,372 24	19,006 36	11,806 89	90,185 49
Lattis Creek No. 1.....	75,030	72,218	36,884	184,132	.....	.....	.....	.....	128,974	55,158	102,119 94	37,881 72	21,942 43	161,944 09
Atlas No. 1.....	17,186	22,741	88,855	128,782	3,090	.....	12,225	15,315	135,376	8,721	73,539 13	27,727 04	14,596 05	115,862 22
Atlas No. 2.....	.....	.....	5,820	5,820	.....	.....	16,488	16,488	21,195	1,113	16,022 63	8,748 99	7,015 46	31,787 08
Letsinger.....	5,779	2,992	481	9,252	3,388	1,513	.....	4,901	7,121	7,032	8,554 47	3,270 66	3,669 05	15,494 18
North Western.....	33,977	28,775	17,494	80,246	1,939	400	530	2,869	30,570	52,545	38,596 45	21,064 60	10,549 17	70,210 22
Twin.....	36,235	12,131	32,227	80,993	.....	.....	.....	.....	68,964	12,029	38,995 50	9,176 65	9,303 45	57,475 60
Total	405,890	283,951	544,030	1,233,871	125,661	40,494	169,375	335,530	1,030,577	538,824	\$811,298 18	\$337,487 81	\$183,289 25	\$1,332,075 24

CLAY COUNTY.

Gifford No. 1.....	5,055	.....	290	5,345	18,505	7,062	692	26,259	5,345	26,259	\$20,782 18	\$19,488 12	\$5,989 47	\$46,209 77
Gifford No. 2.....	10,600	.....	.....	10,600	38,841	18,082	2,773	59,696	10,600	59,696	44,371 90	29,923 92	11,403 05	85,698 87
Lewis.....	1,488	1,364	32,600	35,452	.....	.....	483	483	13,557	22,378	14,467 79	7,430 10	4,886 95	26,584 84
Vivian No. 4.....	11,472	7,257	.....	18,729	.....	.....	.....	.....	5,163	13,566	13,577 88	8,028 90	6,872 57	28,479 25
Vivian No. 5.....	8,265	7,168	1,017	16,450	.....	.....	.....	.....	4,737	11,713	11,541 80	6,944 64	6,575 07	25,061 51
Island Valley No. 4.....	10,683	4,664	12,429	27,776	.....	1,015	1,015	.....	17,891	10,900	11,821 63	8,415 01	5,503 08	25,739 72
Gold Knob.....	8,581	4,933	1,569	15,083	77	.....	41	118	4,392	10,809	7,366 86	6,850 90	5,299 14	19,516 90
Total	56,144	25,386	47,905	129,435	57,423	25,154	5,004	87,571	61,685	155,321	\$123,930 04	\$87,031 59	\$46,323 33	\$257,290 96

BITUMINOUS MACHINE MINES—Continued.

PARKE COUNTY.

NAME OF MINE.	MACHINE MINED.				PICK MINED.				DISTRIBUTION.		WAGES PAID.			
	Tons of Screened Coal.	Tons of Slack and Nut.	Tons of Mine Run.	Total Tons of all kinds of Coal Produced.	Tons of Screened Coal.	Tons of Slack and Nut.	Tons of Mine Run.	Total Tons of all kinds of Coal Produced.	Indiana.	Other States.	To Miners.	To Inside Day Men.	To Outside Day Men.	Total Wages.
Lyford No. 1	26,943	14,459	17,575	59,177	1,203	505	1,301	3,009	11,259	50,927	\$26,703 13	\$20,042 41	\$9,758 98	\$56,504 52
Parke No. 11	747	450	61,362	62,559	389	220	29,280	29,869	81,427	11,001	46,885 01	10,965 52	5,714 53	63,545 06
Mecca No. 3	30,444	13,586	10,936	54,966	19,227	9,833	3,653	32,713	51,133	36,546	44,331 86	14,435 57	5,589 39	64,356 82
Total	58,134	28,695	89,873	176,702	20,819	10,558	34,214	65,591	143,819	98,474	\$117,900 00	\$45,443 50	\$21,062 90	\$184,406 40

SULLIVAN COUNTY.

Bunker Hill	24,367	10,059		34,426	14,205	5,861		20,066		54,492	\$29,964 67	\$14,955 02	\$8,775 18	\$51,694 87
Caledonia	54,506	20,281	10,441	85,228					11,003	74,225	43,234 85	30,723 45	15,957 86	89,916 16
Dugger	Not reported.													
Green Hill	17,798	8,118	1,059	26,975	1,124	544	38	1,706	2,856	25,825	14,862 22	11,629 80	6,169 25	32,661 27
Hymera No. 1	9,592	23,598	10,633	43,823					9,196	34,627	21,047 78	10,245 29	5,553 27	36,846 34
New Linton	7,215	3,423	20,335	30,973						30,973	11,500 89	9,224 20	8,185 92	28,911 01
Jackson Hill No. 2	60,884	31,833	34,276	126,993	3,079	3,338	169	6,586	36,859	96,720	57,741 54	25,377 29	12,701 87	95,820 70
Phoenix Nos. 1 and 3			32,672	32,672					14,948	17,724	17,893 50	7,616 50	3,343 50	28,853 50
Shelburn	11,146		4,756	15,902					15,902		1,990 30	2,098 88	1,832 93	5,922 11
Star City	43,611	25,601		69,212					10,345	58,867	33,486 84	25,641 11	17,141 20	76,269 15
Virginia	Not reported.													
Sun Flower	101,534	32,410	5,515	139,450					565	138,894	72,129 79	7,434 21	14,873 52	94,437 52
Glendora	82,856	35,208	10,528	128,592					57,964	70,628	68,783 60	32,337 05	15,369 35	116,490 00
Hymera No. 2	18,056	76,598	59,876	154,530	75	252	844	1,171	40,898	114,803	67,664 43	22,706 94	16,156 94	105,528 31
Wilfred No. 1	66,879	53,368	11,758	132,005					30,247	101,758	71,081 52	27,119 99	16,316 32	114,517 83
Reliance	New mine. No report.													
Mammoth Vein	26,825	18,518	13,607	58,950					16,517	42,433	29,825 40	21,104 28	13,975 35	64,905 03
Little Giant	8,733	3,510	55,537	67,780			3,189	3,189	70,969		34,629 73	30,741 10	8,279 14	73,649 97
Cummins			13,932	13,932			15,624	15,624	11,503	18,053	17,184 00	6,924 00	3,642 00	27,750 00

La Blanche	53,039	30,652	7,574	91,285	35	14	213	262	43,293	48,234	44,061 59	23,640 11	16,787 24	84,488 94
Citizens	4,084	2,030	2,729	8,843	2,725	1,420	1,736	5,881	14,724	.....	8,964 03	3,287 63	5,848 03	18,099 69
Mildred .....	.....	.....	37,925	37,925	.....	.....	.....	.....	37,925	.....	28,125 00	6,676 00	3,740 60	38,541 60
St. Clair	11,865	6,548	772	19,185	.....	.....	.....	.....	.....	19,185	9,212 78	5,845 77	4,178 25	19,036 80
Jackson Hill No. 4 .....	.....	.....	2,780	2,780	5,526	5,318	169	11,013	1,235	12,558	8,238 09	3,017 20	2,602 27	13,857 56
Hymers No. 3	9,762	22,672	8,267	40,701	675	1,610	852	3,167	5,333	33,535	18,170 29	10,672 93	8,362 70	37,205 92
Kettle Creek	180	180	600	950	.....	.....	.....	.....	960	.....	921 60	.....	152 80	1,074 40
Phoenix No. 4 .....	.....	.....	2,325	2,325	.....	.....	.....	.....	2,325	.....	1,000 00	600 00	302 80	1,902 80
Union No. 1 .....	.....	.....	1,150	1,150	.....	.....	2,205	2,205	1,050	2,305	2,580 02	930 50	610 14	4,120 66
Total	612,932	404,607	349,047	1,366,586	27,444	18,387	25,039	70,870	436,617	1,000,839	\$714,294 46	\$340,349 25	\$207,858 43	\$1,262,502 14

VIGO COUNTY.

Atherton	59,642	29,468	978	90,088	2,529	1,207	.....	3,736	12,648	81,176	\$45,794 43	\$16,716 75	\$8,750 83	\$71,261 51
Glen Oak	43,263	7,344	50,980	101,587	11,813	2,045	3,204	17,062	.....	118,649	55,360 23	37,674 30	14,710 16	107,744 69
Park No. 10	43,057	38,006	32,206	113,269	.....	.....	.....	.....	98,679	14,590	58,226 52	21,601 49	11,306 23	91,134 24
Sugar Creek	2,341	469	986	3,796	24,339	4,851	6,375	35,565	35,565	3,796	35,142 37	9,113 58	5,950 56	50,206 51
Ray No. 2	4,985	5,143	356	10,484	9,357	3,939	976	14,272	16,498	8,258	16,051 08	3,589 47	6,747 05	26,388 60
Forrest Park .....	.....	.....	3,053	3,053	.....	.....	.....	.....	3,053	.....	3,200 00	1,100 00	632 00	4,932 00
Total	153,288	80,430	88,559	322,277	48,038	12,042	10,555	70,635	166,443	226,469	\$213,774 63	\$89,795 59	\$48,096 33	\$351,666 55

WARRICK COUNTY.

Big Four .....	.....	.....	62,705	62,705	.....	.....	6,358	6,358	65,063	4,000	\$28,053 51	\$7,361 46	\$4,978 48	\$40,393 45
Big Vein, No. 3 .....	.....	.....	94,566	94,566	.....	.....	.....	.....	94,566	.....	40,838 65	6,256 35	5,256 60	52,351 60
DeForrest	7,343	3,720	400	11,463	.....	.....	.....	.....	5,713	5,750	5,278 45	1,180 35	1,036 64	7,495 44
Electric	3,806	1,827	91,809	97,442	.....	.....	.....	.....	34,854	62,588	42,521 61	12,462 48	6,095 52	61,079 61
Total	11,149	5,547	249,480	266,176	.....	.....	6,358	6,358	200,196	72,338	\$116,692 22	\$27,260 64	\$17,367 24	\$161,320 10

KNOX COUNTY.

Enterprise .....	.....	.....	2,859	2,859	.....	.....	4,465	4,465	5,788	1,536	\$2,553 44	\$505 55	\$749 12	\$3,808 11
Pine Knot .....	.....	.....	20	20	.....	.....	.....	.....	5	15	789 18	.....	1,339 62	2,128 80
Total .....	.....	.....	2,879	2,879	.....	.....	4,465	4,465	5,793	1,551	\$3,342 62	\$505 55	\$2,088 74	\$5,936 91
Total Bituminous Machine Mines	1,297,597	828,616	1,373,456	3,496,669	299,228	116,589	285,590	701,407	2,097,083	2,103,993	\$2,125,055 56	\$948,151 09	\$543,510 41	\$3,616,717 06

BLOCK COAL—HAND OR PICK MINES.

CLAY COUNTY.

NAME OF MINE.	PRODUCTION.				DISTRIBUTION.		WAGES.			
	Tons of Screened Coal.	Tons of Slack and Nut Coal.	Tons of Mine-Run Coal.	Total Tons of all Kinds of Coal Produced	Indiana.	Other States.	To Miners.	To Inside Day Men.	To Outside Day Men.	Total Wages Paid.
Gart No. 7	45,275	9,065		54,340	31,650	22,690	\$50,243 58	\$14,181 11	\$7,345 60	\$71,770 29
Continental No. 1	16,530	3,933	639	21,102	3,704	17,398	16,828 47	9,912 71	4,285 23	\$31,026 41
Reb Stock	14,836	2,665		17,501	3,225	14,276	14,712 80	8,165 69	4,055 39	26,933 88
Lawrence No. 6	10,160	2,500		12,660	11,276	1,384	10,176 49	2,471 14	1,235 55	13,883 18
Lawrence No. 7	30,482	7,895	277	38,654	34,909	3,745	35,191 98	13,984 85	7,547 59	56,724 42
Corwall	13,808	1,697		15,505	15,505		15,287 78	4,368 69	2,318 24	21,954 71
Crawford No. 2	8,469	2,110		10,579	4,773	5,806	8,432 85	1,875 16	1,449 79	11,757 80
Crawford No. 5	20,974	4,600	179	25,753	11,405	14,348	21,129 04	6,122 52	3,809 63	\$31,061 19
Crawford No. 6	27,667	6,414		34,081	14,903	19,178	28,935 67	7,188 98	3,804 19	39,928 84
Crawford No. 7	9,287	1,729		11,016	7,283	3,733	9,482 92	3,678 61	1,986 46	15,147 99
Eureka No. 3	853	30	33	916	312	604	3,947 80	146 80	558 40	4,653 00
Monarch			8,614	8,614	8,614		11,100 00	3,157 95	1,180 18	15,438 13
Crawford No. 8	12,046	3,075		15,121	6,150	8,971	12,926 86	4,765 90	3,085 81	20,778 57
Lower Vein	11,655	3,015		14,670	6,093	8,577	15,819 77	6,905 47	4,910 66	27,635 90
Crawford No. 9	2,997	701		3,698	1,400	2,298	3,717 49	1,966 66	1,270 43	6,954 58
Brazil Block No. 4	4,022	810		4,832	365	4,467	6,007 81	8,908 41	4,681 05	19,597 27
Superior No. 4	2,576	560		3,136	3,136		5,460 50	2,124 01	1,061 99	8,646 50
Worlds Fair No. 2	2,660	540		3,200	3,200		3,947 73	1,520 52	729 03	6,197 28
Crawford No. 4	2,374	437		2,811	1,700	1,111	2,854 19	2,401 54	1,437 15	6,692 88
Total	236,671	51,776	9,742	298,189	169,603	128,586	\$276,183 73	\$103,846 72	\$56,752 37	\$436,782 82

REPORT OF STATE GEOLOGIST.

PARKE COUNTY.

McIntosh No. 3.....	4,384	725	.....	5,109	.....	5,109	\$4,377 78	\$1,764 59	\$1,159 46	\$7,301 83
Superior No. 1.....	51,121	12,700	467	64,288	30,801	33,487	56,666 00	20,239 66	10,119 81	87,025 47
Superior No. 2.....	46,736	11,811	571	59,118	29,331	29,787	52,284 72	21,809 26	10,587 16	84,681 14
Superior No. 3.....	27,004	7,375	.....	34,379	15,782	18,597	35,642 50	12,350 37	5,846 50	53,839 37
Pan-American.....	49,227	7,410	391	57,028	23,881	33,147	54,481 30	21,277 40	4,773 60	80,532 30
Brazil Block No. 9.....	39,696	8,060	.....	47,756	11,899	35,857	44,271 77	18,068 24	7,510 93	69,850 94
Total.....	218,168	48,081	1,429	267,678	111,694	155,984	\$247,724 07	\$95,509 52	\$39,997 46	\$383,231 05
Total hand mine—black.....	454,839	99,857	11,171	565,867	281,297	284,570	\$523,907 80	\$199,356 24	\$96,749 83	\$820,013 87

BITUMINOUS—HAND OR PICK MINES.

CLAY COUNTY.

Cloverland No. 1.....	70,356	23,170	16,581	110,107	110,107	.....	\$71,109 22	\$17,719 34	\$8,861 47	\$97,690 03
Cloverland No. 2.....	33,798	10,866	1,883	46,547	44,149	2,398	40,224 78	8,241 00	3,936 90	52,402 68
Fair View.....	13,103	9,416	.....	22,519	13,881	8,638	13,086 21	3,039 19	2,018 00	18,143 40
Fortner.....	6,058	2,264	.....	8,322	7,352	970	6,616 45	2,581 33	1,166 53	10,364 31
Klondyke.....	26,034	12,093	3,462	41,589	39,645	1,944	25,061 73	7,363 24	6,121 03	38,546 00
Glenn No. 2.....	1,511	375	.....	1,886	.....	1,886	1,625 40	1,536 15	758 55	3,920 10
Pearl.....	31,679	21,745	1,943	55,367	35,194	20,173	32,429 85	11,131 03	5,098 65	48,658 93
Glenn No. 1.....	23,828	5,565	.....	29,393	.....	29,393	24,792 15	6,306 30	2,995 05	34,093 50
Total.....	206,367	85,494	23,869	315,730	250,328	65,402	\$214,945 79	\$57,917 58	\$30,955 58	\$303,818 95

DAVISS COUNTY.

Cable No. 9.....	.....	.....	12,212	12,212	12,212	.....	\$7,489 75	\$3,718 10	\$1,386 40	\$12,594 25
Montgomery No. 2.....	1,976	285	1,039	3,300	2,200	1,100	1,848 15	290 85	590 35	2,729 35
Montgomery No. 3.....	60,862	6,906	4,157	71,925	47,738	24,187	56,760 56	18,527 47	10,886 40	86,174 43
Mutual.....	11,900	1,500	13,500	26,900	16,100	10,800	19,700 50	5,990 00	3,755 00	29,445 50
Union.....	.....	.....	6,421	6,421	6,421	.....	3,963 40	881 02	831 35	5,675 77
Mandabach.....	68	33	12,411	12,512	12,512	.....	7,952 66	990 68	935 48	9,878 82
Total.....	74,806	8,724	49,740	133,270	97,183	36,087	\$97,715 02	\$30,398 12	\$18,384 98	\$146,498 12

BLOCK COAL—HAND OR PICK MINES—Continued.

FOUNTAIN COUNTY.

NAME OF MINE.	PRODUCTION.				DISTRIBUTION.		WAGES.			
	Tons of Screened Coal.	Tons of Slack and Nut Coal.	Tons of Mine-Run Coal.	Total Tons of all Kinds of Coal Produced.	Indiana.	Other States.	To Miners.	To Inside Day Men.	To Outside Day Men.	Total Wages Paid.
Rush	18,592	5,753	11,426	35,771	35,771	.....	\$27,260 71	\$7,410 35	\$4,260 50	\$38,931 56
Silverwood	3,329	1,900	14,910	20,139	18,473	1,666	14,004 59	4,524 23	2,931 94	21,460 76
Total	21,921	7,653	26,336	55,910	54,244	1,666	\$41,265 30	\$11,934 58	\$7,192 44	\$60,392 32

GIBSON COUNTY.

Oswald	17,424	18,720	18,781	54,925	50,013	4,912	\$32,471 58	\$12,033 30	\$11,392 78	\$55,897 66
Massey	3,071	2,303	23,624	28,998	23,175	5,823	20,199 47	9,462 13	2,239 48	31,991 08
Ft. Branch .....	.....	.....	1,672	1,672	1,672	.....	1,687 00	219 00	287 50	2,193 50
Total	20,495	21,023	44,077	85,595	74,860	10,735	\$54,358 05	\$21,714 43	\$14,009 76	\$90,082 24

GREENE COUNTY.

Island No. 3 .....	.....	.....	47,493	47,493	.....	47,493	\$30,399 24	\$12,066 88	\$6,495 90	\$48,962 02
Island No. 5	85	.....	19,632	19,717	.....	19,717	14,195 10	6,099 36	2,913 32	23,207 78
Island Valley No. 3	27,624	13,322	37,389	78,335	43,496	34,839	49,208 28	14,211 04	7,881 33	71,300 65
South Linton	43,499	23,921	48,755	116,175	76,552	39,623	70,908 92	20,443 87	7,070 75	98,423 54
Vulcan	1,882	771	5,016	7,669	.....	7,669	5,062 04	558 97	1,244 66	6,865 67
Templeton	3,575	280	55,960	59,815	59,815	.....	34,736 15	11,634 45	6,985 60	53,356 20
Victoria	63,959	46,678	174,572	285,209	282,445	2,764	164,273 98	29,844 90	13,009 08	207,127 96
Antioch	27,826	22,415	20,979	71,220	62,741	8,479	52,840 80	21,587 18	8,239 34	82,667 32

Fry.....			9,190	9,190	9,190		7,965 00	3,560 00	3,670 00	15,195 00
North Linton.....	22,142	10,400	6,991	89,533	24,620	14,913	28,353 98	6,734 87	3,562 95	38,651 80
Pennsylvania.....	2,574	893	740	4,207	3,015	1,192	3,891 98	828 29	1,761 55	6,471 82
Total.....	193,166	118,680	426,717	738,563	561,874	176,689	\$461,835 47	\$127,569 81	\$62,824 48	\$652,229 76

KNOX COUNTY.

Bicknell.....	17,461	14,647	12,933	45,041	28,561	16,480	\$24,075 76	\$7,732 72	\$5,826 35	\$37,634 83
Knox.....	10,378	9,463	10,784	30,625	11,741	18,884	16,222 76	6,205 02	3,165 37	25,593 15
Lynn.....			41,161	41,161	29,191	11,970	23,987 45	5,221 11	5,200 92	34,409 48
Prospect Hill.....	511	291	200	1,002	1,002		824 52	422 73	182 50	1,429 75
Wheatland.....	4,801	2,363	18,230	25,394	23,506	1,888	18,822 13	4,106 69	4,199 86	27,128 68
Total.....	33,151	26,764	83,308	143,223	94,001	49,222	\$83,932 62	\$23,688 27	\$18,575 00	\$126,195 89

PARKE COUNTY.

Lucia.....	15,596	6,818	14,736	37,150	25,934	11,216	\$21,594 12	\$11,286 09	\$5,478 73	\$38,358 94
Mecca No 1.....	379	187	2,514	3,080	2,884	196	1,937 42	3,032 50	581 06	5,550 98
New Century.....	172	85	402	659	659		1,580 00	1,101 00	500 00	3,181 00
Minshall No. 1.....	85,700	17,143	7,493	110,336	82,000	28,336	94,784 91	36,854 61	11,248 08	142,887 60
Minshall No. 2.....	6,891	1,565	2,824	11,280	11,280		10,636 07	4,768 27	2,594 23	17,988 57
Raccoon.....			8,397	8,397	8,397		6,349 73	2,540 49	1,053 47	9,943 69
Mecca No. 4.....	8,629	4,290	5,944	18,863	6,766	12,097	12,391 25	3,750 00	1,309 76	17,451 01
C. B. Harrison.....			671	671	671		369 05	61 54	92 00	622 59
Cox No. 3.....			64,335	64,335	51,715	12,620	38,416 16	18,560 88	9,760 62	66,737 66
W. P. Harrison.....			5,548	5,548	5,548		3,223 39	1,162 95	711 84	5,098 18
Total.....	117,367	30,088	112,864	260,319	195,854	64,465	\$191,282 10	\$83,118 63	\$33,329 49	\$307,730 22

PERRY COUNTY.

Troy.....			7,275	7,275	7,275		\$5,303 11	\$1,387 52	\$1,268 78	\$7,959 41
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BLOCK COAL—HAND OR PICK MINES—Continued.

PIKE COUNTY.

NAME OF MINE.	PRODUCTION.				DISTRIBUTION.		WAGES.			
	Tons of Screened Coal.	Tons of Slack and Nut Coal.	Tons of Mine-Run Coal.	Total Tons of all Kinds of Coal Produced.	Indiana	Other States.	To Miners.	To Inside Day Men.	To Outside Day Men.	Total Wages Paid.
Aberdeen			2,324	2,324	2,324	.....	\$1,424 49	\$719 18	\$481 00	\$2,624 67
Ayrshire No. 3	13,016	6,346	1,682	21,044	16,659	4,385	11,536 49	5,109 88	2,427 35	19,073 72
Ayrshire No. 4	30,345	20,253	39,734	90,332	62,168	28,164	51,336 44	14,374 24	6,595 01	72,305 69
Ayrshire No. 5	606	753	3,476	4,835	3,337	1,498	2,954 75	1,024 64	686 92	4,666 31
Blackburn	3,538	4,668	3,148	11,354	7,629	3,725	6,597 24	2,158 92	1,336 52	10,092 68
Littles	35,232	47,145	9,670	92,047	63,510	28,537	52,556 65	14,571 53	7,178 61	74,306 79
Rogers			2,674	2,674	2,674	.....	1,449 02	457 42	43 31	1,949 75
Hartwell	3,587	1,901	70,427	75,915	45,270	30,645	43,238 53	12,844 62	8,731 00	64,814 15
Petersburg	Not reported.									
Winslow Nos. 2 and 5	12,306	11,404	17,439	41,149	19,291	21,858	22,147 17	15,070 83	4,390 95	41,608 95
Winslow No. 5	Reported with	No 2.								
Carbon			7,459	7,459	7,459	.....	3,972 52	1,738 00	955 00	6,665 52
Total	98,630	92,470	158,033	349,133	230,321	118,812	\$197,213 30	\$68,063 26	\$32,825 67	\$298,108 23

SULLIVAN COUNTY.

White Ash	1,680	880	29,082	31,642	13,817	17,825	\$21,502 76	\$5,349 80	\$3,850 13	\$30,702 69
Freeman	21,145	9,774	.....	30,919	6,650	24,269	23,260 39	5,358 01	3,639 37	32,257 77
Island No. 4	4,649	1,509	12,321	18,479	18,479	.....	14,970 20	10,022 69	9,685 20	34,678 09
Bruliettes Creek No. 6	11,780	10,909	8,561	31,250	2,004	29,246	17,736 05	9,239 27	4,620 95	31,596 27
Shirley Hill	767		11,010	11,777	11,777	.....	9,767 20	3,696 85	2,314 20	15,778 25
Superior	14,021	9,614	4,816	28,451	22,102	6,349	20,568 07	5,633 20	4,029 91	30,231 18
Total	54,042	32,686	65,790	152,518	74,829	77,689	\$107,804 67	\$39,299 82	\$28,139 76	\$175,244 25

VANDERBURGH COUNTY.

Diamond.....	17,464	11,125	7,748	36,337	36,337	.....	\$23,575 19	\$1,561 89	\$4,376 52	\$32,513 60
First Avenue.....	9,561	5,659	5,399	20,619	18,748	1,871	14,983 50	3,221 45	3,649 45	21,854 40
Union.....	9,184	4,609	9,184	22,977	22,977	.....	19,168 95	3,016 95	4,210 05	26,395 95
Unity.....	29,697	5,079	60,786	95,562	95,562	.....	67,434 60	15,724 37	9,469 60	92,628 47
Total	65,906	26,472	83,117	175,495	173,624	1,871	\$125,162 24	\$26,524 66	\$21,705 52	\$173,392 42

VERMILLION COUNTY.

Bruilletes Creek No. 3.....	1,953	1,490	80,675	84,118	3,607	80,511	\$44,610 10	\$15,594 40	\$5,173 05	\$65,377 55
Bruilletes Creek No. 5.....	81,521	49,085	59,528	190,134	18,608	171,526	110,463 76	25,751 85	9,838 35	146,053 96
Buckeye. (Not reported. New mine.).....	.....	.....	11,556	11,556	11,556	.....	7,829 28	2,977 98	2,829 64	13,335 90
Crown Hill No. 1.....	43,204	18,126	83,892	145,222	35,480	109,742	97,619 10	23,420 64	4,444 10	125,483 84
Crown Hill No. 2.....	13,617	4,665	90,811	109,093	24,579	84,514	62,998 24	16,654 27	3,968 50	83,621 01
Oak Hill.....	28,829	17,191	57,478	103,498	.....	103,498	60,893 47	18,370 74	8,799 80	88,064 01
Prince.....	.....	.....	174,710	174,710	.....	174,710	104,682 32	28,276 69	10,730 61	143,689 92
Willow Grove.....	42,541	17,325	38,306	98,172	.....	98,172	49,226 10	10,413 55	5,064 60	64,694 25
Rhodes.....	58,275	32,640	39,551	130,466	17,112	113,354	83,712 34	22,712 37	11,592 95	118,017 66
Riverside.....	3,966	1,551	15,717	21,234	3,669	17,566	15,426 45	2,726 90	3,063 25	21,246 60
Maple Valley No. 1.....	.....	.....	60,353	60,353	8,986	51,367	37,349 65	13,088 96	6,925 94	57,364 55
Maple Valley No. 2.....	.....	.....	3,194	3,194	3,194	.....	2,500 00	1,100 00	500 00	4,100 00
Total	273,906	142,073	715,771	1,131,750	128,791	1,004,959	\$677,311 11	\$181,088 35	\$72,649 79	\$931,049 25

VIGO COUNTY.

Brick Works.....	.....	.....	9,644	9,644	9,644	.....	\$7,534 66	\$2,066 41	\$1,491 48	\$11,092 55
Chicago No. 6.....	1,348	615	6,823	8,786	8,786	.....	5,627 55	3,755 50	2,553 37	11,936 42
Diamond.....	62,404	27,760	28,502	118,606	118,606	.....	76,088 60	26,401 20	9,491 35	111,981 15
Peerless.....	28,597	11,590	2,693	42,880	.....	42,880	29,447 00	11,606 40	5,802 40	46,855 80
Lawton.....	71,706	37,018	45,715	157,439	157,439	.....	100,971 65	21,943 00	8,864 25	131,778 90
Union.....	10,167	3,940	1,197	15,304	15,304	.....	9,834 30	2,926 50	2,442 00	15,202 80
Ehrlich.....	1,169	835	.....	2,004	2,004	.....	1,161 84	453 74	240 66	1,856 24
Grant No. 2.....	24,811	29,541	90,512	144,864	106,435	38,429	77,952 33	25,073 64	10,927 31	113,953 28
Hector.....	18,284	12,825	199	31,308	30,847	461	18,610 76	9,604 91	6,215 85	34,431 52
Klondyke.....	9,942	7,315	37,299	54,556	1,803	52,753	28,331 25	12,789 45	7,711 50	48,832 20
Redbird.....	19,695	15,027	10,772	45,494	45,494	.....	22,833 48	9,806 83	4,979 08	37,619 39
Rosebud No. 2.....	59,718	26,526	7,294	93,538	80,565	12,973	55,474 64	20,308 02	5,303 87	84,086 53
Royal No. 1.....	20,508	10,438	60,857	81,803	.....	564	55,564 18	14,332 34	4,749 39	74,645 91

BLOCK COAL—HAND ORPICK MINES—Continued.

VIGO COUNTY—Continued.

NAME OF MINE.	PRODUCTION.				DISTRIBUTION.		WAGES.			
	Tons of Screened Coal.	Tons of Slack and Nut Coal.	Tons of Mine-Run Coal.	Total Tons of all Kinds of Coal Produced.	Indiana.	Other States.	To Miners.	To Inside Day Men.	To Outside Day Men.	Total Wages Paid.
Larimer.....	18,136	17,304	23,809	59,249	16,019	1,441	9,638 90	1,951 56	1,566 70	13,157 16
Broadhurst.....	31,926	30,623	9,309	71,853	47,448	11,801	32,577 11	7,313 85	7,684 39	47,555 35
Miami No. 2.....	31,919	17,511	23,929	73,359	.....	71,863	43,745 95	11,901 83	4,375 39	60,623 17
Deep Vein No. 1.....	26,453	17,339	11,463	55,255	67,947	5,112	40,392 99	9,314 68	6,144 25	55,851 92
Greenfield No. 1.....	24,433	19,874	17,281	61,588	55,255	.....	37,308 73	6,799 00	6,514 40	50,622 13
Lost Creek.....	5,243	3,004	12,762	21,009	57,360	4,228	40,697 01	7,963 04	6,471 99	55,032 04
Miami No. 3.....	80,592	79,808	.....	160,400	.....	21,009	9,294 49	3,624 24	1,785 60	14,704 33
Miami No. 1.....	.....	.....	.....	.....	.....	160,400	90,960 42	19,096 25	7,966 03	118,012 70
Total.....	546,751	368,838	410,520	1,326,109	902,195	423,914	797,047 84	228,932 39	113,851 26	1,139,831 49

WARRICK COUNTY.

Air Line.....	3,450	1,800	2,150	7,400	2,420	4,980	\$3,908 25	\$986 10	\$459 70	\$5,354 05
Chandler.....	5,460	2,830	3,360	11,650	3,250	8,400	7,219 95	1,207 30	971 55	9,898 80
Star No. 1.....	.....	.....	32,624	32,624	32,624	.....	15,438 78	5,428 01	3,287 62	24,154 41
Burke.....	.....	.....	17,692	17,692	17,692	.....	8,343 71	1,686 66	2,160 61	12,191 18
Total.....	8,910	4,630	55,826	69,366	55,986	13,380	\$34,910 69	\$9,308 07	\$6,879 68	\$51,098 44
Total hand mine bituminous coal.....	1,715,418	965,595	2,263,243	4,944,256	2,899,365	2,044,891	\$3,090,087 31	\$910,951 49	\$462,592 19	\$4,463,630 99

RECAPITULATION.

Showing Total Production and Wages of Indiana Mines for 1904.

TOTAL PRODUCTION OF BLOCK COAL.

	MACHINE MINED.				PICK MINED.				DISTRIBUTION.		WAGES.			
	Tons of Screened Coal.	Tons of Slack and Nut Coal.	Tons of Mine-Run Coal.	Total Tons of all Kinds of Coal Produced.	Tons of Screened Coal.	Tons of Slack and Nut Coal.	Tons of Mine-Run Coal.	Total Tons of all Kinds of Coal Produced.	Indiana.	Other States.	Miners.	To Inside Day Men.	To Outside Day Men.	Total Wages Paid.
Total production block machine mines.....	74,698	11,807	.....	86,505	62,886	11,814	.....	74,700	27,161	134,044	\$125,982 96	\$95,040 29	\$44,019 21	\$265,042 46
Total production block pick mines.....	.....	.....	.....	.....	451,839	99,857	11,171	565,867	281,237	284,570	523,907 80	199,356 24	96,749 83	820,013 87
Total block coal.....	74,698	11,807	.....	86,505	517,725	111,671	11,171	640,567	308,458	418,614	\$649,890 76	\$294,396 53	\$140,769 04	\$1,085,056 33

TOTAL PRODUCTION OF BITUMINOUS COAL.

Total bituminous machine mines.....	1,297,597	828,616	1,373,456	3,499,669	299,228	118,589	285,590	701,407	2,097,083	2,103,993	\$2,125,055 56	\$948,151 09	\$543,510 41	\$3,616,717 06
Total bituminous pick mines.....	.....	.....	.....	.....	1,715,418	965,595	2,263,243	4,944,256	2,899,365	2,044,891	3,090,087 31	910,951 49	462,592 19	4,463,630 99
Total bituminous coal..	1,297,597	828,616	1,373,456	3,499,669	2,014,646	1,082,184	2,548,833	5,645,663	4,996,448	4,148,884	\$5,215,142 87	\$1,859,102 58	\$1,006,102 60	\$8,080,348 05
Total machined coal.....	1,372,295	840,423	1,373,456	3,586,174	362,114	128,403	285,590	776,107	2,124,244	2,238,037	\$2,251,038 52	\$1,043,191 38	\$587,529 62	\$3,881,759 52
Total pick mined coal.....	.....	.....	.....	.....	2,170,257	1,065,452	2,274,414	5,510,123	3,180,662	2,329,461	3,613,995 11	1,110,307 73	569,342 02	5,283,644 86
Grand total..	3,904,666	2,034,278	3,933,460	9,872,404	.....	.....	.....	.....	5,304,906	4,567,498	\$5,865,033 63	\$2,153,499 11	\$1,146,871 64	\$9,165,404 38

TABLE,

Showing Comparative Statement of Coal Produced, Wages Paid and Number of Employees for 1903 and 1904.

	1903.	1904.	Decrease of 1904 Under 1903.	Increase of 1904 Over 1903.
Total tonnage produced	9,992,553	9,872,404	120,149	.....
Total wages paid	\$9,149,572 12	\$9,165,404 38	.....	\$15,832 26
Total employees	15,128	17,838	.....	2,710

TABLE

Showing Number of Miners, Machine Runners and Helpers, Loaders, Inside Day and Monthly Men, Persons Employed Outside; Total Number of Employees at Each Mine, Number of Days Worked and Number of Mules Used; Totals by Counties, Expenditure for Improvements.

CLAY COUNTY.

NAME OF MINE.	Pick Miners.	Machine Runners and Helpers.	Loaders.	Inside Day and Monthly Men.	Outside Day Men.	Total Employees.	Days Worked.	Mules Used.	Fatal Accidents.	Improvements.
Brazil Block No. 1.....	9	4	8	12	6	39	285	5		
Brazil Block No. 8.....	23	6	14	20	8	68	193	5		
Diamond No. 5.....	24	2	9	7	7	49	174	4		
Gart No. 7.....	96			20	10	126	185	7		
Gart No. 10.....	26	6	11	12	6	61	207	4		
Continental No. 1.....	38			6	5	49	78	2		
Rebstock.....	41			10	6	57	239	3		
Cloverland No. 1.....	118			34	15	167	194	13		
Cloverland No. 2.....	62			9	5	76	165	4		
Lawrence No. 6.....	46			6	6	58	81	3		
Lawrence No. 7.....	55			21	7	83	201	7		
Fair View.....	57			9	5	71	90	3		
Cornwall.....	32			7	7	46	175	3		
Crawford No. 2.....	31			5	4	40	116	2		
Crawford No. 5.....	44			8	5	57	221	2		
Crawford No. 6.....	81			15	6	102	143	5		
Crawford No. 7.....	29			7	5	41	103	2		
Eureka No. 3.....	24			4	6	34	24	2		
Fortner.....	32			8	4	44	78	4		
Klondyke.....	65			18	9	92	73	11		
Gifford No. 1.....	37	8	10	14	7	76	170	8		
Gifford No. 2.....	90	6	18	56	13	183	150	18	1	
Glenn No. 1.....	70			10	8	88	111	5	1	
Monarch.....	21			2	2	40	289	2		
Pearl.....	100			20	8	128	140	8		
Lewis.....	2	10	30	9	7	58	137	2		1,250 00
Vivian No. 4.....		8	17	9	9	43	215	2		300 00
Vivian No. 5.....	6	6	21	5	6	44	203	3		300 00
Crawford No. 8.....	50			7	5	62	152	4		

Showing Number of Miners, Machine Runners and Helpers, Etc.—Continued.

CLAY COUNTY—Continued.

NAME OF MINE.	Pick Miners.	Machine Runners and Helpers.	Loaders.	Inside Day and Monthly Men.	Outside Day Men.	Total Employees.	Days Worked.	Mules Used.	Fatal Accidents.	Improvements.
Lower Vein No. 1.....	40			10	5	55	242	3	1	
Crawford No. 9.....	31			4	5	40	72	3		
Brazil No. 4.....	57			21	16	94	76	3		3,427 75
Glenn No. 2.....	17			2	4	23	66	1		
Gold Knob.....		8	20	14	11	53	131	3		2,681 69
World's Fair.....	28			6	4	38	99	3		
Crawford No. 4.....	27			8	5	40	47	3		
Superior No. 4.....	24			8	6	38	114	3		
Island Valley No. 4.....		8	20	8	8	44	97	4		
Total.....	1,529	72	178	470	253	2,502	5,536	184	3	\$8,835 80

DAVIESS COUNTY.

Cabel No. 9.....	55			16	7	78	45	3		
Montgomery No. 2.....	15			2	2	19	39	3		
Montgomery No. 3.....	110			28	12	150	217	16		
Mutual.....	60			11	7	78	209	9		\$1,115 10
Union.....	19			4	2	25	164	2		
Mandabach.....	12			2	3	17	228	2		
Total.....	271			63	33	367	902	35		\$1,115 00

FOUNTAIN COUNTY.

Rush.....	45			11	7	63	222	3		\$305 00
Silverwood.....	26			6	6	38	238	3		450 00
Total.....	71			17	13	101	460	6		\$755 00

GIBSON COUNTY.

Oswald	51	.....	.....	21	13	85	156	12	.....	\$5,515 98
Massy	44	.....	.....	10	5	59	176	5	.....	500 00
Ft. Branch	14	.....	.....	2	3	19	21	1	.....	50 00
Total	109	.....	.....	33	21	163	353	18	.....	\$6,065 98

GREENE COUNTY.

Black Creek	54	10	60	38	9	171	146	14	2	.....
Island No. 1	73	12	24	50	12	171	204	19	.....	.....
Island No. 2	70	28	38	47	14	197	172	17	1	.....
Island No. 3	70	.....	.....	19	10	99	150	9	.....	.....
Island No. 5. (No report.)	20	16	06	52	16	200	144	22	.....	.....
Gilmour .....	.....	6	26	15	4	51	215	4	.....	.....
Hoosier No. 1 .....	.....	4	16	5	6	31	40	2	.....	.....
Hoosier No. 2	20	6	16	6	10	58	74	3	.....	\$856 67
Island Valley No. 2	99	.....	.....	30	13	142	130	16	.....	.....
Island Valley No. 3	130	.....	.....	31	9	170	142	17	.....	.....
South Linton	2	12	50	25	10	99	116	7	.....	.....
Midland	30	.....	.....	4	6	40	61	2	.....	.....
Vulcan	6	18	92	55	8	179	186	20	.....	.....
Summit No. 2	52	.....	.....	13	9	74	248	7	.....	.....
Templeton	204	.....	.....	45	16	265	241	18	1	.....
Victoria	47	10	56	48	15	176	174	20	2	7,001 06
Glenburn	81	.....	.....	31	13	125	212	10	.....	.....
Antioch	21	10	41	12	10	94	148	5	.....	500 00
Tower Hill	1	18	99	30	12	160	135	13	.....	252 00
Green Valley	17	18	100	50	21	206	211	16	1	540 00
Lattis Creek No. 1	20	18	90	45	12	185	122	18	.....	.....
Atlas No. 1	40	4	16	9	8	77	159	3	.....	.....
Atlas No. 2	31	.....	.....	5	3	39	130	.....	.....	.....
Fry .....	.....	8	20	6	4	38	.....	2	.....	.....
Letsinger	15	10	70	37	12	144	160	9	.....	90 40
North Western .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Twin. (Not reported.)	60	.....	.....	13	9	82	170	7	.....	800 00
North Linton	20	.....	.....	5	6	31	19	2	.....	.....
Pennsylvania .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total	1,183	208	910	726	277	3,304	3,908	282	7	\$10,049 13

Showing Number of Miners, Machine Runners and Helpers, Etc.—Continued.

KNOX COUNTY.

NAME OF MINE.	Pick Miners.	Machine Runners and Helpers.	Loaders.	Inside Day and Monthly Men.	Outside Day Men.	Total Employees.	Days Worked.	Mules Used.	Fatal Accidents.	Improvements.
Bicknell.....	47	.....	.....	13	10	70	160	7	.....	.....
Knox.....	63	.....	.....	12	9	84	84	7	.....	\$3,200 00
Lynn.....	50	.....	.....	12	10	72	136	6	.....	.....
Prospect Hill.....	17	.....	.....	4	4	25	25	3	.....	.....
Enterprise.....	18	8	4	5	5	40	53	2	.....	1,250 00
Wheatland.....	32	.....	.....	5	6	43	159	2	2	2,081 40
Pine Knot.....	.....	2	9	9	14	34	26	1	.....	.....
Total.....	227	10	13	60	58	368	643	28	2	\$6,531 40

PARKE COUNTY.

Brazil Block No. 12.....	22	12	26	29	9	98	203	10	.....	.....
Cox No. 3.....	68	.....	.....	21	12	101	191	9	.....	.....
Lucia.....	45	.....	.....	17	5	67	188	12	.....	\$350 00
New Century.....	52	.....	.....	15	6	73	65	11	.....	.....
Lyford No. 1.....	26	12	41	25	12	110	195	9	.....	1,870 00
Mary.....	9	14	36	25	10	94	142	8	.....	2,213 59
McIntosh No. 3.....	29	.....	.....	5	4	38	55	.....	.....	.....
Superior No. 1.....	148	.....	.....	31	8	187	183	10	.....	.....
Superior No. 2.....	105	.....	.....	35	12	152	194	12	.....	.....
Superior No. 3.....	66	.....	.....	16	6	88	202	5	.....	.....
Minshall No. 1.....	130	.....	.....	50	11	191	230	19	.....	.....
Minshall No. 2.....	17	.....	.....	5	4	26	239	.....	.....	755 37
Pan American.....	135	.....	.....	23	13	171	159	9	.....	.....
Brazil Block No. 9.....	81	.....	.....	33	9	123	178	10	.....	.....
Raccoon.....	32	.....	.....	9	5	46	74	4	.....	.....
Park No. 11.....	36	22	32	15	9	108	178	7	1	.....
Mecca No. 4.....	13	.....	.....	6	3	22	87	4	.....	.....
Mecca No. 3.....	42	8	81	14	12	157	189	14	.....	.....
C. B. Harrison. (No mine boss report.).....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
W. P. Harrison. (No mine boss report.).....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total.....	1,044	68	216	374	150	1,852	2,902	157	1	\$5,188 96

PERRY COUNTY.

Troy	16	.....	.....	3	3	22	164	2	.....	.....
Total	16	.....	.....	3	3	22	164	2	.....	.....

PIKE COUNTY.

Aberdeen	13	.....	.....	3	3	19	77	3	.....	\$145 00
Ayrshire No. 3	60	.....	.....	20	7	87	77	15	.....	.....
Ayrshire No. 4	115	.....	.....	28	10	153	165	12	2	313 87
Ayrshire No. 5	33	.....	.....	5	5	43	40	3	.....	1,035 02
Blackburn	50	.....	.....	14	7	71	38	10	.....	.....
Littles	122	.....	.....	36	12	170	144	13	.....	.....
Rogers. (No mine boss report) .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Hartwell	98	.....	.....	20	13	131	181	12	.....	1,032 35
Petersburg	40	.....	.....	16	7	63	21	6	.....	.....
Carbon	18	.....	.....	6	4	28	135	.....	2	325 00
Winslow No. 2	50	.....	.....	8	72	130	9	.....	.....	1,338 62
Winslow No. 5	30	.....	.....	8	6	44	66	.....	.....	.....
Winslow No. 3. (No mine boss report) .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Ayrshire No. 6. (Idle; no report) .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total	629	.....	.....	164	146	939	953	74	5	\$4,189 86

SULLIVAN COUNTY.

Bunker Hill	18	6	23	22	30	99	207	9	.....	.....
Caladonia	16	.....	95	35	15	173	222	10	1	.....
Dugger .....	.....	8	34	17	7	66	93	7	.....	.....
Green Hill	8	6	35	20	11	80	130	9	.....	\$640 00
Hymera No. 1	44	14	104	53	19	234	46	15	.....	1,621 67
New Linton	8	6	14	13	5	46	231	4	.....	.....
Jackson Hill No. 2 .....	.....	18	107	34	17	176	171	19	1	.....
Phoenix No. 1	47	8	12	31	15	113	90	11	.....	.....
Phoenix No. 3	15	.....	.....	4	4	23	62	3	.....	.....
Shelburn .....	.....	4	13	8	9	34	108	4	.....	.....
Star City .....	.....	12	62	43	23	140	147	12	.....	.....
White Ash	38	.....	.....	10	6	54	175	5	.....	426 14
Freeman	37	.....	.....	9	6	52	186	4	1	519 00
Sun Flower .....	.....	16	92	28	11	147	179	10	1	.....
Glendoria .....	.....	20	123	37	24	204	158	15	.....	.....
Hymera No. 2	6	18	123	25	18	190	174	12	.....	.....
Wilfred No. 1 .....	.....	16	96	47	20	179	183	12	1	.....

Showing Number of Miners, Machine Runners and Helpers, Etc.—Continued.

SULLIVAN COUNTY—Continued.

NAME OF MINE.	Pick Miners.	Machine Runners and Helpers.	Loaders.	Inside Day and Monthly Men.	Outside Day Men.	Total Employees.	Days Worked.	Mules Used.	Fatal Accidents.	Improvements.
Island No. 4.....	26			10	6	42	191	3		
Mammoth Vein.....		10	50	18	15	93	216	4		3,689 51
Little Giant.....		10	53	20	10	93	213	4		
Cummins.....	42	10	13	20	10	95	159	8		
La Blanche.....	2	12	51	22	19	106	233	6		
Citizens.....	11	4	19	4	6	44	240	2		
Bruilletes Creek No. 6.....	46			9	6	61	113		2	
Mildred.....	9	10	18	8	8	53	190	3		
Virginia.....	14	18	85	16	12	145	114	6		
Superior.....	26			7	6	39	164	2		
Shirley Hill.....	43			7	6	56	82	3		
St. Clair.....		10	34	13	11	68	107	5		
Jackson Hill No. 4.....	36	6	12	21	9	84	128	2		
Hymera No. 3.....	11	12	85	33	19	160	117	10		
Kettle Creek.....		4	13	9	4	30	38	2		
Reliance. (New mine. No report.).....										
Phoenix No. 4. (New mine. No report.).....										
Union No. 1.....	6	6	13	7	8	40	41	2	1	
Total.....	509	276	1,379	660	395	3,219	4,694	226	8	\$6,896 32

VANDERBURGH COUNTY.

Diamond.....	37			7	7	51	261	4		
First Avenue.....	22			5	6	33	224	2		
Ingliside.....	25	4	4	6	5	44	221	3		
Sunnyside.....	65			20	10	95	141	14		
Union.....	30			7	7	44	205	4		
Unity.....	95			19	12	126	262	13		
Total.....	274	4	4	64	47	393	1,314	40		

VERMILLION COUNTY.

Brillettes Creek No. 3	82			24	9	115	195	14		
Brillettes Creek No. 5	153			40	12	205	215	20		
Cayuga	13			4	2	19	223	3		\$2,760 00
Crown Hill No. 1	157			22	9	188	202	14		3,959 00
Crown Hill No. 2	96			12	7	115	194	9	1	7,354 90
Oak Hill	97			28	11	136	152	12		
Prince	158			49	11	218	177	16		208 12
Willow Grove	83			14	7	104	159	8	1	1,444 60
Rhodes	91			20	9	120	246	7	1	
Riverside. (No report)										1,683 65
Maple Valley No. 1	81			15	7	103	158	7		407 62
Maple Valley No. 2. (No report)										1,150 00
Buckeye	40			7	8	55	24	3		
Total	1,051			235	92	1,378	1,945	113	3	\$18,947 89

VIGO COUNTY.

Atherton	13	10	51	36	11	120	213	8		
Brick Works	12			2	2	16	247	1		\$400 00
Chicago No. 6	34			13	6	53	49	6		
Diamond	133			40	12	185	210	17	2	
Peerless	74			19	9	102	168	9		
Lawton	173			30	11	214	184	16		
Union	42			15	11	68	69	6		
Ehrlich	32			8	5	45	20	5		
Grant No. 2	142			50	12	204	191	20	2	1,000 00
Glen Oak	29	14	73	50	15	181	215	25		
Hector	43			15	9	67	157	7		
Klondyke	75			15	10	100	185	10	1	
Miami No. 1	177			28	10	215	210	16		
Park No. 10	50	28	33	42	16	169	179	12		
Redbird	41			10	5	56	237	4		
Rosebud No. 2	172			30	11	213	129	12		
Royal No. 1	102			23	13	138	173	9		
Larimer	24			5	5	34	246	2		
Broadhurst	58			11	8	77	220	6		
Miami No. 2	80			15	7	102	170	6		
Deep Vein	57			16	8	81	209	4		
Greenfield No. 1	54			10	5	69	240	4		
Lost Creek	50			8	7	65	202	4		
Sugar Creek	45	6	10	11	7	79	265	3		
Ray No. 2	31	10	14	5	7	67	162	2		
Miami No. 3	49			5	7	61	97	4		
Forest Park. (New mine. No report.)										
Total	1,791	68	181	512	229	2,781	4,647	218	5	\$1,400 00

Showing Number of Miners, Machine Runners and Helpers, Etc.—Continued.

WARRICK COUNTY.

NAME OF MINE.	Pick Miners.	Machine Runners and Helpers.	Loaders.	Inside Day and Monthly Men.	Outside Day Men.	Total Employees.	Days Worked.	Mules Used.	Fatal Accidents.	Improvements.
Air Line.....	27			4	4	35	92	4		
Big Four.....	8	12	46	16	12	94	167	9		\$1,316 55
Big Vein No. 3.....	4	18	51	12	9	94	206	6		
Chandler.....		8	8	3	6	25	60	2		510 00
De Forrest.....		4	10	3	3	20	115	2		
Star No. 1.....	40			9	8	57	195	8		
Electric.....		12	50	17	12	91	243	6		1,000 00
Star No. 2. (Burke.).....	23			4	6	33	142	3		1,428 94
Total.....	102	54	165	68	60	449	1,220	40		\$4,255 49
Grand Total.....	8,806	760	2,046	3,449	1,777	17,838	29,641	1,421	34	\$74,230 83

STRIKES AND OTHER LABOR CONDITIONS.

Numerous strikes of a local character have occurred throughout the State during the past year, which have affected only individual mines, with but three exceptions. These were of such short duration as to require no special mention.

One of the exceptions referred to was a strike of the drivers at the Indiana Bituminous Coal Company's Fairview Mine, located near Turner, in Clay County. The mule barns here are about one mile distant from the mine, and the drivers thought it was not a part of their day's work to bring the mules from these barns to the mine before working hours in the morning (7 o'clock). They refused to conform with the rules of the mine, and this resulted in a strike June 7th. Since that time the mine has not been in operation.

A strike occurred August 1st at the Coal Bluff Mining Company's Harrison No. 3 Mine. This was caused by the miners refusing the company permission to drive nothing but entries during the dull season. The reason given by the company for asking such permission was on account of the small demand for coal just at that time. They could not dispose of the product of the entire mine, and thought by driving nothing but narrow work they could increase the number of working places, thereby employing a larger force of miners and increasing the capacity of the mine when the market demanded it later in the season. Work was resumed after the mine had been idle about four weeks, but it was not learned on what terms a settlement was made.

On April 1st a strike occurred at the Knox Mine, located near Bicknell, in Knox County. The trouble here was caused by a difference between the operators and miners as to the time when shot firing should begin. Prior to this the time for firing shots had been 3:15 o'clock p. m., but as a new contract took effect on the above date, the company insisted on 3:30 as firing time. The miners demanded a continuance of the previous conditions, and after an idleness of five months the company conceded their demand and operations were again resumed at the mine.

The national joint convention of operators and United Mine Workers of America was held in Indianapolis during the month of February, at which time a contract was agreed upon whereby

the miners accepted a reduction of 5 cents per ton on the price paid for pick mining and a proportionate reduction in the wages of machine miners and all other labor in and around the mines. This reduction took effect on April 1st, and the contract covers a period of two years, extending from April 1, 1904, to March 31, 1906. Considerable dissatisfaction on the part of the miners was expressed at the time the settlement was made, but after the situation had been thoroughly explained to them and matters made plain, the wisdom and energy displayed by the national and State officers in securing so favorable a contract in the face of a falling market was commended in every part of the State, and at the State conventions held in Terre Haute and Brazil in the following month of March the contract was ratified without hesitation.

We give herewith copies of the Terre Haute and Brazil agreements, made by the miners of District 11, representing the bituminous field, and the miners of District 8, representing the block coal field:

TERRE HAUTE AGREEMENT.

APRIL 1, 1903, TO MARCH 31, 1904.

Pursuant to an agreement made between the coal operators and the United Mine Workers of America of Illinois, Indiana, Ohio and Pennsylvania, made at Indianapolis, Indiana, March 21, 1904, the price of mining for bituminous coal in the State of Indiana shall be 85 cents per ton of 2,000 pounds for screened lump coal, made over a standard screen, and 52 cents per ton of 2,000 pounds for run-of-mine. That further details in the scale of prices for pick and machine mining in the State of Indiana for one year, beginning April 1, 1904, shall be as follows:

The standard height of coal in Indiana shall be 3 feet 6 inches, excepting in mines already opened, where the standard height shall be 3 feet 3 inches. All coal less than 3 feet 3 inches in thickness and over 2 feet 9 inches, the price shall be 93 cents per ton for screened lump coal, and 57 cents per ton for mine run coal. All coal less than 2 feet 9 inches and down to 2 feet 6 inches, the price shall be \$1.01 per ton for screened lump coal and 62 cents per ton for mine-run coal.

Narrow entries 7 to 9 feet wide, \$1.76 $\frac{3}{4}$ per yard.

Wide entries 12 feet wide, \$1.10 per yard.

Wide entries shall not be more than 13 feet nor less than 11 feet. In the event of a 10 or 11 foot entry being demanded by the operator, narrow entry prices shall be paid, if 14, 15, 16 or 17 foot entries are demanded the wide price shall be paid.

The right of the operators to drive an 18-foot room when necessary shall not be questioned.

BREAK THROUGHS.

Break throughs between entries shall be paid for at entry prices. Break throughs between rooms, when sheared or blocked, shall be paid for at entry prices, but no break throughs shall be driven without consent of the operators. Nothing herein shall interfere with the law governing break throughs.

ROOM TURNING.

Room turning, \$4.25. Room necks to be driven 12 feet in and widened at an angle of 45 degrees when so desired by the operator. Any distance in excess of above shall be paid for proportionately, but no room neck shall exceed 15 feet. When room necks are driven 12 feet wide, the price shall be $\frac{5}{8}$ of regular price, \$2.65 $\frac{1}{2}$.

MACHINE MINING.

In entries 7 to 9 feet wide, \$1.26 $\frac{1}{2}$. In entries 12 feet wide, $\frac{5}{8}$ of price of narrow entries, or \$0.78 $\frac{5}{8}$. Narrow work after punching machine shall be sheared when demanded by the operator. Narrow work after the chain machine must be done in a workmanlike manner.

BREAK THROUGHS.

Break throughs between entries, same as entry prices. Break throughs between rooms shall be paid for at the same price when similarly driven.

ROOM TURNING.

Room turning, \$3.18 $\frac{3}{4}$. Room necks to be driven 12 feet in and widened at an angle of 45 degrees when so desired by operators. Any distance in excess of above shall be paid for proportionately, but no room neck shall exceed 15 feet. When room necks are driven 12 feet wide, prices shall be $\frac{5}{8}$ of regular price, or \$1.98 $\frac{1}{2}$.

DAY WORK FOR PUNCHING MACHINE.

Machine work, when paid for by the day, shall be: For machine runner, \$2.99 $\frac{1}{2}$; helper, \$2.42.

DAY WORK, CHAIN OR CUTTER BAR MACHINE.

When paid for by the day, shall be: For machine runner, \$2.84 $\frac{1}{4}$; helper, \$2.84 $\frac{1}{4}$. Day work for machines shall apply only to opening new mines and defective work, such as horse backs, etc.

PRICE PER TON FOR MACHINE MINING FOR PUNCHING MACHINE.

Vandalia track and north thereof:

Screened Lump.—Runner, 10 $\frac{3}{4}$ cents; helper, 9 $\frac{3}{4}$ cents; loading, shooting and timbering, 46 $\frac{1}{2}$ cents. Total, 67 cents.

Run of Mine.—Runner, 7 cents; helper, $6\frac{1}{2}$ cents; loading, shooting and timbering, $28\frac{1}{2}$ cents. Total, 42 cents.

South of Vandalia track:

Screened Lump.—Runner, $9\frac{3}{4}$ cents; helper, 8 13-20 cents; loading, shooting and timbering, 48 6-10 cents. Total, 67 cents.

Run of Mine.—Runner, 6 7-40 cents; helper, 5 27-40 cents; loading, shooting and timbering, 30 3-20 cents. Total, 42 cents.

FOR CHAIN MACHINE.

Screened Lump.—Runner, $5\frac{3}{4}$ cents; helper, $5\frac{3}{4}$ cents; loading, shooting and timbering, 52 cents. Total, $63\frac{1}{2}$ cents.

Run of Mine.—Runner, 3 $\frac{5}{8}$ cents; helper, 3 $\frac{5}{8}$ cents; loading, shooting and timbering, $32\frac{1}{4}$ cents. Total, $39\frac{1}{2}$ cents.

Machine shovels shall be furnished by the operators, but when replaced the old shovels must be returned, and in case of careless breaking or destruction, the helper shall pay for the shovel so destroyed.

BLACKSMITHING.

Price of blacksmithing shall be $1\frac{1}{4}$ cents on the dollar. Sharpening shall be done in workmanlike manner and men shall not have to wait for their tools.

DAY LABOR.

Inside day labor shall not be less than \$2.42 per day of eight hours, when men are employed. And for outside day labor on the north of the B. & O. S. W. the minimum price shall be $\$1.91\frac{1}{4}$ per day. South of the B. & O. S. W. the price shall be $19\frac{1}{2}$ cents per hour.

All outside day laborers working at the mines, excepting weighmasters, flat trimmer and dumper, who shall be regarded strictly as company men, shall be recognized as members of the United Mine Workers of America, and present conditions and hours of labor shall prevail during the existence of this contract; and provided further, that in emergencies or in the absence of any regular employe the right of the operator to employ men not members of the United Mine Workers of America for outside day labor shall not be questioned. Any and all flat trimmers shall dock for dirty coal.

DEAD WORK.

1. It is agreed that the companies shall have the working places as dry as local conditions will permit, and said working places shall be in working condition at time of starting work in the morning. If any company shall fail to have said working places dry or reasonably so one hour after starting time two successive days, the company shall, if said failure is traceable to neglect or carelessness of the company's agent, give miner or miners so affected other work or pay him or them for time so lost.

2. The question of slate in or over the coal shall be and is regarded a local question to be taken up and adjusted by the methods provided in

the annual Terre Haute agreement for settlement of disputes: Provided, however, that established usages and prevailing conditions shall not be changed except in new mines where they have not been considered and adjusted.

3. Where bottom coal is excessively hard to take up, the operator shall have the option. If he demands that it be taken up he shall pay extra therefor. Provided, that where coal so left shall exceed four inches in thickness it shall be taken up by the loaders and paid for by the machine men, but this shall not apply when caused by sulphur, boulders, rock or any unusual condition. And whenever there shall arise a dispute between any loader and boss, or committee and boss, as to whether the bottom coal in any room is "excessively hard" the company interested shall select a man who shall take up one-third of such bottom coal, and if by such test it requires more than forty minutes to take up all the bottom coal in such room, then the loader shall be paid at the rate of 30 cents per hour for such time so required in excess of forty minutes. This is to apply to the No. 4 vein of Linton coal.

GENERAL.

1. When the coal is paid for mine run, it shall be mined in as good condition as when paid for on a screened lump basis, and, when loaded on the miner's car, it shall, as nearly as possible, be free from slate, bone coal, or other impurities, and, if it can be shown that any miner persistently violates the letter or spirit of this clause, he shall be discharged. Persistently, as used in this clause, means three cars the first week and two cars in any succeeding week. Nor shall he load an undue proportion of fine coal in any one car, but shall see that the fine coal is mixed with the large coal in such a way as to make a fair quality of mine run coal. This provision for cleaning coal and penalty for failure also applies to screened lump coal.

2. The semi-monthly pay shall continue until the constitutionality of the law providing for weekly pay shall have been passed upon by the Supreme Courts of Indiana and of the United States.

3. The time of beginning work in the morning and the length of intermission at noon shall be considered a local question.

4. That the above scale is based upon an eight hour work day; that it is definitely understood that this shall mean eight hours work at the face, exclusive of the noon time, six days in the week, or forty-eight (48) hours in the week, and that no local ruling shall in any way deviate from this agreement, or impose conditions affecting the same, but any class of day labor may be paid at the option of the operator for the number of hours and fraction thereof actually worked at the hour rate, based on one-eighth of the scale rate per day; provided, that when men go into the mine in the morning they shall be entitled to two hours' pay whether the mine works or not, excepting in event of a mine being closed down by action of any member or members of the U. M. W. of A., the two hours' pay shall be forfeited.

REGARDING DRIVERS.

They shall take their mules to and from the stables, and the time required in so doing shall not include any part of the day's labor, their work beginning when they reach the change at which they receive empty cars, but in no case shall a driver's time be docked while he is waiting for such cars at the point named.

5. Inside day work may be done upon idle days, and in case of emergency on overtime.

6. It is agreed that if any difference arises between the operators and miners at any time, a settlement shall be arrived at without stopping the work. If the parties immediately affected can not reach an agreement themselves, the question shall be referred without delay to a board of arbitration constituted of two operators, selected by the operator interested, and two miners selected by the local union of the United Mine Workers of America involved. In the event of these four being unable to reach a decision, they shall select a fifth man, and the decision of the board so constituted shall be final, but no miner or operator directly interested in the differences shall be a member of such board. Nothing in the above shall be construed as excluding officers of the miners' or operators' associations, nor mine superintendents.

7. The duties of the mine committee shall be confined to the adjustment of disputes between the mine boss or superintendent and any of the members of the United Mine Workers of America, working in and around the mines, except as hereinafter set forth in Article No. 16. In case they fail to agree, they shall proceed to adjust the trouble by the selection of an arbitration board as provided in Article 6 of this agreement. The mine committee shall have no other authority, nor exercise any other control, nor in any way interfere with the operation of the mine, and, for violation of this agreement, the committee or any other member thereof or mine boss or superintendent, shall be discharged.

8. That under no circumstances will the operators recognize or treat with a mine committee or any representative of the United Mine Workers of America, during the suspension of work, contrary to this agreement.

9. The operator shall have the privilege of working a night shift for cutting coal with machines. All men so employed shall be paid 28 cents extra for each eight hours' work at night, in addition to the scale price per ton.

10. Work on driving entries and drawing pillars may be by double shift at the option of the operator.

11. This contract shall in no case be set aside because of any rules of any local union of the U. M. W. of A. Nor shall there be any rules made controlling or affecting the operation of the mines, nor shall any change be made in accepted rules without the operators and miners first consulting and agreeing thereto.

12. Coal may be dumped as slowly as the operator may find necessary to thoroughly screen it, even if the car is brought to a stop, but it shall not be dumped in such a way as to throw the coal over the car door or unnecessarily break it.

13. Any miner knowing his place to be unsafe, shall protect same

without delay and shall go into the mine for that purpose outside of regular hours and on idle days.

14. No restriction shall be placed on the amount of coal which machines may mine, nor on the number of cars that any miner may load in any specified time.

Men shall work double in wide entries at option of operator in developing the mine or for running entries for the purpose of increasing production.

Enough extra loaders shall be employed in each mine so that the full complement of loaders agreed upon to follow each machine shall be at work every day that the mine hoists coal.

Where three places are now given to two loaders the custom shall continue.

No more than three places for two men nor two places for one man shall be allowed. In mines where the coal averages 6 feet high or over, rooms 30 feet wide or over equipped with two tracks shall be considered double places, and two loaders may be limited to two such places.

In Sullivan County where men work double in two rooms 25 to 30 feet wide, with track up to the center, the custom shall continue.

Whenever a new mine is opened it shall be governed by the same rules existing in other contiguous mines in the same vein of coal.

15. The price of powder per keg shall be \$1.75. The miners agree to purchase the powder from their operators, provided it is furnished of standard grade and quality, that to be determined by the operators and expert miners jointly where there is a difference.

16. Engineers shall be paid the present rate of wages, minus 5.55 per cent. Eight hours shall constitute a day's work. But the engineers shall, outside of regular hours, hoist and lower the men, and in addition shall perform all the duties which necessarily and usually pertain and belong to an engineer's position, and shall not receive any extra pay therefor. It is agreed further that no hoisting engineer shall be subjected to the interference or dictates of the mine committee nor the local unions, but all the differences between the engineer and his employer shall be adjusted by the officers of the U. M. W. of A. and employer interested.

17. The prices now paid firemen and blacksmiths, together with the present condition of employment and hours of labor, shall continue during the existence of this contract. Less 5.55 per cent.

18. It is further agreed that the operators shall offer no objection to the check-off for the check-weighman and for dues for the U. M. W. of A., provided, that no check-off shall be made against any person until he shall have first given his consent in writing to his employer. This applies to all day work as well as miners.

SHOT FIRERS.

Present conditions as to shot firers shall continue until a commission composed of one miner, to be selected by the United Mine Workers of America of District No. 11, one operator, to be selected by the Bituminous Coal Operators' Association of Indiana, and Prof. Robert Thurston, of Cornell College, an expert engineer shall be appointed.

Such commission shall, as soon as possible, examine the so-called dan-

gerous pick mines in the State of Indiana, and decide whether or not it is necessary to employ shot firers in any of said mines, on account of gas, dust or other causes beyond the control of either miners or operators, the present methods of mining not to be considered as being beyond control.

If a majority of such commission shall decide that it is necessary that shot firers be employed in any mine and shall sign a report to that effect, then shot firers may be employed by the miners in such mine, who shall pay them for their services, and such shot firers shall be wholly in the employ of the miners and in no manner whatever to be the agents, servants or employes of the owners, operators or managers of the mine.

The owner or operator of any mine where the commission decides that it is necessary that shot firers be employed and where they are so employed by the miners, shall pay to the local union an amount of money equivalent to one-fourth ($\frac{1}{4}$) cent per ton of mine run, or two-fifths ($\frac{2}{5}$) cent per ton of screened lump coal of the output of said mine.

It being agreed and understood that such payment to the local union shall not directly or indirectly be considered as or construed to be a payment by the owner or operator of any part or portion of the services rendered by shot firers for the miners.

It being further expressly agreed and understood that in any mine where shot firers are employed that the relation of master and servant shall exist wholly between the miners and the shot firers, and that such relation shall not obtain as between the owner or operator of the mine and the shot firers.

The expenses of such commission shall be borne equally by the United Mine Workers of America of District No. 11, and the Bituminous Coal Operators' Association of Indiana, except that the Operators' Association shall alone bear the expenses occasioned by the appointment and services of the expert engineer.

In behalf of the Indiana Bituminous Coal Operators' Association:

J. C. KOLSEM, President.

P. H. PENNA, Secretary.

United Mine Workers of America, District No. 11:

GEO. HARGRAVE, President.

J. H. KENNEDY, Secretary.

AGREEMENT BETWEEN THE BLOCK COAL OPERATORS AND
THE UNITED MINE WORKERS OF AMERICA, DISTRICT
No. 8, FROM APRIL 1, 1904, TO APRIL 1, 1906.

CONTRACT.

PICK MINING SCALE FOR 1904-1906.

Contract between the operators, miners and day laborers of the Brazil Block Coal District, from April 1, 1904, to April 1, 1906.

1. Entered into this first day of April, 1904, between the Operators' Scale Committee of the Block Coal District, and the Executive Board of the United Mine Workers of America, representing District No. 8.

2. Pursuant to a contract made between the Coal Operators and the

United Mine Workers of America, of Indiana, Illinois, Ohio and Pennsylvania, made at Indianapolis, Ind., March 21, 1904.

3. The price for mining screened block coal in the Block Coal District of Indiana shall be ninety-five (95) cents per ton of 2,000 lbs., it being understood also that the price for digging unscreened coal shall be an equivalent of the price paid for screened coal.

4. That further details in the scale prices for pick mining in the Block Coal District shall be as follows:

5. The payment for low coal shall be upon the following scale:

6. For all coal two feet ten inches, and under three feet one inch, one dollar (\$1.00) per ton.

7. For all coal under two feet ten inches, one dollar and five cents (\$1.05) per ton.

8. The price of yardage shall be as follows:

Single yardage in coal 3 ft. 1 in. or over.....	\$0 95
Double yardage in coal 3 ft. 1 in. or over.....	1 90
Gob entries in coal 3 ft. 1 in. or over.....	1 42½
Gob entries in coal 3 ft. 1 in. or over, without brushing.	47½
Single yardage in coal 2 ft. 10 in. and under 3 ft. 1 in..	1 00
Double yardage in coal 2 ft. 10 in. and under 3 ft. 1 in..	2 00
Gob entries in coal 2 ft. 10 in. and under 3 ft. 1 in.....	1 50
Gob entries in coal 2 ft. 10 in. and under 3 ft. 1 in., without brushing	50
Single yardage in coal below 2 ft. 10 in.....	1 05
Double yardage in coal below 2 ft. 10 in.....	2 10
Gob entries in coal below 2 ft. 10 in.....	1 57½
Gob entries in coal below 2 ft. 10 in., without brushing.	52½

All entries to be driven, when required by the operator, 5½ feet in the clear in height, and the miners agree to gob the dirt, when he is not required to take it more than the distance of six rooms back from the last breakthrough, and when the dirt is hauled by a mule, then the miners agree to unload the same at a distance of not more than eight rooms back from the last breakthrough, from the face of the entry. This agreement shall apply to all the block coal mines in the Block Coal District, with the exception of the present No. 1 and No. 2 Superior Mines of the Zellar, McClellan & Co., and in these two mines the same conditions shall continue as were in force during the year just ending, viz.: The miners shall continue to gob the breakthroughs. Twenty-five cents per yard shall be paid for all double yardage, when the same is worked double shift, and 12½ cents per yard for all single yardage, when the same is worked double shift. Work on driving entries and drawing pillars may be by double shift at the option of the operator.

9. Inside day scale:

Track layers	\$2 42
Track layers' helpers.....	2 42
Trappers	1 06½
Bottom cagers	2 42
Drivers	2 42
Trip riders	2 42
Water haulers	2 42

Timberman, where such are employed.....	2 42
Pipemen, for compressed air plants.....	2 37½
All other inside day labor.....	2 42
Blacksmiths	2 69.36
All outside day labor shall receive.....	1 91¼

10. The firemen and night pumpers shall be paid at the rate of twenty-three and nine-tenths (23 9-10) cents per hour for their labor. The above wage is based on an eight (8) hour work day, but in the event the operator desires it, the firemen and night pumpers are to work overtime to the extent of not more than two hours, in any one day or shift. However, it is understood that in the event of an emergency the firemen and night pumpers will not limit their time, but continue working until such emergency is past.

11. The firemen and night pumpers shall be subject to the same rules and regulations as the top men, and be in their class, and may be laid off in case the mine shall work only parts of days, and the work of the firemen and the top men, may be interchanged if it is found to be to the interest of the employer so to do, for example: Where the work can be performed by one man, the firing and any other work about the top shall be done by any one of the top men selected.

12. Where a miner is working a deficient place, and is being paid by the day, his pay shall be \$2.42 per day, and if he uses his own tools during such time, he shall be paid ten cents per day for the use of same. The operator shall have the option of furnishing the tools for any such work.

13. The price of blacksmithing shall be 1½ cents on the dollar.

14. Semi-monthly pay shall continue until the constitutionality of the law providing for weekly pay, shall have been passed upon by the Supreme Courts of Indiana, and of the United States.

15. The miner shall not be compelled to load his coal more than six feet from the face, at the beginning time.

16. Inside day work may be done upon idle days, and in the case of emergency on overtime.

17. The hour to begin work in the morning shall be seven (7) a. m., with thirty minutes stop for dinner, and begin shooting at 3:30 o'clock p. m., from April 1, 1904 and 1905, to October 1, 1904 and 1905, and from October 1, 1904 and 1905, to April 1, 1905 and 1906, the mines shall start at 7:30 a. m. with thirty minutes stop for dinner, and begin shooting at 4:00 p. m., and that no shooting shall be done at the mine except by mutual consent between the bank boss and the bank committee, and in the event that the mine is to work a half day, it shall be the duty of the mine boss to notify the bank committee of the fact.

18. That eight hours a day means eight hours' work in the mine at the usual working places, for all classes of inside workmen. This shall be exclusive of the time required in reaching said working places in the morning, and departing from the same at night.

19. The miners hereby agree to do all the propping in their rooms, except setting of props required to break the bottom in shooting the same, and if any props are loosened or displaced, thereby endangering the safety of the workmen, the miners agree to reset the same.

20. It is also agreed on the part of the operators not to require the miners to put down their own road, and bottom shooters may lay the road in the rooms when required.

21. Also, to give each miner as near as possible an equal turn of cars, and not allow any day hands to load coal on idle days.

22. No miner shall be discharged or discriminated against because of his refusal to do work by the day when called upon by the pit boss.

23. It is also agreed not to require miners to load or clean falls unless they are caused by some fault of the miner not properly timbering his working place, or his having shot or otherwise caused his timber to become insecure, in which case it will be the duty of the miner to put his place in good order again.

24. It is further agreed that if any difference arise between the operator and miner at any pit, settlement shall be arrived at without stopping of work. If the parties immediately affected can not reach an adjustment between themselves, the question shall be referred to the Executive Board of the United Mine Workers of America, representing District No. 8, and an equal number of operators, whose actions shall be final, but no miner nor operator interested in the differences shall be a member of said committee.

25. The duties of the mine committee shall be confined to the adjustment of disputes between the mine boss or superintendent and any of the members of the United Mine Workers of America, except the engineer, working in and around the mines.

26. Regarding Drivers: They shall take their mules to and from the stables, and the time required in so doing shall not include any part of the day's labor. Their work beginning when they reach the parting at which they receive empty cars, and in no case shall the drivers' time be docked while he is waiting for said cars at point named, but when the men go into the mine in the morning, they shall be entitled to two hours' pay, whether or not the mine works the full two hours, but after the first two hours, the men shall be paid for every hour thereafter, by the hour or for each hour's work, or fractional part thereof. If for any reason the regular routine of work can not be furnished inside labor for a portion of the first two hours, the operators may furnish other than the regular labor for the unexpired time.

27. That under no circumstances will the operators recognize or treat with a mine committee or any representative of the United Mine Workers of America, during the suspension of work contrary to this agreement.

28. The Block Coal District of Indiana may continue the use of the diamond bar screen, the screen to be seventy-two (72) feet superficial area, of uniform size, one and one-quarter (1¼) inches between the bars, free from obstructions, and that such screen shall rest upon a sufficient number of bearings to hold the bars in proper position.

29. It is hereby further agreed that track layers may begin work on top before the usual time of hoisting coal, in getting track material ready to send down on the cage, and that the time required in doing so, shall be a part of the eight hours' work.

30. In case of emergency work, the mine boss shall consult with the mine committee, and if they approve of the work being done on over-

time, the men engaged thereon shall not be required to lay off until their time is equalized with the others working in said mine.

31. The Crawford Coal Company in their mines at Center Point may continue to do the brushing in the entries where the coal is 3 feet 1 inch and under in thickness.

32. On and after April 1, 1904, until April 1, 1906, the scale of hoisting engineers throughout the Block Coal District, or District No. 8, shall be as follows: Where one engineer is employed, the compensation shall be seventy-nine dollars and sixty-eight and one-half cents (\$79.68½) per month. Where two engineers are required, the first engineer shall receive seventy-nine dollars and sixty-eight and one-half cents (\$79.68½) per month, the second sixty-nine dollars and six cents (\$69.06) per month, and when they change week about, seventy-four dollars and thirty-seven and one-fourth cents (\$74.37¼) per month.

33. It is agreed on the part of the engineers to be at their work in time to lower the men and mules, and remain a sufficient time after the regular working hour to hoist the men and mules from the mine. Also to keep up all repairs on the machinery, including pumps in the mine.

34. It is also mutually agreed that a licensed engineer shall be employed at all times when steam is required at the throttle; provided, however, that in all cases where the mine is not hoisting coal, or the machines are not operated, then, and in all such cases, the engineers are required to do their own firing, it being understood that this provision does not apply to any case where the work of the mine may be stopped in the midst of any one shift. Nor does it cover any case where the fireman is required to assist in the washing or cleaning out the boilers on Sunday.

35. It is also fully understood and agreed upon the part of the United Mine Workers of America, that the engineers will not under any circumstances allow affiliation with any labor organization to interfere with or prevent their being on duty at any and all times required by the operators, and that they will not suspend work in sympathy with any organization; and further, that they will during the continuance of this contract at all times fully protect all the company's property under their care, and that they will operate fans and pumps, and lower or hoist such men or supplies as may be required to protect the company's property, and any and all coal that may be required to keep up steam at the company's plant. But it is understood that the operators will not ask them during this period to hoist any coal produced by non-union labor for sale on the market.

36. No engineer shall lay off or exchange shifts without the consent of the operators.

37. It is also agreed that in case of sickness or unexpected absence of the engineer any other engineer or engineers shall perform his duty; and if desired by them his wages for time so absent shall revert to the engineer performing such duty.

38. It is further agreed no hoisting engineer shall be subject to the interference or dictation of the mine committee nor the local unions, but all differences between the engineer and his employer shall be adjusted by the officers of the United Mine Workers of America and employer interested.

39. It is also agreed upon the part of the operators that they will enforce a rule forbidding the entering of the engine room by loafers and disinterested parties, and that they will have cards printed and placed in conspicuous places to this effect.

40. This contract is entered into in good faith by both parties, and there is to be no deviation from it by the operators, miners, laborers or any local unions.

Committee on behalf of the Operators for the Block Coal District:

JAS. H. McCLELLAND.

M. H. JOHNSON.

W. E. EPPERT.

WM. M. ZELLER.

A. H. ZIMMERMAN.

HUGH MASON.

JAS. J. BUCKLIN.

Executive Committee, District No. 8, United Mine Workers of America, for Block Coal Miners:

WM. HOUSTON, Pres. Dist. 8.

JOHN S. BENNETT, Vice-Pres.

WM. TREAGER, Secy.-Treas.

THOS. SLATER.

ROBERT GIVENS.

CONTRACT.

MACHINE MINING SCALE FOR 1904-1906.

Contract between the Machine Operators of the Block Coal District and the Executive Board, District No. 8, United Mine Workers of America, governing prices and conditions of mining in Machine Mines Block Coal District, from April 1, 1904, to April 1, 1906.

1. Entered into this first day of April, 1904, between the Operators Machine Mines of the Block Coal District and the Executive Board of the United Mine Workers of America, representing District No. 8.

2. Pursuant to a contract made between the Coal Operators and the United Mine Workers of America of Illinois, Indiana, Ohio and Pennsylvania, made at Indianapolis, March 21, 1904.

3. The price for loading, shooting, timbering, taking care of all draw slate that is four (4) inches and under in thickness, in rooms and entries, shall be forty-nine and three-fourths (49 $\frac{3}{4}$) cents per ton.

Price for entry driving, 6 to 9 feet wide, forty-nine and three-fourths (49 $\frac{3}{4}$) cents per yard.

Price for entry driving, 9 to 12 feet wide, thirty and three-fourths (30 $\frac{3}{4}$) cents per yard.

The loader agrees to keep the bug dust and draw slate back 14 feet from the working face.

All entries more than twelve feet in width shall be paid same as rooms.

Machine runners and helpers to be paid twenty-three and three-fourths (23 $\frac{3}{4}$) cents per ton, and when working by the day, machine runner to be paid \$2.86 $\frac{2}{3}$ per day; helpers, \$2.55 per day; motormen to receive \$2.86 $\frac{2}{3}$ per day.

Entry driving, 6 to 9 feet wide, machine runner to be paid twenty-three and three-fourths (23¾) cents per yard.

Entry driving, 9 to 12 feet wide, machine runner to be paid fifteen (15) cents per yard.

It is further agreed that where there is not sufficient room to gob the bug dust and draw slate, the loader will load it in the bank cars, and the company will unload it.

It is understood that there shall be nothing paid for room turning or low coal, and there shall be nothing charged for blacksmithing.

There shall be no discrimination against any employes.

That the system of loading coal in machine mines be on the following basis, to wit:

1. That one man shall have the right to two places where he can take care of the same.
2. That two men shall have the right to three places where they can take care of the same.
3. All others one place.

When a man is off work more than one day, the mine boss shall have the right to put a man in the places if it is necessary, providing the man leaves the places in the same condition, as near as possible, as he found them.

The Block Coal District of Indiana may continue the use of the diamond bar screen, the screen to be seventy-two (72) feet superficial area, of uniform size, one and one-quarter (1¼) inches between the bars, free from obstructions, and that such screen shall rest upon a sufficient number of bearings to hold the bars in proper position.

This agreement to become a part of the agreement entered into on the 1st day of April, 1904, between the Operators' Scale Committee of the Block Coal District, and the Executive Board of the United Mine Workers of America, representing District No. 8.

On behalf of the Machine Operators of the Block Coal District:

OTTER CREEK COAL CO.,
A. H. ZIMMERMAN, Supt.

BRAZIL BLOCK COAL CO.,
JAS. H. McCLELLAND, President.

On behalf of the Executive Board, District No. 8, United Mine Workers of America:

WM. HOUSTON, President.
JOHN S. BENNETT, Vice-Pres.
WM. TREAGER, Secy.-Treas.
THOS SLATER.
ROBERT GIVENS.

TABLE

Showing by Counties the Number of Miners, Number of Inside Day and Monthly Men, Number of Outside Day and Monthly Men Employed; Total Wages Earned by Same and Average Wages Earned Per Employee, Both for the Block and Bituminous Mines.

BLOCK COAL MINES.

COUNTY.	Number of Miners.	Total Wages of Miners.	Average Wages Per Miner.	Number of Inside Day and Monthly Men.	Total Wages of Inside Day and Monthly Men.	Average Earnings Day and Monthly Men.	Outside Employees.	Total Wages Outside Employees.	Average Earnings Outside Employees.
Clay.....	950	\$345,411 28	\$363 58	247	\$155,807 83	\$590 31	143	\$8,265 80	\$570 95
Parke.....	683	304,479 48	445 79	197	138,588 70	698 42	71	58,112 24	818 48

BITUMINOUS MINES.

Clay.....	829	\$338,875 83	\$408 77	223	\$144,949 17	\$649 99	110	\$77,284 91	\$702 59
Daviess.....	271	97,715 02	360 57	63	30,398 12	482 50	33	18,384 98	557 12
Fountain.....	71	41,265 30	581 20	17	11,934 58	702 03	13	7,192 44	553 26
Gibson.....	109	54,358 05	498 69	33	21,714 43	654 01	21	14,009 76	667 13
Greene.....	2,301	1,273,133 65	553 29	726	465,087 62	641 95	277	246,113 73	896 71
Knox.....	250	87,275 24	349 10	60	24,193 82	403 23	58	20,663 74	356 27
Parke.....	645	309,182 10	471 64	177	128,562 13	726 34	79	54,392 39	688 51
Perry.....	16	5,303 11	331 31	3	1,387 62	462 50	3	1,268 78	422 82
Pike.....	629	197,213 30	311 94	164	68,069 26	415 05	146	32,825 67	224 83
Sullivan.....	2,164	822,099 13	379 88	660	379,649 07	575 25	395	235,998 19	597 46
Vanderburgh.....	282	148,985 65	528 31	64	46,801 82	731 27	47	39,123 71	832 41
Vermillion.....	1,051	677,311 11	644 44	235	181,088 35	770 58	92	72,649 79	789 57
Vigo.....	2,040	1,010,822 47	496 70	512	318,727 98	622 51	226	161,947 59	707 10
Warriock.....	321	151,602 91	472 28	68	36,568 71	538 06	60	24,246 92	404 01
General average.....	12,612	\$5,965,033 63	\$465 03	3,449	\$2,153,499 11	624 38	1,777	\$1,146,871 64	\$645 96

TABLE.

MACHINE MINING.

Exhibiting by Counties the Names of Mines in Which Machine Mining is Carried On; Geological Number of Coal Seam Mined; Average Number and Kind of Machines in Use; Number of Miners Employed, Total Tons of Coal Produced, Average Tons Per Miner and Average Tons Per Machine Produced and the Number of Days the Machines Were Operated.

BLOCK COAL MINES.

CLAY COUNTY.

MINE.	KINDS OF MACHINES USED.			Number of Days Mine Was Operated.	Total Tons Produced.	Number of Miners Employed.	Average Tons Per Miner.	Average Tons Per Machine.
	Geological Number of Seam.	Electric Chain.	Compressed Air Puncher.					
Brazil Block No. 1.....	IV	2	.....	285	8,707	12	725	4,351
Brazil Block No. 8.....	III	3	.....	193	12,933	20	646	4,311
Diamond No. 5.....	IV	1	.....	60	3,319	11	340	3,349
Gart No. 10.....	III	3	.....	52	4,864	17	286	2,432
Total general average.....	.....	9	.....	590	29,853	60	497	3,317

PARKE COUNTY.

Brazil Block No. 12.....	IV	6	.....	203	26,308	38	694	4,384
Mary.....	III	7	.....	142	30,344	50	606	4,334
Total general average.....	.....	13	.....	345	56,642	88	644	4,357

BITUMINOUS MINES.

CLAY COUNTY.

Gifford No. 1.....	III?	4	.....	170	5,345	18	291	1,336
Gifford No. 2.....	III?	3	.....	150	10,600	24	733	9,533
Lewis.....	V	5	.....	137	35,452	40	866	7,090
Vivian No. 4.....	III	4	.....	215	18,729	25	748	4,682
Vivian No. 5.....	IV	3	.....	203	16,450	27	609	5,483
Island Valley No. 4.....	IV	4	.....	97	27,776	28	992	6,669
Gold Knob.....	III?	3	.....	131	15,083	28	539	5,027
Total general average.....	.....	21	5	1,103	120,435	190	633	5,735

MACHINE MINING—Continued.

GREENE COUNTY.

MINE.	KINDS OF MACHINES USED.			Number of Days Mine Was Operated.	Total Tons Produced.	Number of Miners Employed.	Average Tons Per Miner.	Average Tons Per Machine.
	Geological Number of Seam.	Electric Chain.	Compressed Air Patcher.					
Twin.....	IV-V	4	*	*	80,993	60		
Black Creek.....	IV	5		146	72,801	70	1,040	14,560
Island No. 1.....	IV		6	204	52,529	36	1,431	8,754
Island No. 2.....	IV		14	172	81,251	66	1,231	5,803
Gilmour.....	IV	8		144	98,108	112	875	12,263
Hoosier No. 1.....	IV	3		215	43,248	32	1,351	14,416
Hoosier No. 2.....	V	2		40	11,535	20	576	6,767
Midland.....	III	6		116	54,174	62	837	9,029
Island Valley No. 2.....	V		4	137	18,469	24	769	4,617
Summit No. 2.....	IV	9		186	98,242	120	818	10,915
Glenburn.....	IV	5		174	56,662	66	858	11,332
Tower Hill.....	III	5		148	44,794	51	878	8,958
Green Valley.....	IV	9		135	113,833	117	972	12,648
Lattas Creek No. 1.....	IV	9		211	184,132	118	1,560	20,459
Atlas No. 1.....	IV	8		122	128,782	108	1,192	16,097
Atlas No. 2.....	IV	3		119	5,820	20	291	1,940
Letsinger.....	IV	4	*	*	9,252	28	330	2,313
North Western.....	IV	5		160	80,246	80	1,003	10,045
Total general average.....		85	34	2,429	1,234,871	1,190	1,037	14,529

*Not reported.

KNOX COUNTY.

Enterprise.....	VI	.....	4	53	2,859	12	238	712
Pine Knot.....	VI	.....	*	*	*	*	*	*
Total general average.....			4	53	2,859	12	238	712

*New mine, tonnage not reported.

PARKE COUNTY.

Lyford No. 1.....	VI	6	.....	195	59,177	53	1,110	9,862
Parke No. 11.....	VI	.....	11	178	62,559	54	1,168	5,687
Mecca No. 3.....	III	4	.....	189	54,966	39	1,438	13,741
Total general average.....		10	11	562	176,702	146	1,217	8,414

SULLIVAN COUNTY.

Bunker Hill.....	VI	3	.....	207	34,426	29	1,187	11,442
Caladonia.....	VI	12	.....	222	85,228	79	1,078	7,102
Dugger.....	VI	.....	*	*	*	*	*	*
Greep Hill.....	VI	3	.....	130	23,975	41	658	8,991
Hymera No. 1.....	III?	7	.....	46	43,823	118	371	6,260
New Linton.....	VI	3	.....	231	30,973	20	1,522	10,324
Jackson Hill No. 2.....	VI	18	.....	171	126,993	125	1,015	7,055
Phoenix Nos. 1 and 3.....	V	.....	4	90	32,672	20	1,655	8,084
Shelburn.....	VI	2	.....	108	15,902	17	935	7,951

MACHINE MINING—Continued.

SULLIVAN COUNTY—Continued.

MINE.	KINDS OF MACHINES USED.			Number of Days Mine Was Operated.	Total Tons Produced.	Number of Miners Employed.	Average Tons Per Miner.	Average Tons Per Machine.
	Geological Number of Seam.	Electric Chain.	Compressed Air Puncher.					
Star City	VI	6	.....	147	69,212	74	935	11,537
Virginia.....	VI	.....	.....	.....	.....	.....	.....	.....
Sun Flower	VI	8	.....	179	139,459	108	3,143	17,307
Glendoria.....	VI	10	.....	158	128,592	143	912	12,859
Hymers No. 2.....	VI	9	.....	190	154,530	141	1,096	17,170
Wilfred No. 1.....	VI	8	.....	183	132,005	112	1,179	16,500
Reliance.....	VI	.....	.....	.....	.....	.....	.....	.....
Mammoth Vein.....	VI	5	.....	93	58,950	60	982	11,790
Little Giant.....	VI	5	.....	213	67,780	63	1,075	13,550
Cummins.....	VII	.....	5	159	13,832	23	605	2,788
La Blanche.....	VI	6	.....	233	91,265	63	1,448	15,210
St. Clair.....	VI	5	.....	107	19,185	44	236	3,837
Jackson Hill No. 4.....	VI	.....	3	128	2,780	18	154	923
Hymers No. 3.....	VI	6	.....	117	40,701	97	417	6,781
Kettle Creek.....	VI	2	.....	38	960	17	56	480
Mildred.....	VI	5	.....	190	37,925	28	1,454	7,545
Phoenix No. 4.....	VI	.....	.....	.....	.....	.....	.....	.....
Union No. 1.....	VI	.....	.....	.....	.....	.....	.....	.....
Citizens.....	VI	2	.....	240	8,843	23	384	4,421
Total general average.....	.....	125	12	3,580	1,363,111	1,463	931	10,940

*Not reported.

VANDERBURGH COUNTY.

Ingleside.....	V	.....	2	44	1,636	8	204	618
Sunnyside.....	V	.....	.....	.....	.....	.....	.....	.....
Total general average.....	.....	.....	2	44	1,636	8	204	618

*Machines taken out.

VIGO COUNTY.

Atherton.....	VI	6	.....	213	90,088	61	1,640	15,014
Glen Oak.....	VI	7	.....	215	101,587	87	1,167	14,512
Parke No. 10.....	VI	.....	14	179	113,269	51	2,219	8,085
Sugar Creek.....	VI	5	.....	70	3,796	16	236	758
Ray No. 2.....	VI	.....	5	38	10,484	24	436	2,096
Forrest Park.....	VI	4	.....	.....	.....	8	.....	.....
Total general average.....	.....	22	19	715	319,224	267	1,185	7,785

*Not reported.

WARRICK COUNTY.

Big Four.....	V	.....	6	167	62,705	58	1,081	10,450
Big Vein No. 3.....	V	.....	9	206	94,566	69	1,371	10,507
De Forrest.....	V	.....	2	115	11,463	14	818	5,731
Electric.....	V	6	.....	243	97,442	62	1,571	16,240
Total general average.....	.....	6	17	731	266,176	203	1,311	11,138

TABLE

Showing Price Paid Per Ton for Pick and Machine Mining, Inside Day Labor, Total Number of Employees, Total Tons of Coal Produced, Total Wages Paid Employees, Wages Earned Per Year Per Employee and Per Cent. of Gain or Loss in Price Per Ton for Each Year from 1890 to 1904, Inclusive.

YEAR.	BLOCK MINING.			BITUMINOUS MINING.			Total Number of Employees.	Total Tons of Coal Produced.	Total Wages Paid Employees.	Wages Earned per Year per Employee.	Per Cent. Gain in Price per Ton Over Preceding Year.	Per Cent. Loss in Price per Ton Under Preceding Year.
	Price Paid for Pick Mining-Screened Coal.	Price Paid for Chain Machine Mining-Screened Coal.	Price Paid for Pick Mining-Screened Coal.	Price Paid for Chain Machine Mining-Mine Run Coal.	Price Paid for Punching Machine Mining-Mine Run Coal.	Wages Paid Inside Day Labor.						
1890	\$0 75		\$0 70		\$0 34 $\frac{1}{2}$	\$1 87 $\frac{1}{2}$	6,550	3,791,211	*			
1891	75		70		34 $\frac{1}{2}$	1 87 $\frac{1}{2}$	6,975	3,819,600	*			
1892	75		70		34 $\frac{1}{2}$	1 90	7,600	4,408,471	*			
1893	75		70		34 $\frac{1}{2}$	1 90	7,431	4,358,897	*			
1894	75		65		34 $\frac{1}{2}$	1 90			*			
1895	70		60		29 $\frac{3}{4}$	1 75	7,885	4,202,084	\$1,852,500 00	\$234 93		
1896	70		60		29 $\frac{3}{4}$	1 75	7,112	4,068,124	1,750,000 00	246 06		
1897	61		51		27 $\frac{3}{4}$	1 52 $\frac{1}{2}$	7,384	4,088,100	1,600,000 00	200 40		15
1898	76	\$0 57	66		30	1 75		5,140,920	1,182,500 00		29 $\frac{7}{8}$	
1899	76	57	66		30	1 75	7,366	5,839,713	3,813,652 39	517 79		
1900	90	68 $\frac{1}{2}$	80	\$0 36 $\frac{1}{2}$	33	2 25	8,888	6,283,063	4,843,343 28	546 77	21 $\frac{1}{4}$	
1901	90	68 $\frac{1}{2}$	80	36 $\frac{1}{2}$	33	2 30	12,086	7,019,203	5,680,539 86	469 62		
1902	90	68 $\frac{1}{2}$	80	36 $\frac{1}{2}$	33	2 30	13,139	8,763,197	7,078,913 12	538 77		
1903	1 00	78 $\frac{1}{2}$	90	42 $\frac{1}{2}$	45	2 56	15,128	9,992,563	9,149,572 12	608 81	12 $\frac{1}{2}$	
1904	95	73 $\frac{1}{2}$	85	39 $\frac{1}{2}$	42	2 42	17,888	9,872,404	9,165,404 38	528 63		.055 +

* Not reported.

Above prices are taken from the yearly contracts made between the operators and miners, and only from mines where organized labor was employed. The per cent. of increase and decrease is based on pick mining. Prior to 1898 chain machine mining was done either by the day or by the cut, hence no scale of prices per ton was obtainable.

WAGES, ETC.—1890 TO 1904.

EXAMINATIONS.

Examinations of applicants for certificates of competency to serve as Mine Boss, Fire Boss and Hoisting Engineer were held at Terre Haute March 15, 16 and 17, and August 25, 26 and 27.

The examinations were written and partly oral. The following table gives the names and addresses of those receiving certificates, also the number of the certificate:

MINE BOSS EXAMINATION HELD MARCH 15, 16 and 17, 1904.

<i>Name.</i>	<i>Address.</i>	<i>No. of Certificate.</i>
William Dempsey.....	Sullivan.....	35
Jacob C. Eck.....	Hymers.....	12
William R. Hilgedick.....	Linton.....	4
Harry Evans.....	Terre Haute.....	24
J. Willard Waeker.....	Clinton.....	23
James W. Templeton.....	Linton.....	17
Bert McClanahan.....	Hymers.....	1
John Watterson.....	Coal Bluff.....	59
John Johnson.....	Coal Bluff.....	16
Robert Monkhouse, Jr.....	Coal Bluff.....	90
A. T. Potter.....	Linton.....	10
C. L. Board.....	Linton.....	3
Lon Shaw.....	Sullivan.....	9
J. A. Richardson.....	Farmersburg.....	2
Charles Wilson.....	Seeleyville.....	..
James W. Meredith.....	Linton.....	5
James Gregory.....	Terre Haute.....	71
Harry Milburn.....	Lyford.....	22
Ephraim McGranhan.....	Brazil.....	6
Thomas Watkins.....	Brazil.....	7
William B. Tolson.....	Washington.....	25
W. H. Jackson.....	Sullivan.....	73
Benj. F. Whittington.....	Diamond.....	66
Frank Friend.....	Clay City.....	8
Dayton Ferris.....	Coal Bluff.....	..
Benj. R. Barnett.....	Brazil.....	74

HOISTING ENGINEER EXAMINATION, MARCH 15, 16 and 17, 1904.

<i>Name.</i>	<i>Address.</i>	<i>No. of Certificate.</i>
Jackson Wyeth.....	Terre Haute.....	31
Irwin D. Johnson.....	Edwards.....	77
Ed. Williams.....	Washington.....	20
Frank Garlinghouse.....	Clinton.....	78
Olney White.....	Dugger.....	41
C. B. Rouse.....	Sullivan.....	38
W. A. Heaton.....	Rosedale.....	57
W. E. Eslinger.....	Shelburn.....	27
George W. Chambers.....	Clinton.....	29
W. G. Woods.....	Terre Haute.....	37
T. N. Jean.....	Linton.....	34
William Sutton.....	.....	36
Hubert Parr.....	Fontanet.....	96
John O. White.....	Bridgeton.....	62
C. A. Dillahunt.....	Farmersburg.....	47
John W. Cable.....	Shelburn.....	51

<i>Name.</i>	<i>Address.</i>	<i>No. of Certificate.</i>
W. A. Pope.....	Linton.....	35
Louis Lyday.....	Linton.....	95
M. L. Ramsford.....	Shelburn.....	68
Lawrence T. Hicks.....	Evansville.....	46
Howard S. Brown.....	Bridgeton.....	53
Henry F. Ward.....	Edwardsport.....	58
Henry Miller.....	Dugger.....	39
John D. Britton.....	Brazil.....	91

MINE BOSS EXAMINATION HELD AUGUST 25, 26 AND 27, 1904—Continued.

<i>Name.</i>	<i>Addresses.</i>	<i>No. of Certificate.</i>
W. F. Azbell.....	Dugger.....	43
Adam Purvis.....	Rosedale.....	39
John Randall.....	Linton.....	38
Wm. Babbitt.....	Sullivan.....	37
Harry Antibus.....	Linton.....	36
Arthur Thompson.....	W. Terre Haute.....	34
Thomas Harrop.....	Dugger.....	33
Murray Bledsoe.....	Caledonia.....	32
Samuel Bradshaw.....	Perth.....	28
Wm. C. Keller.....	Columbus.....	27
Jas. J. Johnson.....	Fontanet.....	66
John Thomas.....	Midland.....	105
M. A. Pell.....	Brazil.....	90
John Holden.....	Diamond.....	82
Stephen Adams.....	Linton.....	67
John Bennie.....	Linton.....	48
Frank Morris.....	Shelburn.....	29
H. S. Bonham.....	Linton.....	47
Edward Cole.....	Sullivan.....	26
Louis Dablemont.....	Linton.....	30
M. M. Sweeding.....	Brazil.....	112
Geo. Sildamridge.....	Linton.....	71
Richard L. Anderson.....	Clinton.....	65

HOISTING ENGINEER EXAMINATION HELD AUGUST 25, 26 AND 27, 1904.

<i>Name.</i>	<i>Addresses.</i>	<i>No. of Certificate.</i>
Chas. W. Miller.....	Brazil.....	79
Wm. G. Spears.....	Brazil.....	85
James Williams.....	Washington.....	21
Picket P. Connett.....	Terre Haute.....	58
John B. Hosenohr.....	Terre Haute.....	89

MINE BOSS EXAMINATION HELD AUGUST 25, 26 AND 27, 1904.

<i>Name.</i>	<i>Addresses.</i>	<i>No. of Certificate.</i>
John Haag.....	Jasonville.....	25
D. W. Griffiths.....	Clinton.....	114
W. J. Winterbottom.....	Washington.....	111
David Owens.....	Linton.....	110
William R. Risher.....	Saline City.....	109
J. H. Needhammer.....	Jackson Hill.....	106
William White.....	Shelburn.....	107
John Mainey.....	Knightsville.....	103
John Blackwell.....	Vicksburg.....	41
George Geatches.....	Linton.....	95
H. C. Kasameyere.....	Newburg.....	93
John M. Lowry.....	Jasonville.....	92

<i>Name.</i>	<i>Address.</i>	<i>No. of Certificate.</i>
Neal Watts	Brazil	91
James Sidell	Atherton	89
H. E. Wilson	Burnett	88
Walter P. Lambert	Jasonville	87
James E. Johnson	Fontanet	77
Lawrence P. King	Burnett	76
C. A. Landine	Perth	104
J. V. Gustin	Farnsworth	74
Thomas S. Jenkins	Brazil	
Burrell Wiley	Sullivan	65
Edward G. Lewis	Burnett	62

FIRE BOSS EXAMINATION HELD AUGUST 25, 26 AND 27, 1904.

<i>Name.</i>	<i>Addresses.</i>	<i>No. of Certificate</i>
Dave Murdock	Linton	98
Thomas Harrop	Dugger	33

HOISTING ENGINEER EXAMINATION HELD AUGUST 25, 26 AND 27, 1904.

<i>Name.</i>	<i>Address.</i>	<i>No. of Certificate.</i>
M. S. Smith	Burnett	94
Judge Williams	Clinton	101
Oscar Schalatter	Harmony	102
John Boucher	Brazil	80
Ray Lyday	Clinton	78
George M. Hubble	Merom	21
Ralph C. Payton	Hillsdale	50
N. H. Brown	Sullivan	24
Walter S. Neal	Jasonville	5
Will C. Witt	Bicknell	6
W. R. Maddex	Linton	8
Mark McConnell	Farmersburg	12
Joseph Bisch	St. Marys	19
John Harlove	Farnsworth	2
O. M. Hicks	Midland	51
A. C. Stewart	Fort Branch	3
Grant Johnson	Shelburn	55
D. G. Sims	Linton	52
Clarence Sides	Fort Branch	56
B. J. Hixon	Terre Haute	57
Archie Kelly	W. Terre Haute	60
Geo. Arrowsmith	Fontanet	63
Hodson Neal	Delcarbo	69
Raymond L. Bevis	Terre Haute	72
Winford Crager	Dugger	49
Charles W. Miller	Brazil	—
Wm. G. Spears	Brazil	—

SERVICE CERTIFICATES.

Seventeen service certificates were granted within the year, as follows: Mine Boss, 11; Fire Boss, 1; Hoisting Engineer, 5. Following will be found the names and addresses of those to whom certificates were issued:

MINE BOSS.

<i>Name.</i>	<i>Addresses.</i>	<i>Date.</i>
Chas. A. Gilmon.....	Alum Cave.....	March 17
Samuel L. Price.....	Vincennes.....	June 1
Wm. E. White.....	Evansville.....	June 1
John Brownlee.....	Terre Haute.....	June 1
Wm. S. Osborn.....	Carbon.....	June 21
Robert Straughn.....	Rosedale.....	June 17
Omer Bolinger.....	Shelburn.....	July 7
Chas. Bennett.....	Corey.....	July 7
Herbert Haag.....	Cannelsburg.....	July 10
Ralph Sharpe.....	Cummins.....	Aug. 15
Henry L. Pirtle.....	Alum Cave.....	Aug. 6

FIRE BOSS.

<i>Name.</i>	<i>Address.</i>	<i>Date.</i>
William Wilson.....	Sullivan.....	April 21

HOISTING ENGINEER.

<i>Name.</i>	<i>Addresses.</i>	<i>Date.</i>
H. S. Shee.....	Terre Haute.....	Dec. 22
Jas. E. Stull.....	Washington.....	Feb. 29
Ephriam Colbert.....	Washington.....	Jan. 15
Jas. Trulove.....	Clinton.....	Jan. 15
Von O. Lambert.....	Ehrmandale.....	Aug. 12

TABLE,

Showing by Counties Names of Mines, Geological Number of Coal Seams, Thickness of Coal Seams by Feet and Inches, Depth of Coal in Feet, and the Nature of Roof and Floor.

BLOCK COAL MINES.

CLAY COUNTY.

NAME OF MINE.	Geological No. of Coal Seam.	Thickness of Coal Seam.	Depth to Coal Seam.	Nature of Roof.	Nature of Floor.
Brazil Block No. 1.....	IV	3' 8"	101	Gray shale.....	Sandy under-clay.
Diamond No. 5.....	IV	3' 6"	43	Gray shale.....	Sandy under-clay.
Brazil Block No. 7.....	IV	4' 4"	Slope	Gray shale.....	Sandy under-clay.
Brazil Block No. 8.....	III	3' 8"	89	Sand shale.....	Light under-clay.
Brazil Block No. 10.....	III	3' 6"	65	Sand shale.....	Light under-clay.
Continental.....	III	4'	63	Sand shale.....	Light under-clay.
Reb Stock.....	III	3' 3"	85	Sand shale.....	Light under-clay.
Lawrence No. 6.....	III	4' 5"	41	Sand shale.....	Light under-clay.
Lawrence No. 7.....	IV	3' 7"	82	Blue shale.....	Sandy under-clay.
Cornwall.....	IV	4'	.....	Gray shale.....	Sandy under-clay.
Crawford No. 5.....	III	3' 6"	86	Sand shale.....	Light under-clay.
Crawford No. 6.....	III	3' 8"	.....	Sand shale.....	Light under-clay.
Crawford No. 6.....	III	2' 6"	116	Sand shale.....	Light under-clay.
Crawford No. 7.....	IV	3' 8"	.....	Blue shale.....	Sandy under-clay.
Crawford No. 8.....	III	3' 6"	84	Sand shale.....	Light under-clay.
Lower Vein Block.....	IV	3' 9"	50	Sand shale.....	Light under-clay.
Crawford No. 9.....	IV	4'	48	Gray shale.....	Sandy under-clay.
Monarch.....	IV	3' 6"	86	Blue shale.....	Sandy under-clay.
Dan Davis.....	IV	3' 6"	81	Blue shale.....	Sandy under-clay.
Crawford No. 4.....	IV	4'	57	Blue shale.....	Sandy under-clay.
Brazil Block No. 4.....	III	4' 8"	160	Sand shale.....	Light under-clay.
Superior No. 4.....	IV	3' 8"	90	Blue shale.....	Sandy under-clay.
Superior No. 4.....	III	3' 2"	248	Blue shale.....	Sandy under-clay.
Superior No. 4.....	IV	3' 2"	.....	Gray shale.....	Light under-clay.
Eureka No. 5.....	III	3' 6"	116	Gray shale.....	Light under-clay.
Indiana Block Coal Co.....	IV	3' 6"	58	Gray shale.....	Sandy under-clay.
Crawford No. 2.....	IV	3' 6"	68	Blue shale.....	Sandy under-clay.

BITUMINOUS MINES

CLAY COUNTY.

Cloverland No. 1.....	VI	7'	100	Brown shale.....	Dark under-clay.
Cloverland No. 2.....	VI	7'	90	Brown shale.....	Dark under-clay.
Fair View.....	VI	7'	.....	Brown shale.....	Dark under-clay.
Klondike.....	VI	6' 9"	25	Brown shale.....	Dark under-clay.
Gifford No. 1.....	III	4' 4"	110	Sand shale.....	Light under-clay.
Gifford No. 2.....	III	4' 6"	75	Sand shale.....	Light under-clay.
Fortner.....	V	3' 4"	100	Black shale.....	Bluish under-clay.
Glen No. 1.....	III	4' 6"	101	Sand shale.....	Light under-clay.
Glen No. 2.....	IV	4'	.....	Blue shale.....	Sandy under-clay.
Glen No. 2.....	III	3' 3"	.....	Sand shale.....	Light under-clay.
Pearl.....	VI	7'	32	Brown shale.....	Dark under-clay.
Lewis.....	V	9'	77	Black shale.....	Bluish under-clay.
Vivian No. 4.....	III	5' 8"	107	Gray shale.....	Dark under-clay.
Vivian No. 5.....	IV	5'	43	Gray shale.....	Sand grit.
Gold Knobb.....	III	8' 6"	.....	Dark shale.....	Dark under-clay.
Island Valley No. 4.....	IV	5' 6"	104	Massive sandstone.....	Sand grit.

DAVISS COUNTY.

NAME OF MINE.	Geological No. of Coal Seam.	Thickness of Coal Seam.	Depth to Coal Seam.	Nature of Roof.	Nature of Floor.
Hoosier.....	III	3' 7"	50	Sandstone.....	Light under-clay.
Montgomery No. 2.....	V	3' 8"	65	Sandstone.....	Bluish under-clay.
Montgomery No. 3.....	V	3' 8"	100	Sandstone.....	Bluish under-clay.
Union.....	V	3' 8"	50	Sandstone.....	Bluish under-clay.
Mutual.....	III	4' 6"	100	Gray shale.....	Light under-clay.
Wheatland.....	VII	5'	100	Gray shale.....	White under-clay.
Mandabach.....	V	6'	56	Black shale.....	Bluish under-clay.

FOUNTAIN COUNTY.

Rush.....					
Silverwood.....					

GIBSON COUNTY.

Fort Branch.....	VI	5'	262	Brown shale...	Dark under-clay.
Oswald.....	V	6' 10"	450	Gray shale.....	Bluish under-clay.
Massy.....	V	4' 6"	50	Black shale....	Bluish under-clay.

GREENE COUNTY.

Black Creek.....	IV	4' 8"	.....	Gray shale.....	Sand grit.
Island No. 1.....	IV	5'	66	Gray shale.....	Sand grit.
Pennsylvania Co.....	III	7' 6"	217	Brown shale...	Dark under-clay.
Island No. 2.....	IV	5'	95	Gray shale.....	Sand grit.
Island No. 3.....	IV	5'	72	Gray shale.....	Sand grit.
Island No. 5.....	IV	5'	55	Gray shale.....	Sand grit.
Gilmour.....	IV	5' 4"	152	Gray shale.....	Sandstone.
Hoosier No. 1.....	IV	3' 7"	133	Massive sandstone.....	Sandstone.
Hoosier No. 2.....	V	7'	46	Black shale.....	Bluish under-clay.
Island Valley No. 2.....	V	7' 6"	105	Black shale.....	Bluish under-clay.
Island Valley No. 3.....	IV	5' 6"	47	Gray shale.....	Sand grit.
Island Valley No. 4.....	IV	5' 6"	104	Massive sandstone.....	Sandstone.
South Linton.....	IV	5'	81	Gray shale.....	Sand grit.
Midland.....	III	7'	245	Brown shale.....	Dark under-clay.
Vulcan.....	V	7'	.....	Black shale.....	Dark under-clay.
Summit No. 2.....	IV	5' 6"	150	Gray shale.....	Sand grit.
Templeton.....	IV	5'	52	Gray shale.....	Sand grit.
Victoria.....	IV	5' 8"	122	Gray shale.....	Sand grit.
Glenburn.....	IV	4' 6"	102	Gray shale.....	Sand grit.
Antioch.....	IV	4' 6"	176	Gray shale.....	Sand grit.
Tower Hill.....	III	7'	132	Brown shale...	Dark under-clay.
Green Valley.....	IV	5' 2"	127	Massive sandstone.....	Sandstone.
Lattis Creek.....	IV	5'	153	Gray shale.....	Sandstone.
Atlas No. 1.....	IV	5' 6"	132	Gray shale.....	Sand grit.
Atlas No. 2.....	IV	5'	128	Gray shale.....	Sand grit.
Fry.....	IV	3' 7"	87	Gray shale.....	Black bituminous shale
Letsinger.....	III	7' 6"	.....	Brown shale...	Dark under-clay.
North West.....	III	7' 6"	217	Brown shale...	Dark under-clay.
Twin.....	IV	5'	75	Gray shale.....	Sand grit.
North Linton.....	V	5'	56	Black shale.....	Fire clay.
	IV	4'	152	Gray shale.....	Sand grit.
	IV	4' 2"	68	Gray shale.....	Sand grit.

BITUMINOUS MINES—Continued.

KNOX COUNTY.

NAME OF MINE.	Geological No. of Coal Seam.	Thickness of Coal Seam.	Depth to Coal Seam.	Nature of Roof.	Nature of Floor.
Knox.....	VI	4' 4"	103	Brown shale...	Dark under-clay.
Bicknel.....	VI	4' 4"	92	Brown shale...	Dark under-clay.
Prospect Hill.....	VII	3'	335	Light gr'y shale	White under-clay.
Enterprise.....	VI	4' 3"	154	Brown shale...	Dark under-clay.
Pine Knot.....	VI	4' 6"	210	Brown shale...	Dark under-clay.

BLOCK MINES.

PARKE COUNTY.

Brazil Block No. 12.....	III	3' 6"	98	Sand shale....	White under-clay.
Mary.....	III	4' 10"	105	Sand shale....	White under-clay.
Crawford No. 10.....	III	5'	108	Sand shale....	White under-clay.
Superior No. 1.....	IV	4'	135	Gray shale....	Sandy under-clay.
Superior No. 2.....	III	3' 6"	40	Sand shale....	White under-clay.
Superior No. 3.....	IV	3' 8"	64	Gray shale....	Sandy under-clay.
Pan-American.....	III	4'	70	Sand shale....	White under-clay.
Brazil Block No. 9.....	IV	4' 6"	120	Sand shale....	White under-clay.
				Gray shale....	Sandy under-clay.

BITUMINOUS MINES.

PARKE COUNTY.

Lyford No. 1.....	VI	6' 6"	.....	Brown shale...	Dark under-clay.
Park No. 11.....	VI	6' 6"	102	Brown shale...	Dark under-clay.
Harrison.....	IV	4'	.....	Gray shale....	Sandy under-clay.
Cox No. 3.....	VI	6'	94	Brown shale...	Dark under-clay.
Lucia.....	III	4'	134	Sand shale....	White under-clay.
Minshal No. 1.....	III	4' 6"	150	Sand shale....	White under-clay.
Minshal No. 2.....	III	5'	.....	Sand shale....	White under-clay.
Briar Hill.....	VI	5'	Drift	Brown shale...	Dark under-clay.
Mecca No. 3.....	III	5'	166	Gray shale....	White under-clay.
Mecca No. 4.....	III	5' 6"	.....	Gray shale....	White under-clay.

PERRY COUNTY

Lincoln.....	II	3' 4"	Slope	.....	.....
Troy.....	II	3'	50	Massive sand- stone.....	Sandstone.
Cannelton.....	II	.....	.....	.....	.....

PIKE COUNTY.

Aberdeen.....	V	4' 6"	43	Black shale...	Bluish under-clay.
Ayrshire No. 3.....	V	5'	22	Sandstone....	Light under-clay.
Ayrshire No. 4.....	V	4' 8"	Slope	Sand shale....	Light under-clay.
Ayrshire No. 5.....	V	5'	Drift	Black shale...	Bluish under-clay.
Ayrshire No. 6.....	V	4' 10"	Drift	Black shale...	Bluish under-clay.
Blackburn.....	V	6' 6"	Slope	Black shale...	Bluish under-clay.
Littles.....	V	6' 6"	80	Black shale...	Bluish under-clay.
Rogers.....	V	7'	Slope	Black shale...	Bluish under-clay.
Hartwell.....	V	5'	Drift	Black shale...	Bluish under-clay.
Petersburg.....	V	5'	52	Black shale...	Bluish under-clay.
Carbon.....	V	4' 6"	Slope	Black shale...	Bluish under-clay.
Winslow No. 2.....	V	5'	Slope	Black shale...	Bluish under-clay.
Winslow No. 3.....	V	5'	Slope	Black shale...	Bluish under-clay.
Winslow No. 4.....	V	4' 10"	.....	Black shale...	Bluish under-clay.

SULLIVAN COUNTY.

NAME OF MINE.	Geological No. of Coal Seam.	Thickness of Coal Seam.	Depth to Coal Seam.	Nature of Roof.	Nature of Floor.
Phoenix No. 1.....	V	7'	37	Black shale....	Bluish under-clay.
Phoenix No. 2.....	V	7'	Slope	Black shale....	Bluish under-clay.
Star City.....	VI	5' 6"	120	Brown shale....	Dark under-clay.
Shelburn.....	V	6'	.....	Black shale....	Bluish under-clay.
Bunker Hill.....	VI	4' 6"	72	Brown shale....	Dark under-clay.
Dugger.....	VI	5'	105	Brown shale....	Dark under-clay.
Jackson Hill No. 2.....	VI	5' 8"	104	Brown shale....	Dark under-clay.
Jackson Hill No. 4.....	VI	5'	165	Brown shale....	Dark under-clay.
West Linton.....	VI	4' 8"	50	Brown shale....	Dark under-clay.
Hymers No. 4.....	III	6'	.....	Gray shale....	Sandy under-clay.
Hymers No. 2.....	V	7'	105	Black shale....	Bluish under-clay.
Caladonia.....	V	5' 3"	106	Brown shale....	Dark under-clay.
Freeman.....	VI	5'	100	Brown shale....	Dark under-clay.
White Ash.....	V	6'	53	Black shale....	Bluish under-clay.
Green Hill.....	VI	4' 6"	120	Brown shale....	Dark under-clay.
Sun Flower.....	VI	6'	.....	Brown shale....	Dark under-clay.
Glendora.....	VI	5'	110	Brown shale....	Dark under-clay.
Wilfred No. 1.....	VI	5' 6"	108	Brown shale....	Dark under-clay.
Island No. 4.....	IV	8' 6"	260	Gray shale....	Gray shale.
Mammoth.....	VI	6'	173	Brown shale....	Dark under-clay.
Little Giant.....	VI	5' 6"	.....	Brown shale....	Dark under-clay.
Cummins.....	VII	5'	Slope	Lightgrayshale	White under-clay.
Lablanch.....	VI	5' 6"	80	Brown shale....	Dark under-clay.
Citizens.....	VI	5'	165	Brown shale....	Dark under-clay.
Brillettes No. 6.....	VII	5' 6"	80	Lightgrayshale	White under-clay.
Mildred.....	VI	5'	144	Brown shale....	Dark under-clay.
Virginia.....	VI	6'	200	Brown shale....	Dark under-clay.
Superior.....	VII	5' 6"	112	Lightgrayshale	White under-clay.
Shirley Hill.....	VI	5' 6"	110	Brown shale....	Dark under-clay.
St. Clair.....	VI	5' 6"	197	Brown shale....	Dark under-clay.
Jackson Hill No. 4.....	VI	5' 6"	155	Brown shale....	Dark under-clay.
Hymers No. 3.....	V	6'	.....	Black shale....	Bluish under-clay.
Kettle Creek.....	VI	5' 3"	152	Brown shale....	Dark under-clay.
Phoenix No. 4.....	VI	6' 6"	.....	Brown shale....	Bone coal.
Reliance.....	VI	5'	237	Brown shale....	Bone coal.
Union.....	VI	5' 6"	235	Brown shale....	Dark under-clay.
Clover Leaf.....	IV	5' 9"	306	Graysand shale	Sandy under-clay.
Hamelton.....	III	8' 6"	255	Dark grayshale	Dark under-clay.
Fairbanks.....	VI	5' 6"	248	Brown shale....	Dark under-clay.
Linton Semi-block.....	III	6' 6"	235	Dark grayshale	Dark under-clay.

VANDERBURGH COUNTY.

Sunnyside.....	V	4'	255	Black shale....	Bluish under-clay.
Unity.....	V	4'	225	Black shale....	Bluish under-clay.
First Avenue.....	V	4'	256	Black shale....	Bluish under-clay.
Diamond.....	V	4'	256	Black shale....	Bluish under-clay.
Union.....	V	4'	235	Black shale....	Bluish under-clay.
Ingleside.....	V	4'	236	Black shale....	Bluish under-clay.

VERMILION COUNTY.

Buckeye.....	VII	4' 8"	149	Black bitum- inous shale....	Under-clay and shale.
Brillettes Creek No. 3.....	VI	6'	265	Gray shale....	Dark under-clay.
Brillettes Creek No. 5.....	VII	4' 10"	85	Black bit. shale	Dark under-clay.
Prince.....	VII	4' 10"	130	Black bit. shale	Dark under-clay.
Eureka.....	VIa	5'	110	Gray clod....	Dark under-clay.
(See note).....	VI	.....	.....	.....	.....
Oak Hill.....	VII	4' 10"	40	Black bit. shale	Dark under-clay.
Willow Grove.....	VI	6'	176	Brown shale....	Dark under-clay.
Crown Hill No. 1.....	VII	5' 6"	164	Black bit. shale	Dark under-clay.
Crown Hill No. 2.....	VII	5'	151	Black bit. shale	Dark under-clay.
Rhodes.....	VII	5' 6"	100	Black bit. shale	Dark under-clay.
Maple Valley.....	VII	6' 6"	.....	Black bit. shale	Dark under-clay.

BITUMINOUS MINES—Continued.

VIGO COUNTY.

NAME OF MINE.	Geological No. of Coal Seam.	Thickness of Coal Seam.	Depth to Coal Seam.	Nature of Roof.	Nature of Floor.
Atherton.....	VI	6' 9"	165	Brown shale...	Dark under-clay.
Brick Works.....	VII	4' 4"	85	Black shale.....	Dark under-clay.
Chicago No. 6.....	VII	7'	133	Brown shale.....	Dark under-clay.
Diamond.....	VI	6'	54	Brown shale.....	Dark under-clay.
Peerless.....	VI	7'	101	Brown shale.....	Dark under-clay.
Lawton.....	VI	6' 6"	110	Brown shale.....	Dark under-clay.
Ehrlich.....	VI	7'	99	Brown shale.....	Dark under-clay.
Grant No. 2.....	VI	6' 6"	120	Brown shale.....	Dark under-clay.
Glen Oak.....	VI	6' 6"		Brown shale.....	Dark under-clay.
Hector.....	VI	7'	133	Brown shale.....	Dark under-clay.
Klondike No. 1.....	VI	6' 6"	Slope	Brown shale.....	Dark under-clay.
Miami No. 1.....	VI	7'	32	Brown shale.....	Dark under-clay.
Red Bird.....	VI	6'	90	Brown shale.....	Dark under-clay.
Rosebud No. 2.....	VI	6' 6"	110	Brown shale.....	Dark under-clay.
Royal No. 1.....	VI	6'	103	Brown shale.....	Dark under-clay.
Larimer.....	VII	4' 8"	110	Black shale.....	Dark under-clay.
Broadhurst.....	VII	4' 4"	80	Black shale.....	Dark under-clay.
Miami No. 2.....	VI	6'	50	Brown shale.....	Dark under-clay.
Deep Vein.....	VI	6'	170	Brown shale.....	Dark under-clay.
Greenfield No. 1.....	VI			Brown shale.....	Dark under-clay.
Lost Creek.....	VI	6'	120	Sandstone.....	Dark under-clay.
Sugar Creek.....	V		105	Black shale.....	Bluish under-clay.
Ray No. 2.....	VI	7' 4"	95	Brown shale.....	Dark under-clay.
Miami No. 3.....	VI	7'	85	Brown shale.....	Dark under-clay.
Riverside.....	VII		110	Black shale.....	Dark under-clay.
Forest Park.....	VI	6' 5"	150	Blue sand shale	Bone coal.
Domestic Block (See note)	IV	4'	108	Massive sand rock.....	Gray shale.

WARRICK COUNTY.

Star No. 1.....	V	4' 4"	100	Sand rock.....	Bluish under-clay.
Star No. 2.....	V	4' 4"	110	Sand rock.....	Bluish under-clay.
Air Line.....	V	5' 6"	100	Black shale.....	Bluish under-clay.
Chandler.....	V			Black shale.....	Bluish under-clay.
Big Four.....	V	7'	Slope	Black shale.....	Bluish under-clay.
De Forrest.....	V	7'	65	Black shale.....	Bluish under-clay.
Electric.....	V	7'	30	Black shale.....	Bluish under-clay.
Big Vein No. 3.....	V	7'	37	Black shale.....	Bluish under-clay.
Goslee.....	V	4'	87	Black shale.....	Bluish under-clay.

NOTE 1—The two seams of coal No. VIa and VI are mined together in the Eureka Mine, being separated by a small dirt band of a few inches in thickness.

NOTE 2—The seam mined at the Domestic Block Mine is block coal, this being the only block mine in Vigo County.

NOTE 3—The floor underlying Coal No. IV changes in nature very much in different parts of the field. In the vicinity of Brazil it is a sandy fire clay and is very hard when first mined but weathers in a few weeks to a fine grained plastic mass and is used in the manufacture of hollow brick, sewer pipe and other clay products. In the Linton field it is a hard sand grit resembling very much a mass of sand cemented together with no seams and a total absence of clay. In the Jasonville field it is a hard white massive sandstone, while at the Island No. 4 Mine, near Dugger, in Sullivan County, the formation immediately under the coal for about three feet is a dark gray shale.

FATALITIES AND INJURIES.

An aggregate of two hundred and forty-seven (247) accidents to mine employes was reported to this office during the year 1904, classed as follows: Fatal, thirty-four (34); serious, one hundred and thirty-two (132), and minors, eighty-one (81). The different causes of the accidents and the occupation of those injured are shown in the two following tables:

TABLE,

Exhibiting the Number of Casualties Arising in Indiana Mines During the Year 1904, and the Different Causes Thereof.

CAUSE OF ACCIDENT.	Fatal.	Serious.	Minor.	Total.
Falling slate.....	13	38	25	76
Falling coal.....		15	20	35
Smoke explosion.....	1	2		3
Powder explosions.....	3	5		8
Delayed shots.....	5	3		8
Premature shots.....		5		5
Blown out shots.....		1		1
Misplaced shots.....		1		1
Mine cages.....		9	4	13
Kicked by mule.....		2	4	6
Mine cars.....	6	39	20	65
Falling down shaft.....	4	1		5
Mining machines.....		3	2	5
Railroad cars.....	1	1		2
Electric shock.....	1	1		2
Miscellaneous.....			6	6
Dust explosion.....		3		3
Fell off scaffold.....		1		1
Coal falling down shaft.....		2		2
Total.....	34	132	81	247

TABLE,

Exhibiting the Number of Fatal and Serious Accidents Arising During the Year 1904, the Different Occupations of Persons Injured and Cause of Accident.

	Miners.	Machine Runners.	Loaders.	Drivers.	Jerries.	Track Men.	Timbermen.	Shooters.	Pumpers.	Cagers.	Mine Bosses.	Carpenters.	Flat Trimmers.	Outside Labor.	Sinkers.	Total.
Falling slate.....	31	2	2	7	3	1	3	1	1	1	1	1	1	1	1	51
Falling coal.....	15	2	2	7	3	1	3	1	1	1	1	1	1	1	1	45
Smoke explosion.....	2	2	2	7	3	1	3	1	1	1	1	1	1	1	1	3
Powder explosions.....	2	2	2	7	3	1	3	1	1	1	1	1	1	1	1	8
Delayed shots.....	2	2	2	7	3	1	3	1	1	1	1	1	1	1	1	8
Premature shots.....	2	2	2	7	3	1	3	1	1	1	1	1	1	1	1	5
Blown-out shots.....	1	2	2	7	3	1	3	1	1	1	1	1	1	1	1	1
Misplaced shots.....	1	2	2	7	3	1	3	1	1	1	1	1	1	1	1	1
Dust explosions.....	3	2	2	7	3	1	3	1	1	1	1	1	1	1	1	3
Mine cages.....	8	2	2	7	3	1	3	1	1	1	1	1	1	1	1	9
Kicked by mule.....	7	2	2	7	3	1	3	1	1	1	1	1	1	1	1	2
Mine cars.....	7	2	2	7	3	1	3	1	1	1	1	1	1	1	1	45
Mining machines.....	3	2	2	7	3	1	3	1	1	1	1	1	1	1	1	3
Falling down shaft.....	2	2	2	7	3	1	3	1	1	1	1	1	1	1	1	5
Electric shock.....	2	2	2	7	3	1	3	1	1	1	1	1	1	1	1	2
Railroad cars.....	2	2	2	7	3	1	3	1	1	1	1	1	1	1	1	2
Coal falling down shaft.....	2	2	2	7	3	1	3	1	1	1	1	1	1	1	1	2
Falling off scaffold.....	1	2	2	7	3	1	3	1	1	1	1	1	1	1	1	1
Total.....	96	5	2	47	3	1	3	1	1	1	1	1	1	2	1	166

FATAL ACCIDENTS.

The following is a detailed statement of facts and circumstances attending each of the fatal accidents that have taken place in the mines of this State during the year 1904, as established by investigation made either by myself or one of my assistants acting in conjunction with the coroner of the county in which the accidents have occurred; also, some comments on same:

CLAY COUNTY.

The first mine accident resulting in death occurred on January 13th, in the Collins Coal Company's No. 1 Mine, at about 8:30 o'clock on the morning of the above date. Thomas Welch, a miner, 68 years of age, employed at this mine, was working at the face of his room, when, apparently without warning, a large iron-stone boulder (commonly called by miners a nigger head), measuring six feet in length, five feet wide and twelve inches thick, suddenly gave way, falling on him, crushing and injuring him so

that he died a few minutes later. On examination it was found that the boulder had been almost completely imbedded in the roof, with only a small portion of the lower surface visible, showing on a line with the roof, and, being of different formation, also separated it from the strata surrounding it by a glaze or thin coating of coal. It was practically without support, loose and ready to fall when the coal had been mined from under it. This dangerous condition, however, was not noticeable, and would have been very hard to determine either by examining or by sounding the roof; therefore, decedent could not have been aware of the danger he was working in until the rock fell, resulting in his death.

On February 16th Charles Patrick, a miner, 17 years of age, was killed by falling draw slate in the Collins Coal Company's No. 2 Mine. Little was learned at the investigation of this accident other than that deceased was last seen alive at about 11:30 o'clock a. m. of the above date, at which time he informed the driver, who was then pulling a car of coal from his room, that he would load no more coal that day, and as his working place was located some distance from those of his fellow-workmen, no one had occasion to visit him during the day. At about 7:30 o'clock p. m. a searching party found him at the face of his room lying under a piece of draw slate which measured ten feet long, five feet wide and six inches thick. Life had then been extinct for several hours.

On April 13th Allen Payne, a miner, 23 years of age, was instantly killed by a delayed bottom shot in the Lower Vein Block Coal Company's No. 1 Mine. This accident was investigated by Assistant Inspector Thomas, and from evidence given at the investigation it was learned that at firing time (3:25) on the evening of the above date Walter King, a miner, whose working place was near that of the deceased, had two shots ready to fire, one of which was tamped on fuse, the other to be fired by a squib. A day man named Wilson also had a bottom shot, which was charged with one and one-half pounds of dynamite, ready to fire in the same room. Arrangements were made that Payne should assist King in firing his shots, they to light one shot each at the same time that Wilson would light the bottom shot. In the hurry and excitement incident to such work Wilson lighted the bottom shot before the others were quite ready, and warned them of the fact.

King succeeded in lighting his squib, but deceased failed to light the fuse in the shot he was trying to fire. They then ran to a place of safety, and, after waiting about one minute or so, two shots were heard to explode, which they thought were in King's room. Several other shots were being fired at the same time in this part of the mine, and after results proved that it was one of these that they heard instead of the bottom shot. After hearing the two shots explode they rushed back into the room to fire the one which Payne failed to light, and when deceased had gotten directly over the bottom shot it exploded, killing him instantly and seriously injuring King. Deceased leaves a wife and two children. A conformance to the statute requiring shots to be fired in rotation might have prevented this accident.

GREENE COUNTY.

On March 31st Samuel Thorp, assistant mine boss, age 40 years, was crushed by falling slate in the Lattas Creek No. 1 Mine, sustaining internal injuries that resulted in heart failure, of which he died on the night of April 17th.

From evidence given at the investigation of the accident it was learned that on the morning of the 31st deceased had been instructed to take assistance with him and shoot down some slate which had become loose and dangerous on one of the main entries. A hole had been drilled in the slate on the day previous, and his instructions were to charge this hole and fire a shot in the slate. Instead of following instructions, he proceeded to knock out the timbers from under the slate with a sledge hammer, and while so engaged, at about 8 o'clock a. m., a large piece of slate, eight feet wide, thirty feet in length and eight inches thick, suddenly gave way and fell, the outer edge striking him and inflicting injuries as above stated. It was not thought at the time that he was seriously injured, and there is some doubt as to whether his death was due to injuries received from the slatefall or not. He leaves dependent one child.

On June 16th W. L. Haskins, miner, age 32 years, was fatally injured by a blast in the Victoria Mine. At firing time, 3:30 o'clock p. m., of the above date, deceased and another miner named Dority, who was working in the room adjoining that of the deceased, had two shots each charged, ready to fire, all of

Haskins while he made what they both thought was three unsuccessful attempts to ignite the fuse in the shot he was trying to fire. (Later results, however, proved that the fuse had been ignited in one of the three attempts.) After waiting until he thought there was danger from the shots he had previously lighted, Dority called to Haskins, and they ran to a place of safety, where they waited an interim of perhaps three minutes, during which time they heard three shots explode. Haskins then, thinking that he had failed to light his shot, rushed back into his room for the purpose of doing so, and when within ten or twelve feet of it the shot exploded, pieces of coal from it striking and injuring him so badly that he died on the following morning. He leaves as dependents a wife and three children. Two very dangerous practices are exhibited in this accident, viz., the use of fuse in shot firing and that of trying to fire more than one shot at a time. Had the ordinary miners' squibs been used and but one shot fired at a time in rotation, as required by law, the accident would undoubtedly not have happened.

On July 7th Thomas McClelland, miner, age 50 years, was fatally injured by falling down the Glenburn hoisting shaft. At the time he met his death deceased was employed as a dirt dumper at the top of the mine, in which capacity he was but temporarily employed, during the time certain repairs were being made in the bottom. His place of work was at what is known as the dirt landing, located about twelve feet above the ground or first landing. He and one other person were employed at this point, their duties being to pull the loaded cars off the cage as they were hoisted, push them to a point some 400 feet distant from the shaft, dump and return the empty cars to the cage. At about 9 o'clock on the morning of the accident they had, as usual, taken a loaded car off the cage and during the interval necessary to return the empty the mine superintendent, wishing to do down into the mine, caused the cage to be lowered. The dumpers, returning with the empty car, not knowing that the cage had been moved, pushed it over into the shaft. McClelland, involuntarily clinging to it, was also pulled into the shaft, falling a distance of about seventy feet, striking the top of the cage and receiving injuries from which he died during the night following. He leaves as dependents a wife and eight children. The superin-

which were tamped on fuse. Arrangements were made that Dority should light his two shots first, then pass through the breakthrough between the two rooms and assist Haskins to fire, they to light one shot each at the same time, thus lighting the four shots in rotation before any one of them would have time to explode. This they proceeded to do, and Dority had lighted both of his shots and one of those in Haskins' room, and was watching tendent, as did others, gave evidence at the investigation that he had called twice to the dumpers notifying them that he intended using the cage, yet the dumper who was working with McClelland testified that they had heard no such order. Be that as it may, the superintendent, knowing the danger of moving the cage under existing conditions, should be censured in not waiting until fully assured that both men had heard his order before causing the cage to be moved.

On December 23d a second fatal accident occurred in this mine, when Raymond Little, driver, age 17 years, and single, was crushed to death beneath a loaded mine car in the Glenburn Mine.

No one witnessed this accident, and little could be learned at the investigation other than when last seen alive decedent was coming out of a cross-entry with a loaded car, riding, by standing with one foot on the drawbar in the front end of the car and the other one on the tail chain. From the fact that the mule was loose from the car and was continuing on its way out of the entry when the accident was reported, it is presumed that the hook in the tail chain, in some way, became detached from the car, thus causing him to fall to the roadway directly in front of it. When found he was lying beneath the car, about the center, life extinct.

On October 25th Starlin Center, miner, age 32 years, single, was almost instantly crushed to death by falling slate in the Island No. 2 Mine. Deceased and several other persons were at work in the morning of the above date cleaning up and constructing a cut-off roadway through an old abandoned room to recover a pair of cross-entries which had caved in. At about 11:30 o'clock a. m. he was loading dirt from along the side of the room pillar, working under a ledge of slate which extended out over the roadway, when suddenly this slate ledge, measuring sixteen feet in length, three feet wide and eighteen inches thick, gave

way, falling on him, crushing him so that death resulted before the slate could be removed, an interim of perhaps five minutes.

On November 1st James Layman, driver, age 17 years, and single, was run over and crushed to death by a loaded mine car in the Black Creek Mine. Deceased was driving a parting team, hauling coal from a double parting on the main entry to the shaft bottom. At about 2:20 o'clock p. m. he was coming out with a trip of three loaded cars, riding on the front end of the first car, when, in some way, he slipped and fell under the car, which passed almost entirely over him, crushing and killing him instantly.

On December 9th a second fatal accident occurred in this mine. Larry Bays, miner, age 23 years, and single, was fatally injured by falling draw slate. There was no one present at the time the accident occurred, and when found by the driver, who had gone into his room to pull a car, at about 1:20 o'clock p. m., he was lying under a large piece of slate, unconscious, in which state he remained until death relieved him, at about 12 o'clock midnight of the same date.

KNOX COUNTY.

On August 16th George Ballow, age 34 years, and Tollard M. Goldman, age 45 years, sinkers, met their death by falling down an escape shaft which they were sinking for the Enterprise Hill Coal Company. An investigation of this accident was made by Assistant Inspector Thomas, at which time it was learned that the company, in providing a hoisting apparatus to be used in sinking this escape shaft, had converted a traction into a hoisting engine by covering one of the traction wheels with short wooden slats and using it as a winding drum. Ballow and Goldman were working on the night shift, and at about 11 o'clock p. m. of the above date had prepared to descend the shaft and begin their shift. After calling to the engineer, asking if all was right, and receiving an affirmative reply, they stepped into the sinking bucket and signaled him to lower away. The engineer started his engine and had unwound about fifteen feet of rope, when it suddenly slipped from the surface of the drum, thus allowing the bucket, with its human load, to fall about four feet, when the rope was caught by the main shaft of the engine, the sudden jerk

causing the men to lose their hold on the rope, falling to the bottom of the shaft, a distance of about 125 feet, killing them both instantly. Goldman leaves as dependents a wife and six children.

PARKE COUNTY.

On January 12th Bert Challis, driver, age 23 years, single, was crushed to death by a mine car in the Parke No. 11 Mine. There was no one present immediately at the time of the accident, and little was learned on investigation other than that when decedent was last seen alive he was riding on the front end of a loaded mine car, coming down a very heavy grade without spraggs. It is presumed that the car was running at a high rate of speed, and that he slipped and fell under it. When found he was lying under the car between the axles, life extinct.

PIKE COUNTY.

On January 13th Joseph Keys, miner, age 50 years, and Willis Hall, also a miner, age 30 years, were fatally burned by an explosion of blasting powder in the Carbon Mine. An investigation of this accident developed the fact that it was brought about by carelessness on the part of one of the decedents seldom exhibited by even those who are the most ignorant in the use and handling of explosives. The point at which the accident occurred was some forty feet from the face of Keys' working place, the location of his powder box, containing two full kegs of powder and one keg which had been partly used. A large hole had been made in the top of this keg, and it had been left standing open. The box also contained a roll of fuse which was thought to be damp. In order to determine this fact Keys took up the fuse and applied his lamp to the powder in the end of it, which ignited and commenced to burn, and while standing almost directly over the box, he cut off a short piece of the fuse, the burning end falling into the open powder keg, exploding the powder and burning him so badly that he died one week later. It was not thought at the time that Hall was fatally injured, yet death resulted two weeks from the date of the accident. Keys leaves as dependents a wife and one child and Hall a wife and three children.

On October 3d two more lives were sacrificed to the use of fuse

in shot firing. David Key, miner, age 49 years, and Evert Botkins, 37 years of age, also a miner, were killed by a blast in the Ayrshire No. 3 Mine. With the exception that two lives were lost, this accident is an exact counterpart of that occurring in the Victoria Mine in Greene County; i. e., Key had two shots ready to fire at firing time (3:30 o'clock p. m.), both of which were tamped on fuse, and Botkins was assisting him to fire them, they to light one shot each at the same time. Botkins succeeded in lighting his shot, and, thinking that Key had done the same, ran out on the entry to a place of safety with him, where they waited until they heard a shot explode. Key then said that he thought he had failed to get his shot lighted, Botkins replying that they had better get back and light it before the smoke got too strong. They then rushed back into the room for the purpose of doing so, and when within about fifteen feet of the shot it exploded, killing Key instantly and injuring Botkins so badly that he died six hours later. Both of the unfortunates leave as dependents a wife and three children each.

On October 26th Louis Mallory, miner, age 30 years, and single, was fatally injured by falling slate in the Ayrshire No. 4 Mine. At the time of the accident he was loading a car of coal from the end of a pillar which he was drawing, when a piece of draw slate suddenly gave way, striking him on the head, inflicting what was thought at that time to be merely a scalp wound. A few days later he took to his bed and was bleeding at the ears. A doctor was called and upon examination it was discovered that he had suffered a basilar fracture of the skull, and that an operation would be necessary to remove the blood clot on his brain. This was done, but Mallory did not recover, and died November 4th.

SULLIVAN COUNTY.

March 16th Elmer DeLapp, car greaser, age 15 years, was killed by falling slate in the Wilfred No. 1 Mine. Deceased was not working on the day of the accident, but he had gone down the manway into the mine in the afternoon visiting. Among other places he visited was that of a miner named Treadway, with whom he remained until firing time. Treadway had two shots ready to fire, which deceased insisted on lighting. He finally did

light one, against Treadway's wishes, and was returning to light the remaining one, when a large piece of draw slate, fifteen feet wide, seventeen feet long and from two to four inches thick, fell on him, killing him instantly.

March 16th Fred Cliver, miner, age 19 years, single, was fatally injured by an electric shock in the Sunflower Mine. From evidence given at the investigation of this accident it was learned that at about 9 o'clock on the morning of the accident the wick or cotton in decedent's lamp being nearly exhausted, he had gone into a neighbor's room to get a new one. Failing to get one there, he started out to try elsewhere. In leaving the room his lamp was extinguished, but he continued his way in the dark, and, miscalculating the distance he had traveled, came into contact with a live electric wire located across the entry from the mouth of the room. It is presumed that, being in the dark, he stumbled and fell, his face striking the wire. The contact only lasted from fifteen to thirty seconds, when assistance reached him, yet death resulted from the shock ten minutes later. Two hundred and fifty volts (the maximum electric load carried in this mine) is not considered dangerous to human life, unless the contact continues for a considerable length of time, yet two deaths have occurred in the mines of the State within the past eighteen months where the voltage carried was less than the above number, and in each instance the contact lasted but a few seconds. There should be a law enacted prohibiting the use of naked wires on traveling or haulage roads.

On June 3d Alfred McClelland, driver, age 20 years, was killed by falling slate in the Freeman Mine. At the time of the accident deceased was hauling water. At about 2:45 o'clock p. m. he was going into the mine with an empty water box, riding on the tail chain between the mule and the box, and when passing through a double parting on the main entry a piece of slate, three feet wide, seven feet long and four inches thick, fell on him, crushing his head against an iron rail, death resulting fifteen minutes later.

June 4th Perry Kirkham, miner, age 24 years, was fatally injured by falling slate in the Bruillette's Creek No. 6 Mine. He and his buddie were at work at the face of their room on the morning of the above date, loading a car of coal. At the time of the

accident decedent was shoveling coal from under a horse-back or roll, when suddenly, without warning, a large portion of it gave way, falling on him, crushing and injuring him so that he died within a few hours. He leaves as dependents a wife and one child. Considerable negligence on the part of both decedent and his buddie was exhibited in this accident, as they knew the nature of the roof, and that it was dangerous, having sounded and examined it a short time previous to the accident; yet they continued working under it without having first secured it with props or timber.

On May 26th John Griffin, timberman, age 36 years, single, was fatally injured by falling slate in the Jackson Hill No. 2 Mine. Shortly after 7 o'clock on the morning of the above date deceased was at work trying to take down a loose slate shot which had been fired on one of the cross-entries the previous evening. At the time of the accident he was shearing the slate through on one side of the entry for the purpose of loosening it more, so that it could be taken down easily, when suddenly, without warning, a large piece of slate, measuring eight feet wide, thirteen feet long and six inches thick, gave way, falling on him, crushing and injuring him so that he died two hours later.

On July 21st Edward White, driver, age 17 years, single, was instantly killed by being run over with a loaded mine car in the Caledonia Mine. There was no witness to this accident, and little could be learned at the investigation other than that when last seen alive decedent was riding on the front end of a trip of three loaded cars, on his way from a double parting to the shaft bottom. A few minutes later he was found under the front car of the trip, life extinct. The supposition is that he slipped and fell under the car, as there was evidence on the roadway of his having been dragged about seventy-five feet before the trip was stopped.

On September 14th Samuel E. Shepherd, age 26 years, was killed by falling slate in the Union Mine. Deceased and eight other persons were at work on the night shift, shooting up bottom and timbering near the bottom of the shaft, preparatory to laying the double partings. At about 11:15 p. m. they had fired a shot which knocked a couple of props out from under some very loose slate, and were at work clearing away the débris, so that the props could be reset, when a large piece of slate, measuring four feet

wide, six feet long and twelve inches thick, suddenly gave way and fell, killing Shepherd instantly and seriously injuring two other persons. Deceased leaves a wife and one child.

On October 18th a second fatal accident occurred in the Bruillette's Creek No. 6 Mine, when Mathew Gibson, miner, age 21 years, single, met his death from falling slate. This accident was very similar to that of Kirkham. At about 8:30 o'clock a. m. decedent had gone to visit a fellow-miner named Clark, and while sitting near the face of the latter's room, talking, a large piece of roof of slip formation, which measured eight feet long, two and one-half feet wide and eighteen inches thick, suddenly gave way, falling on him and killing him instantly. Clark testified that he had examined and sounded the rock a short time prior to the accident, and could not detect that it was loose. Roof of this character is very treacherous, and cannot be watched too closely.

VERMILLION COUNTY.

On January 9th John Thompson, carpenter, age 51 years, single, met his death by falling down the Crown Hill No. 2 hoisting shaft. At the time of the accident (3:30 p. m.) Thompson was at work putting in some guides in the tippie, and was standing on a platform located about thirty-eight feet above the ground or surface landing, when a violent smoke explosion occurred in the mine. So great was the force of the explosion that it extended up into the tippie, causing decedent to lose his footing and fall to the bottom of the shaft, a distance of 193 feet, killing him instantly. From evidence obtained at the investigation of this accident it was learned that at quitting time of the above date there were thirty-five or forty shots ready to fire, containing in all at least two hundred and fifty, possibly more, pounds of powder. The shot firers commenced firing these shots at 3 o'clock p. m., and in about thirty minutes had completed their work. The last shot fired, however, seamed, making an unusually large amount of flame, and the smoke from so great a number of shots previously fired in so short a time being very dense and hot, ignited from this flame, causing an explosion of such force as to almost wreck the interior of the mine, also tearing out a part of the guides and midwall in the hoisting shaft. The shot firers, although nearly overcome with powder smoke and after-damp, escaped without serious injury.

On November 1st Matt Pugh, shot firer, age 34 years, was fatally burned from the flame of a blown-out shot in the Rhodes Mine. Pugh and one other person were employed to fire the shots in this mine after the miners and other workmen had completed their day's work and quit the mine. It was a custom that each of the shooters would take opposite sides of the shaft, begin firing on the return of the air, and continue lighting shots until they had made a complete circuit of that part of the mine, or until all of the shots had been fired. At about 5 o'clock on the evening of the accident Pugh had fired a number of shots on one of the cross-entries, when he came to a room where a shot had been prepared which measured seven feet nine inches, right angles from the drill hole. It was also drilled three feet and five inches past the cutting or loose end, and was charged with four quarts of powder. This shot, when exploded, caused a windy or blown-out shot, the flame of which traveled a distance of one hundred and sixty-three feet down the opposite cross-entry, where deceased had gone for safety, burning him externally and internally, inflicting injuries of which he died three days later in the St. Anthony Hospital at Terre Haute. He leaves as dependents a wife and four children. As shown by the above, this accident was due to an overcharged and misplaced shot and a gross violation of the statute relating to the use of powder and shot firing in mines by two persons, viz., Ante Lathi, the person who prepared the shot, and decedent himself, who had strict orders from the mine manager not to fire any shots that did not conform to statute. Prosecution was filed against Lathi, but he had left the city immediately after the accident and we were unable to secure service on him.

December 30th Robert McCain, driver, aged 24 years, and single, was crushed to death by a trip of loaded mine cars in the Willow Grove Mine. Deceased was employed at the mine as trip rider, his duties being to ride the trip of empty cars in and the loaded one out of the mine. When riding the loaded trip he usually rode on the front end of the first car in the trip, seated on what is termed a shoe, which consisted of a piece of strap iron, one-fourth inch thick and four inches wide, turned at right angles, so as to form two arms eight and twenty inches long, respectively. On the end of the long arm a loop or hook was turned so that it could be hooked over the end of the car. At about 10:40 o'clock

a. m. he was coming out to the shaft with a trip of some eight or ten cars, and when within about one hundred feet of the shaft he in some way fell under the cars and was dragged through under the second one, breaking almost every bone in his body, killing him instantly. There was no one saw him fall, but it is presumed that he caught his foot against an iron roller placed in the center of the track for the purpose of carrying the rope, and was jerked off his seat to the roadway in front of the car.

VIGO COUNTY.

On March 4th, at about noon, Robert Cole, top laborer, age 25 years, single, was crushed to death by a railroad car in the yards of the Diamond Mine. At the time of the accident deceased was bringing an empty car down to the tippie, and when nearing the point where he wished to stop it he applied the brake. At that moment the chain connecting the brake rod and beam gave way, thus causing him to lose his footing and fall to the track directly in front of the car, where he was caught by the brake beam and crushed to death instantly.

On March 15th Oscar King, miner, age 20 years, was fatally burned as a result of an explosion of blasting powder in the Grant No. 2 Mine. From evidence obtained at the investigation of this accident it was learned that at about 10 o'clock a. m. of the above date deceased had gone to his powder box for some needed article, and that he had in the box a powder keg containing about eight pounds of powder. The box was also a receptacle for his squib box, mine checks, paper and other articles that make up a miner's equipment. A large hole had been made with a pick in the top of the powder keg, for the purpose of pouring the powder out of it. This hole had been left uncovered, and when deceased raised the lid of the powder box a spark from his lamp fell into the keg, exploding the powder and burning him so badly that he died eight days later. He leaves as dependent a wife.

On September 17th a second fatal accident occurred in this mine, when Charles Powell, miner, age 21 years, was fatally injured by a delayed shot. At firing time (3:30 p. m.), this date, decedent had three shots charged ready to fire, all of which were tamped on fuse. When it came his turn to fire he lighted two of the shots and retreated to a place of safety on the entry, where

he waited until he heard what he thought was two shots explode. After results, however, proved that but one shot had exploded, and that it made two reports, the concussion from the last report being almost equal to the first one. When he heard the two reports decedent rushed back and lighted his remaining shot and was leaving the room, but when about twenty-two feet from the face of the room the unexploded shot that he had previously lighted exploded, pieces of flying coal from it striking and injuring him so that he died four hours later, one more victim as a result of two practices which we have from time to time severely condemned, viz., the use of fuse in shot firing and of trying to fire a number of shots at one time. Deceased leaves a dependent wife.

On October 18th Peter Felor, miner, age 18 years, and single, was fatally injured by being crushed between a loaded mine car and the entry rib in the Diamond Mine. From evidence adduced at the investigation of this accident it was learned that deceased was very anxious to secure a position as mule driver in the mine, and in order that he might learn the work he spent a great deal of his time, when not otherwise engaged, in assisting the driver who hauled coal from him. At about 1:30 o'clock p. m. of the above date he had assisted in gathering a trip of loaded cars, and after having coupled them together he started the mule and attempted to step up on the drawbar, where the driver usually rides, but missed his footing. In order to save himself from being run down by the cars, which were then in motion, he stepped to one side of the roadway, intending to let them pass him. The space, however, between the roadway and the rib was too small to permit the cars to pass him, there being only about nine inches of room. This fact, owing to his excitement, was not noticed by deceased, and he was caught by the car and dragged along the entry rib for several feet before the trip could be stopped. He was crushed through the abdomen and injured otherwise, so that he died about midnight of the same date.

On November 29th John Dreganous, miner, age 42 years, was fatally crushed by falling slate in the Klondyke Mine. At about 10:30 o'clock a. m. he was engaged in mining off some loose coal in the upper bench of his room, working under a piece of loose draw slate five inches thick, when a piece of slate, eleven feet long and five feet wide, suddenly gave way, falling and catching him

on the edge of the lower bench of coal, crushing him through the chest and inflicting injuries of which he died a short time after being brought out of the mine. There was no one present at the time of the accident. An examination of his working place, however, proved that he knew that the slate was loose, as there was evidence of his having tried to pull it down; also, that he resumed work under it without first having secured it with props, notwithstanding the fact that there were a number of props of different lengths on hand.

A summary of the names of persons killed, occupation, date and cause of each death, the name of mine and county in which the fatalities occurred, and the number of persons dependent on those killed is given in the following table:

SUMMARY OF FATAL CASUALTIES.

CLAY COUNTY.

Date.	Name.*	Age.	Dependents.	Address.	Occupation.	Cause.	Mine.	Company.
Jan. 13..	Thomas Welch.....	68	0	Brazil.....	Miner.....	Falling slate.....	Gifford No. 1.....	Collins Coal Co.
Feb. 16..	Charles Patrick.....	17	0	Brazil.....	Miner.....	Falling slate.....	Gifford No. 2.....	Collins Coal Co.
April 13.	Allen ayne.....	23	5	Saline City.....	Miner.....	Delayed shot.....	Lower Vein Blk.....	Lower Vein Blk. Coal Co.

GREENE COUNTY.

April 31.	Samuel Thorp.....	40	1	Linton.....	Aest. mine boss..	Falling slate.....	Lattas Creek No. 1....	Lattas Creek Coal Co.
June 16..	W. L. Haskins.....	42	4	Linton.....	Miner.....	Delayed shot.....	Victoria.....	Victoria Coal Co.
July 7...	Thomas McClelland..	50	9	Linton.....	Miner.....	Fell down shaft.....	Glenburn.....	L. T. Dickerson Coal Co.
Oct. 25...	Starlin Center.....	32	0	Linton.....	Day man.....	Falling slate.....	Island No. 2.....	Island Coal Co.
Nov. 1...	James Layman.....	17	0	Linton.....	Driver.....	Fell under mine car.	Black Creek.....	Black Creek Coal Co.
Dec. 9...	Larry Bays.....	23	0	Linton.....	Miner.....	Falling slate.....	Black Creek.....	Black Creek Coal Co.
Dec. 23..	Raymond Little.....	17	0	Linton.....	Driver.....	Fell under mine car.	Glenburn.....	L. T. Dickerson Coal Co.

KNOX COUNTY.

Aug. 8...	George Ballow.....	34	0	Bicknell.....	Sinker.....	Fell down sinking shaft.....	Enterprise.....	Enterprise Coal Co.
Aug. 8...	Follard Goldman....	45	6	Bicknell.....	Sinker.....	Same accident.....	Enterprise.....	Enterprise Coal Co.

PARKE COUNTY

Jan. 12..	Bert Challis.....	23	0	Rosedale.....	Driver.....	Mine car.....	Parke No. 11.....	Parke County Coal Co.
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SUMMARY OF FATAL CASUALTIES—Continued.

PIKE COUNTY.

Date.	Name.	Age.	Dependents.	Address.	Occupation.	Cause.	Mine.	Company.
Jan. 13...	Joseph Keys.....	55	2	Carbon.....	Miner.....	Powder explosion...	Carbon.....	Aberdeen Coal Co.
Jan. 13...	Willis Hall.....	30	4	Carbon.....	Miner.....	Same accident.....	Carbon.....	Aberdeen Coal Co.
Oct. 3....	David Key.....	49	4	Ayrshire.....	Miner.....	Delayed shot.....	Ayrshire No. 3.....	Ayrshire Coal Co.
Oct. 3....	Evert Botkins.....	49	4	Ayrshire.....	Miner.....	Same accident.....	Ayrshire No. 3.....	Ayrshire Coal Co.
Oct. 26...	Louis Mallory.....	30	0	Ayrshire.....	Miner.....	Falling slate.....	Ayrshire No. 4.....	Ayrshire Coal Co.

SULLIVAN COUNTY.

March....	Elmar Delap.....	15	...	Wilfred.....	Miner.....	Falling slate.....	Wilfred.....	Wilfred Coal Co.
March 16.	Fred Oliver.....	19	...	Dugger.....	Miner.....	Electric shock.....	Sunflower.....	Sunflower Coal Co.
May 26...	John Griffin.....	36	...	Jackson Hill.....	Miner.....	Falling slate.....	Jackson Hill No. 2.....	Jackson Hill Coal Co.
June 3...	Alfred McClelland.....	20	...	Dugger.....	Driver.....	Falling slate.....	Freeman.....	Sullivan Coal Co.
July 21...	Edward White.....	17	...	Caladonia.....	Driver.....	Mine car.....	Caladonia.....	Rainbow Coal & M. Co.
Sept. 14...	Samuel Shepherd.....	26	2	Sullivan.....	Miner.....	Falling slate.....	Union.....	Union Coal Co.
June 4...	Perry Kirkham.....	23	3	In country.....	Miner.....	Falling slate.....	Bruilletes No. 6.....	Bruilletes Creek Coal Co.
Oct. 19...	Mathew Gibson.....	21	...	In country.....	Miner.....	Falling slate.....	Bruilletes No. 6.....	Bruilletes Creek Coal Co.

VERMILLION COUNTY.

Jan. 9...	John Thompson.....	51	...	Clinton.....	Carpenter.....	Fell down shaft.....	Crown Hill No. 2.....	Crown Hill Coal Co.
Nov. 1...	Mat Pugh.....	34	5	Clinton.....	Shooter.....	Smoke explosion.....	Rhodes.....	J. K. Deering Coal Co.
Dec. 30...	Robert McClain.....	24	...	Clinton.....	Driver.....	Mine car.....	Willow Grove.....	Willow Grove Coal Co.

VIGO COUNTY.

March 14.	Robert Cole.....	25	...	Heckland.....	Outside laborer.....	Fell off R. R. car.....	Diamond.....	Coal Bluff M. Co.
March 15.	Oscar King.....	20	1	Grant.....	Miner.....	Powder explosion.....	Grant No. 2.....	Grant Coal & M. Co.
Sept. 17...	Chas. Powell.....	21	1	Grant.....	Miner.....	Delayed shot.....	Grant No. 2.....	Grant Coal & M. Co.
Oct. 18...	Peter Fedore.....	18	...	Heckland.....	Miner.....	Crushed, mine car.....	Diamond.....	Coal Bluff M. Co.
Nov. 28...	John Deagneous.....	42	2	Ehrmindale.....	Miner.....	Falling slate.....	Klondike.....	Bruilletes Creek Coal Co.

TABLE,

Showing the Nationality of Persons Killed in and Around the Mines of Indiana During the Year 1904. Also the Number of Persons Dependent on Them for Support.

NATIONALITY.	Fatalities.	Widows.	Children.
American	25	11	26
English	1		
Irish	1		
Scotch	1	1	8
Welsh	1		
Polander	1	1	1
Austrian	1	1	4
Colored	1		
Total	34	14	39

COMPARATIVE TABLE,

Showing Number of Tons of Coal Mined Each Year, the Number of Persons Employed and the Number of Tons Produced Per Each Death from January 1, 1879, to January 1, 1905.

YEAR.	Tons Produced.	Employees.	Deaths.	Tons Per Death.
1879	1,196,490	3,459	Not reported.	.....
1880	1,560,375	No report.	.....	.....
1881	1,771,536	4,567	10	177,153
1882	1,900,000	No report.	.....	.....
1883	2,560,000	5,403	11	232,727
1884	2,260,000	5,716	9	228,888
1885	2,375,000	6,502	7	239,285
1886	3,000,000	6,406	7	428,571
1887	3,217,711	No report.	.....	.....
1888	3,140,979	6,685	17	184,763
1889 (No report) .....	.....	.....	.....	.....
1890	3,791,211	6,550	5	758,242
1891	3,819,600	6,975	5	763,900
1892	4,408,471	7,600	19	232,024
1893	4,358,897	7,431	22	193,586
1894 (No report) .....	.....	.....	.....	.....
1895	4,202,084	7,885	23	182,699
1896	4,068,124	7,112	28	170,290
1897	4,088,100	7,984	16	262,630
1898	5,146,920	No report.	22	233,950
1899	5,864,975	7,366	15	390,997
1900	6,283,063	8,858	18	349,059
1901	7,019,203	12,096	24	292,466
1902	8,763,197	13,139	24	365,133
1903	9,992,563	15,128	65	181,683
1904	9,872,404	17,838	34	290,364

TABLE OF SERIOUS ACCIDENTS.

CLAY COUNTY.

Date.	Name.	Occupation.	Injury.	Cause.	Mine.	Company.
Jan. 4.	Evan Powell	Miner	Collar bone broken	Falling coal	Lawrence No. 6	Zellar-McClellan Co.
Jan. 30.	Lenard Cole	Miner	Leg broken	Falling coal	Lawrence No. 6	Zellar-McClellan Co.
Feb. 2.	Albert Parker	Miner	Body bruised	Falling slate	Crawford No. 5	Crawford Coal Co.
Feb. 16.	Martin Formento	Driver	Hip crushed	Falling slate	Brazil Block No. 9	Brazil Block Coal Co.
Feb. 15.	Wm. Byson	Miner	Shoulder injured	Falling slate	Cloverland No. 1	Zellar-McClellan Co.
Feb. 18.	David Riley	Driver	Foot crushed	Mine car	Cloverland No. 1	Zellar-McClellan Co.
Feb. 16.	Perry Chaney	Miner	Face burned	Explosion of powder	Brazil Block No. 7	Brazil Block Coal Co.
Mar. 8.	Wm. Carbon	Miner	Foot crushed	Falling slate	Cloverland No. 1	Zellar-McClellan Co.
Mar. 12.	Antone Ceglander	Miner	Pelvis bone broken	Crushed by mine car	Pearl	Ind. Bituminous Coal Co.
Apr. 21.	Grant Duncan	Machine run'r	Leg broken	Machine & mine car	Brazil Block No. 1	Brazil Block Coal Co.
May 4.	Charles Haines	Miner	Body bruised	Went back on shot	Lewis	Lewis Coal Co.
May 28.	Robert Baxter	Driver	Hip injured	Falling slate	Gifford No. 1	Collins Coal Co.
June 7.	Wm. Carbon	Miner	Head injured	Falling slate	Cloverland No. 1	Zellar-McClellan Co.
June 21.	Ed. Muncie	Miner	Leg injured	Falling coal	Crawford No. 7	Crawford Coal Co.
July 6.	J. W. Stoker	Flat trimmer	Head and shoulder injured	R. R. car	Cloverland No. 1	Zellar-McClellan Co.
Aug. 31.	Wm. Irwin	Day man	Leg broken	Falling slate	Zellar-McClellan No. 4	Zellar-McClellan Co.
	Sam. Butcher	Driver	Arm broken	Mine car	Brazil Block No. 9	Brazil Block Coal Co.

DAVISS COUNTY.

Mar. 15.	Logan Fields	Miner	Leg broken	Falling slate	Montgomery No. 3	Daviess County Coal Co.
Aug. —	Frank Hurman	Jerryman	Foot crushed	Falling slate	Mutual	Mutual Mining Co.

GIBSON COUNTY.

Jan. 12.	Wm. Fine	Miner	Leg broken	Delayed shot	Oswald	Princeton Mining Co.
Feb. 29.	Jeff Turfin	Driver	Hips and back injured	Mine car	Oswald	Princeton Mining Co.

GREENE COUNTY.

Jan. 27.	Harry Myers...	Miner	Shoulder fractured.	Mine car.	Midland.	Midland Coal Co.
Jan. 8.	George Safford	Driver	Ankle crushed.	Mine car.	Island Valley No. 4.	Island Valley Coal Co.
Jan. 18.	John Thomas	Boss driver.	Ankle crushed.	Mine car.	Lewis	Lewis Coal Co.
	Perry Wilson.	Cager.	Hips crushed.	Mine car.	Green Valley	Green Valley Coal Co.
	Cass Marion.	Driver.	Hips crushed.	Mine car.	Green Valley	Green Valley Coal Co.
Jan. 29.	R. H. Allen	Miner	Leg fractured.	Falling coal.	Island Valley No. 3.	Island Valley Coal Co.
Feb. 4.	Charles Phillips.	Miner	Head and hip injured.	Fall down shaft.	N. West	Northwest Coal Co.
Feb. 13.	Walter Fisher.	Driver	Back injured.	Mine car.	Black Creek	Black Creek Coal Co.
Feb. 20.	Charles Marion	Driver	Crushed in abdomen.	Mine car.	Green Valley	Green Valley Coal Co.
Feb. 2.	H. L. Rector.	Miner	Back injured.	Mine car.	Gilmour.	Indiana Southern Coal Co.
Feb. 29.	John Hays.	Driver	Foot crushed.	Mine car.	Island No. 2.	Island Coal Co.
Feb. 26.	Al Redwell.	Miner	Two ribs broken.	Falling slate.	Victoria.	Victoria Coal Co.
Mar. 8.	Jasper Wallace	Miner	Foot crushed.	Falling coal.	Gilmour.	Indiana Southern Coal Co.
Mar. —	Aleck John.	Machine helper	Rib fractured	Falling coal.	Lewis	Lewis Coal Co.
Apr. 11.	Adam Deem.	Miner	Two ribs broken	Falling slate.	Island Valley No. 3.	Island Valley Coal Co.
Apr. 25.	Chas. Sheridan	Driver	Foot crushed.	Mine car.	Island No. 1.	Island Coal Co.
July 25.	Jacob Miller.	Miner	Hips injured	Falling coal.	South Linton.	South Linton Coal Co.
July 29.	A. Regley	Driver	Leg crushed.	Mine car.	Victoria	Victoria Coal Co.
	Patrick Carico.	Driver	Back injured.	Mine car.	Green Valley	Green Valley Coal Co.
	Wm. White	Dumper	Finger cut off.	Mine car.	Fry	Fry Coal Co.
	Richard Lewis.	Timberman	Leg broken.	Falling slate.	Glenburn.	L. T. Dickerson Coal Co.
June 14.	John Camper	Driver	Arm broken.	Mule and cage.	Gilmour.	Indiana Southern Coal Co.
June 20.	Mack Dunnham.	Machine run'er	Foot mangled.	Mining machine.	Atlas No. 2.	Johnson Coal Co.
June 30.	John Hughs	Driver	Side injured.	Mine car.	Gilmour	Indiana Southern Coal Co.
May 9.	Lloyd James.	Driver	Leg broken.	Mine car.	Victoria	Victoria Coal Co.
May 11.	Joe Suke.	Miner	Total blindness.	Back on shot.	N. West	North West Coal Co.
	Wm. Wagner	Driver	Legs crushed.	Mine car.	Antioch	Antioch Coal Co.
	John Elianski	Miner	Back injured.	Falling coal.	North West	North West Coal Co.
Oct. 15.	Wm. Kinney.	Miner	Collar bone broken.	Falling coal.	South Linton	South Linton Coal Co.
Nov. 15.	George Patton.	Day man	Eyes injured.	Premature shot.	Lewis	Coal Bluff Mining Co.
Dec. 7.	E. G. Shoplaw.	Driver.	Ankle broken.	Mine car.	Summit No. 2.	Summit Coal Co.
Dec. 7.	Otto Lafoon	Cager.	Leg broken.	Mine cage.	Midland.	Midland Coal Co.
Dec. 10.	Walker Benfrom.	Miner	Leg broken.	Falling slate.	Atlas No. 1.	Johnson Coal Co.

TABLE OF SERIOUS ACCIDENTS.

KNOX COUNTY.

July 22.	Pat Ryan	Miner	Breast and face burned	Premature shot.	Bicknell	Blacknell Coal Co.
Feb. 10.	Sam Price	Miner	Three ribs broken	Falling slate.	Prospect Hill	Prospect Hill Coal Co.

TABLE OF SERIOUS ACCIDENTS—Continued.

PARKE COUNTY.

Date.	Name.	Occupation.	Injury.	Cause.	Mine.	Company.
Jan. 14.	Otto Powers	Miner	Rib broken	Falling slate	Minshall No. 1	Minshall Vein Coal Co.
Feb. 16.	Martin Fermento	Driver	Chest injured	Falling slate	B. B. Coal Co. No. 9	B. B. Coal Co.
Feb. 22.	Kago Dottie	Driver	Arm broken	Between car and prop	Lyford No. 1	Lincoln Coal and Mining Co.
Mar. 16.	George Jago	Miner	Face and arms burned	Explosion of powder	Lyford No. 1	Lincoln Coal and Mining Co.
Feb. 27.	John Kellar	Driver	Foot crushed	Mine car	Minshall No. 1	Minshall Vein Coal Co.
Mar. 8.	James Houky	Miner	Back injured	Falling slate	Park No. 11	Parke County Coal Co.
Apr. 29.	Lee Wher	Machine run'er	Finger mashed off	Machine jack and rib	Lyford No. 1	Lincoln Coal and Mining Co.
May 9.	Joe Carzetta	Miner	Spine injured	Falling slate	Gilmour	Zellar-McClellan Coal Co.
June 22.	Wm. Oswalt	Machine helper	Hip injured	Falling slate	Brazil Block No. 12	Brazil Block Coal Co.
July 18.	Joe Woods	Loader	Nose broken	Falling slate	Mecca No. 3	Mecca Coal and Mining Co.
Aug. 25.	Mike Papincak	Miner	Face and head injured	Falling slate	Brazil Block No. 9	Brazil Block Coal Co.
Aug. 27.	Marion Yowel	Miner	Shoulder injured	Falling slate	Minshall No. 1	Minshall Vein Coal Co.
Aug. 29.	Brant McAblester	Miner	Arm broken	Falling slate	Minshall No. 2	Minshall Vein Coal Co.
	Mike Genie	Miner	Leg broken	Falling coal	Superior No. 3	Zellar-McClellan Co.
Aug. 31.	Wm. Erbine	Miner	Leg broken, back injured	Falling slate	Superior No. 4	Zellar-McClellan Co.
Sept. 8.	Manual Hatt	Driver	Hips injured	Falling slate	Lyford No. 1	Lincoln Coal and Mining Co.
Oct. 20.	Essich Hawkins	Miner	Body bruised and burned	Blown out shot	Lyford No. 1	Lincoln Coal and Mining Co.

PIKE COUNTY.

Jan. 13.	Alley Hall	Miner	Face and body burned	Powder explosion	Carbon	Aberdeen Coal Co.
Jan. 14.	Rice Kullans	Miner	Finger crushed off	Mine car	Petersburg	Mancie Coal and Mining Co.
Jan. 25.	Ben Allen	Miner	Thumb cut off	Falling slate	Hartwell	S. H. Wulfsman.
Sept. 8.	Mulburn Little	Ass't mine boss	Ankle bone fractured	Mine car	Blackburn	S. W. Little Coal Co.
Feb. 10.	Chris Edes	Miner	Back injured	Falling slate	Winslow	Winslow Gas Coal Co.
Mar. 23.	John King	Day man	Shoulder fractured	Fell against prop	Ayrshire	Ayrshire Coal Co.
Dec. 3.	J. B. Miley	Mine boss	Ankle fractured	Mine car	Blackburn	S. W. Little Coal Co.

SULLIVAN COUNTY.

Jan. 5	Moses White	Miner	Face and hands burned	Dust explosion	Mammoth Vein	Mammoth Vein Coal Co.
Jan. 21.	Wm. Stevenson	Miner	Back injured	Falling draw slate	Mildred	J. Woolley Coal Co.
	Victor Sharp	Miner	Ankle broken	Falling coal	Cummins	Cummins Coal Co.
Feb. 3.	Roscoe White	Miner	Face and head injured	Falling slate	Calladonia	Rainbow Coal & Mining Co.
	A. Pierson	Driver	Three ribs dislocated	Mine car	Mildred	J. Woolley Coal Co.

Mar. 24.	Marsh Moore	Driver.	Jawbone crushed.	Kicked by mule.	Cummins.	Cummins Coal Co.
Mar. 16.	Thomas James.	Driver.	Foot crushed.	Mine car.	Star City.	Harder-Hafer Coal Co.
Mar. 18.	Jack N. Arthur.	Miner.	Leg broken.	Falling coal.	Phoenix No. 3.	New Pittsburg Coal & Coke Co.
Apr. 7.	Charles Young.	Miner.	Leg dislocated.	Falling coal.	St. Clair.	Ind. Hocking Coal Co.
Apr. 13.	I. H. Wooley.	Mine boss.	Arm broken.	Fell off mine car.	Star City.	Harder-Hafer Coal Co.
Apr. 23.	Jacob Week.	Driver.	Shoulder dislocated.	Fell off mine car.	Star City.	Harder-Hafer Coal Co.
May 26.	Wm. Epperson.	Mine boss.	Toe broken.		Green Hill.	Green Hill Coal Co.
June 1.	Ross Nixon.	Track layer.	Back injured.	Falling slate.	St. Clair.	Ind. Hocking Coal Co.
May 21.	Jas. Lindsay.	Driver.	Shoulder dislocated.	Falling slate.	Phoenix No. 1.	New Pittsburg Coal Co.
July 14.	J. M. Poor.	Cager.	Elbow fractured.	Coal fell from cage.	Freeman.	Sullivan Coal Co.
Aug. 16.	John Crynes.	Miner.	Injured internally.	Falling slate.	Star City.	Harder-Hafer Coal Co.
Sept. 10.	Chas. McGarvey.	Loader.	Back crushed.	Falling slate.	Wilfred.	Wilfred Coal Co.
Sept. 14.	Stephen Harper.	Timberman.	Collar bone broken.	Falling slate.	Union.	Union Coal Co.
Dec. 6.	Fred Ring.	Driver.	Hip dislocated.	Mine car.	Jackson Hill No. 2.	Jackson Hill Coal & Coke Co.
Dec. 7.	Lonie Delania.	Miner.	Skull fractured.	Premature blast.	Mammoth Vein.	Mammoth Vein Coal Co.

VANDERBURGH COUNTY.

Feb. 11.	J. Killelue	Miner	Shoulder fractured.	Falling slate.	Unity	Crescent Coal Co.
Aug. 11.	Hugh Monahan	Miner	Rib broken.	Fell from scaffold.	Ingleside.	Ohio River Coal Co.
Dec. 30.	Joe Brown	Driver.	Knee injured.	Mine car.	Sunnyside.	Sunnyside Coal Co.

VERMILLION COUNTY.

Jan. 4.	John Mahon	Miner	Skull fractured, one eye out	Crushed by cage.	Brillettes Creek No. 3	Brillettes Creek Coal Co.
Jan. 9.	Oliver Green	Miner	Hand and face burned	Dust explosion	Atherton.	Chas. F. Keeler Coal Co.
Jan. 9.	Wm. Jones	Miner	Face and head burned	Same accident.	Atherton.	Chas. F. Keeler Coal Co.
Jan. 27.	Wm. Clements	Driver	Foot broken	Mine car.	Brillettes Creek No. 3	Brillettes Creek Coal Co.
Feb. 1.	Mike Wagner	Miner	Collar bone broken	Mine car.	Prince	Kellar Coal Co.
Mar. 3.	Shill Webster	Driver	Hips injured	Mine car.	Buckeye	McClellan Sons & Co.
Apr. 20.	Harry Livengood	Cager	Back injured	Coal falling down shaft.		
Aug. 5.	Robert Thomas	Miner	Leg fractured	Falling slate.	Eureka No. 1.	Cayuga Pressed Brick Co.
Sept. 8.	Manna Hatt	Driver	Back injured	Mine car.	Lyford No. 1.	Lincoln Coal & Min. Co.
Sept. 20.	Judson Rice	Dumper.	Leg broken	Falling slate.	Lyford No. 1.	Lincoln Coal & Min. Co.
Sept. 19.	James Jackson	Driver	Shock by electricity		Brillettes Creek No. 6	Indiana Fuel Co.
Oct. 23.	H. Littlehale	Miner	Leg broken	Mine cage	Prince.	Kellar Coal Co.
Oct. 23.	Ed. Bishop	Miner	Collar bone broken	Mine cage	Buckeye	McClellan Sons & Co.
Oct. 23.	John Galloway	Miner	Back injured	Mine cage	Buckeye	McClellan Sons & Co.
Oct. 23.	George Swinford	Miner	Knee injured	Mine cage	Buckeye	McClellan Sons & Co.
Nov. 15.	Wm. Ottinger	Miner	Burned externally	Smoke explosion	Eureka.	Cayuga Brick and Coal Co.
Nov. 15.	Lester Jones	Miner	Burned externally	Same accident.	Eureka.	Cayuga Brick and Coal Co.

TABLE OF SERIOUS ACCIDENTS—Continued.

VIGO COUNTY.

Date.	Name.	Occupation.	Injury.	Cause.	Mine.	Company.
Jan. 6.	Oran Hicks	Miner	Back injured	Falling slate	Diamond	Coal Bluff Mining Co.
Jan. —	Alonzo Morris	Miner	Leg broken	Fell off cage	Seeleyville No. 2	Seeleyville Coal & Mining Co.
Feb. —	Tom McKinney	Miner	Face and hands burned	Premature blast	Union	Coal Bluff Mining Co.
Feb. —	Vene Tanner	Miner	Face and breast burned	Shot exploded while tamping	Broadhurst	Home Coal Co.
Feb. 23	John Hamilton	Driver	Hips fractured	Falling under car	Glen Oak	Glen Oak Coal Co.
Feb. 24	Henry Trible	Miner	Burned internally	Misplaced shot	Grant No. 2	Grant Coal Co.
Mar. 15	Oscar King	Miner	Burned internally	Explosion of powder	Grant No. 2	Grant Coal Co.
Mar. 19	Arch West	Miner	Face and hands burned	Explosion of powder	Seeleyville No. 2	Seeleyville Coal Co.
Mar. 23	B. Waugh	Driver	Lost an eye	Kicked by mule	Glen Oak	Glen Oak Coal Co.
Apr. 13	William Shepherd	Driver	Leg broken	Mine car	Miami No. 2	Miami Coal Co.
Apr. 28	Abe Akers	Driver	Crushed in chest	Mine car	Lawton	Coal Bluff Mining Co.
July —	Richard Christopher	Miner	Both legs broken	Falling slate	Miami No. 2	Miami Coal Co.
July 8	Fred Christimay	Miner	Wrist broken	Falling coal	Miami No. 1	Miami Coal Co.
July 20	Albert Regan	Driver	Shoulder dislocated	Mine cars	Hector	Laughlin Coal Co.
Aug. —	John Corbin	Miner	Wrist fractured	Mine car	Peerless	Coal Bluff Mining Co.
Aug. 23	Benjamin Moore	Miner	Spine injured	Descending cage	Fauvre	Fauvre Coal Co.
Sept. 14	William Garnett	Miner	Lost one eye	By blast	Atherton	Chas. F. Kellar Coal Co.
Aug. 17	Frank Adams	Miner	Ankle broken	Mine car	Diamond	Coal Bluff Mining Co.
Oct. 15	Burton Gideon	Miner	Collar bone fractured	Falling coal	Fauvre	Fauvre Coal Co.

WARRICK COUNTY.

Mar. 10	Thomas Jones	Miner	Ankle injured	Falling slate	Electric	L. D. Scales.
Dec. 15	William Law	Miner	Injured internally	Premature shot	Star No 2	Ohio River Coal Co.

NOTE. The above includes those who have sustained broken bones, injury to spine, internal injuries, cuts, bruises and other injuries, such as we think require special mention.

ACCIDENTS TO MINE PROPERTY.

Considering the increased number of new mines in operation during the past year, the financial loss from accidents to mine property for that period were comparably small. The most serious accident occurring, and one that entailed the greatest financial loss, was the destruction of the entire surface plant of the Coal Bluff Mining Company's Glen No. 2 Mine, in the early part of November, by fire. The loss of buildings, ropes, cages, screens, scales and repairs on machinery, boilers, etc., from the accident will probably amount to \$10,000.

On Saturday night, October 29th, a fire, originating from a blast, occurred at the face of one of the cross-entries in the Atlas No. 1 Mine, in Greene County. The fire was not discovered until the following Monday morning, and it had gained such headway, owing to the dense volume of smoke and gases given off, that the mine could not be operated. Two days were lost, during which time air-tight brattices were built across the entry and in the breakthroughs for the purpose of smothering the fire, after which operations were resumed. The loss from this accident, other than the time lost by the mine being idle, would not exceed \$150.

A gob fire, originating from spontaneous combustion, occurred in the Midland Mine about December 5th. Prompt action on the part of the mine management in effectively sealing off the affected galleries with air-tight brattices, built of brick and mortar, prevented it from assuming serious proportions, and on my visit to the mine, December 12th, the fire was under complete control. The cost of material, labor, etc., in constructing the brattices will amount to about \$1,000. In addition to this a considerable portion of the mine will be abandoned for the present.

A fire originating from a gas blower being lighted by a blast occurred at the face of one of the working places in the Citizens' Mine, in Sullivan County. Fortunately, the mine was located near the waterworks in the town of Sullivan, and through the aid of the fire department from that town the fire was extinguished after about twelve hours' labor. The loss from this accident will not exceed \$100.

On December 13th, about 6:15 p. m., one of the boilers in the Park No. 10 Mine plant exploded with great violence. So great was the force of the explosion that several other boilers located near the one that exploded were thrown out of position, and all of the smokestacks except one were knocked down and the boiler room completely wrecked. Fortunately there was no one seriously injured, although several workmen were in the near vicinity when the boiler gave way.

The excessive heavy rainfall during the latter part of the winter and early spring flooded a number of mines in different parts of the State. Considering the time the mines were idle while the water was being pumped out, the repairs, etc., necessary to put them in shape for operation, the damage suffered from this was probably greater than from any other cause during the year. Among those whose loss was the greatest are the following:

The Buckeye Mine, in Greene County, was flooded March 11th, and remained idle until June 1st.

The Island No. 1 and Island Valley No. 3 were both flooded on the same date, and were idle two weeks.

The Blackburn Mine, in Pike County, was also flooded about the same date, and has not been operated since that time.

The Bruillette's Creek No. 3, in Vermillion County, was flooded about March 20th, and was idle about one month.

The Chicago No. 6 Mine, in Vigo County, was flooded in February, and did not resume operations until August.

The Klondike Mine, in Vigo County, was flooded in March, and did not resume operations until July.

DIRECTORY OF MINES.

Names and addresses of persons operating mines in each county, also the names of the mines:

CLAY COUNTY.

Name.	Address.	Mine.
Brazil Block Coal Company.....	Brazil.....	Brazil Block No. 1.
Brazil Block Coal Company.....	Brazil.....	Brazil Block No. 4.
Brazil Block Coal Company.....	Brazil.....	Brazil Block No. 8.
Brazil Block Coal Company.....	Brazil.....	Gart No. 7.
Brazil Block Coal Company.....	Brazil.....	Gart No. 10.
Continental Clay & Mining Co....	Brazil.....	Continental No. 1.
I. S. & R. McIntosh Coal Co.....	Brazil.....	Robstock.
Zellar-McClellan & Co.....	Brazil.....	Cloverland No. 1.
Zellar-McClellan & Co.....	Brazil.....	Cloverland No. 2.
Zellar-McClellan & Co.....	Brazil.....	Superior No. 4.
Zellar-McClellan & Co.....	Brazil.....	Superior No. 7.
Indiana Bituminous Coal Co.....	Terre Haute.....	Fairview.
Indiana Bituminous Coal Co.....	Terre Haute.....	Pearl.
Jackson Coal & Mining Co.....	Brazil.....	Cornwall.
Crawford Coal Company.....	Brazil.....	Crawford No. 5.
Crawford Coal Company.....	Brazil.....	Crawford No. 4.
Crawford Coal Company.....	Brazil.....	Crawford No. 6.
Crawford Coal Company.....	Brazil.....	Crawford No. 8.
Crawford Coal Company.....	Brazil.....	Crawford No. 9.
Star Union Coal & Oil Co.....	Indianapolis.....	Fortner.
C. Ehrlich Coal Company.....	Turner.....	Klondike.
Collins Coal Company.....	Brazil.....	Gifford No. 1.
Collins Coal Company.....	Brazil.....	Gifford No. 2.
American Clay Mfg. Company....	Brazil.....	Monarch.
Lewis Coal & Mining Company....	Lewis.....	Lewis.
Vivian Coal Company.....	Chicago.....	Vivian No. 4.
Vivian Coal Company.....	Chicago.....	Vivian No. 5.
Indiana Block Coal Company....	Saline.....	Lower Vein Block No. 1.
Jasonville Coal Company.....	Jasonville.....	Geld Knob.
Dan Davis Coal Co.....	Brazil.....	Worlds Fair No. 2.
Island Valley Coal Co.....	Linton.....	Island Valley No. 4.

DAVISS COUNTY.

Stucky & Osborn.....	Raglesville.....	Stucky.
Davies County Coal Co.....	Montgomery.....	Montgomery No. 3.
Mutual Mining Company.....	Cannelburg.....	Mutual.
Winklepleck & Overton.....	Raglesville.....	Union.
Mandabach Bros.....	Washington.....	Mandabach.

FOUNTAIN COUNTY.

Rush Coal Company.....	Cleveland, Ohio.....	Rush.
Silverwood Coal Company.....	Silverwood.....	Silverwood.

GIBSON COUNTY.

Princeton Coal & Mining Co.....	Princeton.....	Oswald.
Massey Coal Company.....	Oakland City.....	Massey.
Fort Branch Coal Company.....	Fort Branch.....	Fort Branch.

REPORT OF STATE GEOLOGIST.

GREENE COUNTY.

Name.	Address.	Mine.
Black Creek Coal Company.....	Linton.....	Black Creek.
Island Coal Company.....	Indianapolis.....	Island No. 1.
Island Coal Company.....	Indianapolis.....	Island No. 2.
Island Coal Company.....	Indianapolis.....	Island No. 3.
Island Coal Company.....	Indianapolis.....	Island No. 5.
Indiana Southern Coal Co.....	Chicago.....	Gilmour.
Hoosier Coal Company.....	Bloomfield.....	Hoosier No. 1.
Hoosier Coal Company.....	Bloomfield.....	Hoosier No. 2.
Island Valley Coal Company.....	Linton.....	Island Valley No. 2.
Island Valley Coal Company.....	Linton.....	Island Valley No. 3.
South Linton Coal Company.....	Linton.....	South Linton.
Midland Coal Company.....	Midland.....	Midland.
Vulcan Coal Company.....	Indianapolis.....	Vulcan.
Summit Coal Company.....	Bloomfield.....	Summit No. 2.
Western Indiana Coal Co.....	Terre Haute.....	Templeton.
Victoria Coal Company.....	Linton.....	Victoria.
L. T. Dickason Coal Co.....	Linton.....	Glenburn.
Antioch Coal Company.....	Linton.....	Antioch.
Tower Hill Coal Company.....	Bloomington.....	Tower Hill.
Green Valley Coal Company.....	Jasonville.....	Green Valley.
Lattas Creek Coal Company.....	Terre Haute.....	Lattas Creek No. 1.
Johnson Coal Company.....	Columbus, Ohio.....	Atlas No. 1.
Johnson Coal Company.....	Columbus, Ohio.....	Atlas No. 2.
Couch Coal Company.....	Jasonville.....	Fry.
Letsinger Coal Company.....	Bloomfield.....	Letsinger.
Northwestern Coal Company.....	Jasonville.....	Northwestern.
Coal Bluff Mining Co.....	Terre Haute.....	Twin.
North Linton Coal Company.....	Linton.....	North Linton.
Pennsylvania & Indiana Coal Co.....	Midland.....	Pennsylvania.

KNOX COUNTY.

Bicknell Coal Company.....	Bicknell.....	Bicknell.
Knox Coal Company.....	Bicknell.....	Knox.
Lynn Coal Company.....	Bicknell.....	Lynn.
Sugar Loaf Mining Co.....	Bicknell.....	Prospect Hill.
Enterprise Coal Company.....	Vincennes.....	Enterprise.
Washington-Wheatland Coal Co.....	Washington.....	Wheatland.
Chicago & Big Muddy Coal Co.....	Bicknell.....	Pine Knot.

PARKE COUNTY.

W. P. Harrison.....	Rockville.....	Harrison.
Brazil Block Coal Co.....	Brazil.....	Brazil Block No. 12.
Brazil Block Coal Co.....	Brazil.....	Cox No. 3.
Brazil Block Coal Co.....	Brazil.....	Brazil Block No. 9.
Rock Run Coal Co.....	Mecca.....	Lucia.
Mecca Coal & Mining Co.....	Mecca.....	Mecca No. 3.
Lincoln Coal & Mining Co.....	Chicago, Ill.....	Lyford No. 1.
Other Creek Coal Co.....	Chicago, Ill.....	Mary.
Zellar-McClellan & Co.....	Brazil.....	Superior No. 1.
Zellar-McClellan & Co.....	Brazil.....	Superior No. 2.
Zellar-McClellan & Co.....	Brazil.....	Superior No. 3.
Minshall Vein Coal & Mining Co.....	Terre Haute.....	Minshall No. 1.
Minshall Vein Coal & Mining Co.....	Terre Haute.....	Minshall No. 2.
Plymouth Block Coal Co.....	Terre Haute.....	Pan American.
Continental Coal Co.....	Terre Haute.....	Raccoon.
Parke County Coal Co.....	Rosedale.....	Parke No. 11.
Parke County Coal Co.....	Rosedale.....	Parke No. 12.

PERRY COUNTY.

Bergonroth Bros.....	Troy.....	Troy.
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PIKE COUNTY.

Name.	Address.	Mine.
Aberdeen Coal Company.....	Carbon.....	Aberdeen.
Ingle Coal Company.....	Oakland City.....	Ayrshire No. 3.
Aberdeen Coal Company.....	Carbon.....	Carbon.
Ingle Coal Company.....	Oakland City.....	Ayrshire No. 4.
Ingle Coal Company.....	Oakland City.....	Ayrshire No. 5.
Ingle Coal Company.....	Oakland City.....	Ayrshire No. 6.
S. W. Little Coal Company.....	Evansville.....	Rogers.
S. W. Little Coal Company.....	Evansville.....	Blackburn.
S. W. Little Coal Company.....	Evansville.....	Littles.
S. H. Wulfsman.....	Huntingburg.....	Hartwell.
Muncie Coal & Mining Co.....	Muncie.....	Petersburg.
Winslow Gas Coal Co.....	Winslow.....	Winslow No. 2.
Winslow Gas Coal Co.....	Winslow.....	Winslow No. 5.

SULLIVAN COUNTY.

Washington Fuel Co.....	Chicago, Ill.....	Bunker Hill.
Rainbow Coal & Mining Co.....	Caladonia.....	Caladonia.
Indiana & Chicago Coal Co.....	Chicago, Ill.....	Dugger.
Green Hill Coal Co.....	Sullivan.....	Green Hill.
Hymera Coal Co.....	Hymera.....	Hymera No. 2.
Hymera Coal Co.....	Hymera.....	Hymera No. 3.
Hymera Coal Co.....	Hymera.....	Hymera No. 4.
New Linton Coal Co.....	Indianapolis.....	New Linton.
Jackson Hill Coal & Mining Co.....	Terre Haute.....	Jackson Hill No. 2.
New Pittsburgh Coal & Coke Co.....	Chicago, Ill.....	Phoenix No. 1.
New Pittsburgh Coal & Coke Co.....	Chicago, Ill.....	Phoenix No. 3.
New Pittsburgh Coal & Coke Co.....	Chicago, Ill.....	Phoenix No. 4.
Keystone Coal Co.....	Chicago, Ill.....	Shelburn.
Harder-Hafer Coal Co.....	Chicago, Ill.....	Star City.
Sullivan County Coal Co.....	Hymera.....	White Ash.
Sullivan County Coal Co.....	Hymera.....	Freeman.
Sun Flower Coal Co.....	Dugger.....	Sun Flower.
W. S. Bogle Coal & Mining Co.....	Chicago, Ill.....	Glendora.
Wilfred Coal Co.....	Shelburn.....	Wilfred No. 1.
Island Coal Co.....	Indianapolis.....	Island No. 4.
Linton Semi Block Coal Co.....	Linton.....	Wolford.
Cummins Coal Co.....	Chicago, Ill.....	Cummins.
Indiana Hocking Coal Co.....	Farmersburg.....	La Blanche.
Citizens' Coal Co.....	Sullivan.....	Citizens.
Bruilletes Creek Coal Co.....	Terre Haute.....	Bruilletes Creek No. 6.
J. Woolley Coal Co.....	Evansville.....	Mildred.
Keller Coal Co.....	Chicago, Ill.....	Virginia.
Superior Coal Co.....	Terre Haute.....	Superior.
Coal Bluff Mining Co.....	Terre Haute.....	Shirley Hill.
Coal Bluff Mining Co.....	Terre Haute.....	Little Giant.
N. Jackson Hill Coal & M. Co.....	Shelburn.....	St. Clair.
Kettle Creek Coal Co.....	Shelburn.....	Kettle Creek.
Reliance Coal Co.....	Sullivan.....	Reliance.
Union Coal Co.....	Sullivan.....	Union.
Linton Bituminous Coal Co.....	Linton.....	Hamilton.

VANDERBURGH COUNTY.

Diamond Coal Company.....	Evansville.....	Diamond.
C. Thomas Coal Company.....	Evansville.....	First Avenue.
Ingle Coal Company.....	Evansville.....	Ingleside.
Sunnyside Coal Company.....	Evansville.....	Sunnyside.
Evansville Coal & Mining Co.....	Evansville.....	Union.
Crescent Coal Company.....	Evansville.....	Unity.

VERMILLION COUNTY.

Name.	Address.	Mine.
Bruilletes Creek Coal Co.....	Terre Haute.....	Bruilletes Creek No. 3.
Indiana Fuel Company	Clinton.....	Bruilletes Creek No. 5.
Indiana Fuel Company	Clinton.....	Riverside.
Cayuga Press Brick Company....	Cayuga.....	Eureka.
McClellan & Sons.....	Clinton.....	Buckeye.
Clinton Coal Company.....	Clinton.....	Crown Hill No. 1.
Clinton Coal Company.....	Clinton.....	Crown Hill No. 2.
Oak Hill Coal & Mining Co.	Clinton.....	Oak Hill.
Keller Coal Company.....	Clinton.....	Prince.
Willow Grove Coal Company	Clinton.....	Willow Grove.
J. K. Deering & Co.....	Chicago, Ill.....	Rhodes.
Maple Valley Coal Company	Clinton.....	Maple Valley No. 1.
Maple Valley Coal Company	Clinton.....	Maple Valley No. 2.

VIGO COUNTY.

Chas. F. Keeler Coal Company...	Chicago, Ill.....	Atherton.
Terre Haute Brick & Pipe Co....	Terre Haute.....	Brick Works.
Manufactures Fuel Co.....	Chicago, Ill.....	Chicago No. 6.
Coal Bluff Mining Company.....	Terre Haute.....	Diamond.
Coal Bluff Mining Company.....	Terre Haute.....	Peerless.
Coal Bluff Mining Company.....	Terre Haute.....	Lawton.
Bruilletes Creek Coal Company..	Terre Haute.....	Klondike.
J. Ehrlich.....	Seeleyville.....	Seeleyville.
Grant Coal Company.....	Grant.....	Grant No. 2.
W. S. Bogle Coal & Mining Co....	Chicago, Ill.....	Glen Oak.
Loughner Coal Company.....	Seeleyville.....	Hector.
Miami Coal Company.....	Brazil.....	Miami No. 1.
Miami Coal Company.....	Brazil.....	Miami No. 2.
Miami Coal Company.....	Brazil.....	Miami No. 3.
Parke County Coal Company.....	Rosedale.....	Parke No. 10.
Fauvre Coal Company.....	Indianapolis.....	Redbird.
Seeleyville Coal & Mining Co....	Seeleyville.....	Rosebud No. 2.
Seeleyville Coal & Mining Co....	Seeleyville.....	Royal.
West Terre Haute Coal Co.....	West Terre Haute.....	Larimer.
Home Coal Company.....	West Terre Haute.....	Broadhurst.
Deep Vein Coal Company.....	Terre Haute.....	Deep Vein.
Green Field Coal & Mining Co....	Terre Haute.....	Greenfield No. 1.
L. T. Dickason Coal Co.....	Indianapolis.....	Lost Creek.
Sugar Creek Coal Company.....	Terre Haute.....	Sugar Creek.
Vigo County Coal Company.....	Seeleyville.....	Ray No. 2.
Forrest Park Coal Company.....	Terre Haute.....	Forrest Park.

WARRICK COUNTY.

Hall & Marsh.....	Chandler.....	Air Line.
Big Four Coal Company.....	Boonville.....	Big Four.
J. Woolley Coal Company.....	Boonville.....	Big Vein No. 3.
J. A. Bryan.....	Evansville.....	Chandler.
Charles Menden.....	Evansville.....	De Forrest.
John Archibald.....	Evansville.....	Star No. 1.
T. D. Seales Coal Company.....	Boonville.....	Electric.
Ohio River Coal Company.....	Evansville.....	Burke.

Names and addresses of mine bosses and names of mines which they are managing.

CLAY COUNTY.

Name.	Address.	Name of Mine.
John Bolin	Brazil	Brazil Block No. 1.
William Rosser	Diamond	Brazil Block No. 8.
B. F. Jenkins	Brazil	Gart No. 7.
William Woods	Diamond	Gart No. 10.
Samuel Holden	Brazil	Continental.
John Jenkins	Brazil	Rebstock.
Fred Eberwine	Cloverland	Cloverland No. 1.
George Myers	Brazil	Cloverland No. 2.
Thomas Thompson	Brazil	Lawrence No. 6.
William Myers	Turner	Fairview.
Moses Marks	Caradonia	Cornwall.
Griff Howell	Centerpoint	Crawford No. 5.
Walter Knox	Asherville	Crawford No. 6.
Eli Tibbits	Turner	Fortner.
Jacob Ehrlich	Staunton	Klondike.
George A. Davis	Brazil	Gifford No. 1.
August Norkus	Brazil	Gifford No. 2.
H. W. Jenkins	Brazil	Glen No. 1.
H. W. Jenkins	Brazil	Glen No. 2.
Edward Somers	Staunton	Pearl.
Alexander Ferguson	Coalment	Lewis.
William Johnson	Jasonville	Vivian No. 4.
William Johnson	Jasonville	Vivian No. 5.
William Perry	Brazil	Crawford No. 8.
William Risher	Saline	Lower Vein No. 1.
W. G. Spears	Brazil	Crawford No. 9.
Joseph C. Winn	Brazil	Brazil No. 4.
William Miller	Brazil	Superior No. 4.
Willson McIntire	Jasonville	Gold Knob.
William Pence	Brazil	World's Fair.
James Skene	Brazil	Crawford No. 4.

DAVIESS COUNTY.

Arnold Brown	Montgomery	Montgomery No. 3.
J. P. Jager	Cannelburg	Mutual.
W. A. Jacobs	Reagsville	Union.
Jacob Mandabach	Washington	Mandabach.

FOUNTAIN COUNTY.

William Perry	Cates	Rush.
J. S. Tiley	Silverwood	Silverwood.

GIBSON COUNTY.

William Woods	Princeton	Oswald.
John Odell	Fort Branch	Fort Branch.

GREENE COUNTY.

Name.	Address.	Name of Mine.
Reuben Small.....	Linton.....	Black Creek.
Richard Potter.....	Linton.....	Island No. 1.
Winn Risher.....	Linton.....	Island No. 2.
Henry Osha.....	Linton.....	Island No. 3.
Charles Vaughn.....	Linton.....	Island No. 4.
James Scully.....	Gilmour.....	Gilmour.
James Meredith.....	Linton.....	Hoosier No. 1.
Joseph Ferry.....	Linton.....	Hoosier No. 2.
George Epperson.....	Linton.....	Island Valley No. 2.
Joseph Fennel.....	Linton.....	Island Valley No. 3.
John Randall.....	Linton.....	South Linton.
William Davidson.....	Midland.....	Midland.
James Gibson.....	Linton.....	Vulcan.
William McQuade.....	Linton.....	Summit No. 2.
Joseph Dunkerly.....	Linton.....	Templeton.
W. Badders.....	Linton.....	Victoria.
John Kelley.....	Linton.....	Glenburn.
James Stevenson.....	Linton.....	Antioch.
John McQuade.....	Midland.....	Tower Hill.
William James.....	Jasonville.....	Green Valley.
Thomas Hyatt.....	Jasonville.....	Lattas Creek.
Ira Dalrymple.....	Linton.....	Atlas No. 1.
James Pascoe.....	Linton.....	Atlas No. 2.
William Crouch.....	Jasonville.....	Fry.
Dan Davis.....	Jasonville.....	Letsinger.
James Templeton.....	Linton.....	Twin.
William Stevenson.....	Linton.....	North Linton.
Frank Lockhart.....	Linton.....	Pennsylvania.

KNOX COUNTY.

R. M. Freeman.....	Bicknell.....	Bicknell.
William Lynn.....	Bicknell.....	Knox.
E. G. Hooper.....	Bicknell.....	Lynn.
Samuel Price.....	Vincennes.....	Prospect Hill.
Harvey Coonrod.....	Bicknell.....	Enterprise.
Thomas Harris.....	Washington.....	Wheatland.
William J. Brown.....	Bicknell.....	Pine Knot.

PARKE COUNTY.

W. P. Harrison.....	Rockville.....	Harrison.
Charles Doidge.....	Diamond.....	Brazil Block No. 12.
George Doidge.....	Coxville.....	Cox No. 3.
James Lamb.....	Montezuma.....	Lucia.
Harry Milburn.....	Lyford.....	Lyford No. 1.
John Chesterfield.....	Brazil.....	Mary.
Thomas Maxwell.....	Brazil.....	Superior No. 1.
Daniel Isaac.....	Brazil.....	Superior No. 2.
James Cuthbertson.....	Brazil.....	Superior No. 3.
Robert Monkhouse.....	Jessup.....	Minshall No. 1.
Matt Raffle.....	Jessup.....	Minshall No. 2.
John T. Sommers.....	Carbon.....	Pan-American.
James Conkley.....	Diamond.....	Brazil Block No. 9.
Thomas Karriek.....	Coxville.....	Raccoon.
D. N. Williams.....	Rosedale.....	Parke No. 11.
George Lindsay.....	Mecca.....	Mecca No. 4.

PERRY COUNTY.

William Bergenroth.....	Troy.....	Troy.
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PIKE COUNTY.

Name.	Address.	Name of Mine.
John Jones.....	Ayrshire.....	Aberdeen.
Bart Stinson.....	Ayrshire.....	Ayrshire No. 3.
W. L. Smith.....	Ayrshire.....	Ayrshire No. 4.
John Willie.....	Petersburg.....	Blackburn.
John Willie.....	Petersburg.....	Rogers.
Herman Rose.....	Littles.....	Littles.
Bart Stinson.....	Ayrshire.....	Ayrshire No. 5.
George Briggs.....	Cabel.....	Hartwell.
John O. Johnson.....	Sophia.....	Carbon.
John Jenkins.....	Winslow.....	Winslow No. 1.
John Jenkins.....	Winslow.....	Winslow No. 5.

SULLIVAN COUNTY.

J. V. Gustin.....	Farnsworth.....	Bunker Hill.
Murry Bledsoe.....	Caladonia.....	Caladonia.
W. F. A. Bell.....	Dugger.....	Dugger.
Harry Evans.....	Sullivan.....	Green Hill.
Asa Roberts.....	Hymersa.....	Hymersa No. 4.
John Griffith.....	Dugger.....	New Linton.
J. H. Needhammer.....	Jackson Hill.....	Jackson Hill No. 2.
George Sargent.....	Alum Cave.....	Phoenix No. 1.
Alexander Faulds.....	Alum Cave.....	Phoenix No. 3.
William Dempsey.....	Shelburn.....	Shelburn.
I. H. Woolley.....	Del Carbo.....	Star City.
William Green.....	Hymersa.....	White Ash.
O. H. Hendrickson.....	Dugger.....	Freeman.
Thomas Lehman.....	Dugger.....	Sun Flower.
Walter Phillips.....	Sullivan.....	Glendora.
Joseph Peters.....	Hymersa.....	Hymersa No. 2.
Edward Newport.....	Shelburn.....	Wilfred No. 1.
David Love.....	Dugger.....	Island No. 4.
James Taylor.....	Shelburn.....	Mammoth Vein.
William Jackson.....	Linton.....	Little Giant.
R. Sharp.....	Cummins.....	Cummins.
John D. Price.....	Farmersburg.....	La Blanche.
James Nolan.....	Sullivan.....	Citizens.
Ed. Shirk.....	Farmersburg.....	Brillettes Creek No. 6.
John McCloud.....	Sullivan.....	Mildred.
John Jordan.....	Sullivan.....	Virginia.
William Vanhorn.....	Farmersburg.....	Superior.
John Quigley.....	Linton.....	Shirley Hill.
Jacob Eck.....	Farmersburg.....	St. Clair.
A. Moreland.....	Jackson Hill.....	Jackson Hill No. 4.
Theodore Thompson.....	Hymersa.....	Hymersa No. 3.
A. L. Boyer.....	Shelburn.....	Kettle Creek.
A. D. Scott.....	Sullivan.....	Reliance.
James Stewart.....	Shelburn.....	Phoenix No. 4.
Martin Navin.....	Sullivan.....	Union.

VANDERBURG COUNTY.

Adolph Becker.....	Evansville.....	Diamond.
Frank Gunther.....	Evansville.....	First Avenue.
James Johnson.....	Evansville.....	Ingleside.
James Anderson.....	Evansville.....	Sunnyside.
Pius Schultzius.....	Evansville.....	Unity.
C. H. Baetz.....	Evansville.....	Unity.

VERMILLION COUNTY.

Name.	Address.	Name of Mine.
Thomas McQuade	Clinton	Bruliettes Creek No. 3.
Richard Moore	Clinton	Bruliettes Creek No. 5.
Thomas Rose	Clinton	Buckeye.
R. M. Irwin	Cayuga	Eureka.
Claud Peck	Clinton	Crown Hill No. 1.
D. W. James	Clinton	Crown Hill No. 2.
William Hutchinson	Clinton	Oak Hill.
Frank Christy	Clinton	Prince.
Nick Walker	Clinton	Willow Grove.
William Wilson	Clinton	Rhodes.
A. P. Gilmour	Clinton	Riverside.
J. W. Walker	Clinton	Maple Valley No. 1.
J. W. Walker	Clinton	Maple Valley No. 2.

VIGO COUNTY.

James Sidell	Atherton	Atherton.
Art Thompson	Terre Haute	Brick Works.
James Markham	Coal Bluff	Chicago No. 6.
James McGow	Burnett	Diamond.
Charles Long	Coal Bluff	Peerless.
John Cain	Burnett	Lawton.
Wesley Alvis	Seeleyville	Seeleyville.
W. F. Decker	Burnett	Grant No. 2.
H. E. Wilson	Burnett	Glen Oak.
B. B. Barnett	Seeleyville	Hector.
James Boskill	Ehrmindale	Klondike.
James Barker	Brazil	Miami No. 1.
Thomas Bingham	Rosedale	Parke No. 10.
James Hawkins	West Terre Haute	Redbird.
J. D. Lewis	Seeleyville	Rosebud No. 2.
John Scott	Seeleyville	Royal.
Eli Eller	West Terre Haute	Larimer.
William L. Erwin	West Terre Haute	Broadhurst.
W. J. Urwin	Brazil	Miami No. 2.
Richard Morgan	West Terre Haute	Deep Vein.
Josiah Pedlar	West Terre Haute	Greenfield No. 1.
Henry Payne	Seeleyville	Lost Creek.
George Doney	West Terre Haute	Sugar Creek.
George West	Seeleyville	Ray No. 2.
James Burt	Cloverland	Miami No. 3.
John Gilmour	Terre Haute	Forrest Park.

WARRICK COUNTY.

T. B. Hall	Chandler	Air Line.
John E. Kelley	Boonville	Big Four.
P. F. Hargrove	Boonville	Big Vein No. 3.
John McCain	Chandler	Chandler.
M. Wilson	De Forrest	De Forrest.
Edwin Archbald	Newburg	Star No. 1.
William Mason	Boonville	Electric.
H. P. Kasemeir	Newburg	Burke.