

## REPORT OF STATE INSPECTOR OF MINES.

---

OFFICE OF INSPECTOR OF MINES,  
INDIANAPOLIS, INDIANA, February 12, 1906.

*Prof. W. S. Blatchley, State Geologist:*

DEAR SIR—I have the honor to submit to you herewith my seventh annual report as Inspector of Mines, covering the calendar year of 1905, and being the Twenty-seventh Annual Report of this Department and the fifteenth 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.

## CONTENTS.

	PAGE.
Letter of transmittal.....	1059
Introduction.....	1061
General summary.....	1061
Table of production by months and by counties .....	1063
Production of coal and mining conditions.....	1065
New development.....	1066
Improvements.....	1070
Changes in ownership of mining property, and organization of new companies.....	1071
Abandoned mines.....	1074
Mines suspending operation for indifferent periods.....	1075
General table.....	1077
Average wage table.....	1092
Table of employes.....	1093
Table showing comparative statement of tonnage, wages and employes from 1900 to 1905 inclusive.....	1098
Table showing a comparison of average wages per mine employe from 1901 to 1905 inclusive.....	1098
Mining machinery.....	1099
Table of steam boilers and hoisting engines.....	1099
Table of dynamos.....	1100
Table of mining machines and compressors.....	1100
Table of shaker screens and automatic cages.....	1101
Table of box car loaders and coal washers.....	1101
Table of mine haulage.....	1102
Summary of mining machinery.....	1102
Recapitulation of mining machinery.....	1103
Machine mines.....	1104
Table showing number of kegs of powder used and tons produced per keg.....	1106
Table showing geological number of coal seam and tons produced from each seam.....	1107
Examinations for certificates of competency.....	1107
Service certificates.....	1111
Mine casualties.....	1111
Table showing different causes of accidents.....	1111
Description of fatal accidents.....	1112
Summary table of fatal accidents.....	1132
Table showing nationality of person killed and number of dependents..	1134
Comparative table of fatalities.....	1134
Summary of serious accidents.....	1136
Accidents to mine property.....	1141
Directory of mines.....	1143

## ANNUAL REPORT OF THE INSPECTOR OF MINES FOR INDIANA.

The subject-matter of this report is treated under the same several captions as in preceding reports, viz., Production of Coal, Condition of Coal Trade, Condition of Labor, Statistical, and Mine Accidents.

While following the same general lines as in former reports we have endeavored to improve on the different subjects reported, making the information more complete and reliable and of greater interest to the general public. There have also been included in this report the following new tables, which we think contain information desirable especially to those interested in mines and mining: A comparative average wage table has been added, a table showing the per cent. gain or loss in tons of coal produced, number of employes and wages paid from 1900 to 1905 inclusive. Tables of Mining Machinery, Table of Mines Suspending operations for a period of thirty days or more, a table showing the Geological Number and the Number of Tons of Coal Mined from each seam of coal in the State. The following summary contains most of the important totals for the year.

### SUMMARY.

Number of counties having shipping mines.....	14
Number of companies operating mines.....	95
Number of new companies organized.....	6
Number of new mines opened.....	14
Number of mines changing hands.....	81
Number of machine mines.....	76
Number of pick or hand mines.....	114
Total number of mines working more than ten men.....	208
Number of mines abandoned.....	16
Number of pick miners employed.....	8,760
Number of machine runners and helpers employed.....	876
Number of loaders employed.....	3,693
Number of inside day and monthly men employed.....	1,657
Total number of all employes.....	18,609
Number of mules used.....	1,449
Number of electric chain machines.....	374

Number of compressed air punching machines.....	158
Total number of mining machines.....	432
Number of electric traction mine motors.....	23
Number of third-rail electric mine motors.....	11
Total number of motors.....	34
Number of dynamo engines.....	85
Number of dynamos.....	85
Number of compressors.....	25
Number of steam boilers.....	385
Number of hoisting engines.....	190
Number of automatic cages.....	244
Number of shaker screens.....	42
Number of box car loaders.....	26
Number of coal washers.....	1
Total estimated value represented by tables of machinery....	\$1,531,235 00
Total number of days mines have been operated.....	29,277
Total tons hand-mined block coal.....	583,662
Total tons machine-mined block coal.....	75,073
Total tons of block coal.....	658,735
Total tons bituminous hand-mined coal.....	6,275,540
Total tons bituminous machine-mined coal.....	4,061,697
Total tons bituminous coal.....	10,337,237
Total tons hand-mined coal.....	6,859,202
Total tons machine-mined coal.....	4,136,770
Total tons of coal produced.....	10,995,972
Total tons of coal consumed in Indiana.....	5,786,035
Total tons coal shipped outside the State.....	5,209,937
Total wages paid to miners.....	\$6,174,749 73
Total wages paid to inside day and monthly men.....	2,100,474 38
Total wages paid to outside day and monthly men.....	1,078,670 44
Total wages paid to all employes.....	9,353,894 55
Amount expended on improvements.....	149,838 12
Total number of fatalities.....	47
Total number of serious accidents.....	103
Total number of minor accidents.....	101
Total number of accidents to employes.....	251

TABLE

Showing by Months and by Counties the Number of Tons Mined and Wages Paid to Employees for the Year 1905 at Mines Employing More than Ten Men.

MONTHS.	CLAY COUNTY.		DAVISS COUNTY.	
	Tonnage.	Wages.	Tonnage.	Wages.
January .....	65,196	\$79,567 96	9,777	\$10,704 14
February .....	65,111	70,988 22	8,522	9,343 33
March .....	44,518	59,209 46	6,665	7,470 77
April .....	39,306	48,823 40	6,186	6,842 33
May .....	37,658	44,756 71	7,096	7,196 37
June .....	47,611	53,835 33	5,513	6,518 49
July .....	62,759	71,847 23	2,899	5,537 90
August .....	71,934	84,496 97	2,322	5,123 07
September .....	77,200	82,928 10	4,211	7,575 48
October .....	85,106	96,656 84	5,493	7,970 96
November .....	93,402	95,405 03	8,623	10,434 54
December .....	126,059	118,942 87	9,346	10,877 86
Total .....	815,860	\$907,458 16	76,653	\$94,795 24

  

	FOUNTAIN COUNTY.		GIBSON COUNTY.	
	Tonnage.	Wages.	Tonnage.	Wages.
January .....	4,604	\$4,658 51	13,167	\$10,963 56
February .....	4,963	4,965 97	10,828	9,726 25
March .....	5,349	5,355 27	8,371	8,354 67
April .....	6,042	5,451 87	5,323	6,807 44
May .....	5,542	5,118 67	2,855	3,186 21
June .....	6,786	6,323 65	3,714	3,523 14
July .....	5,367	5,561 76	6,024	5,394 74
August .....	6,303	6,778 06	5,965	5,583 70
September .....	6,664	6,499 36	8,086	6,896 69
October .....	5,762	5,732 53	12,477	10,705 34
November .....	6,841	6,094 50	11,920	10,618 82
December .....	5,812	5,870 39	12,117	10,978 68
Total .....	70,535	\$68,410 54	100,847	\$92,719 24

  

	GREENE COUNTY.		KNOX COUNTY.	
	Tonnage.	Wages.	Tonnage.	Wages.
January .....	231,705	\$193,557 06	18,207	\$14,264 24
February .....	218,164	178,014 11	15,630	13,243 79
March .....	189,007	149,480 55	8,909	7,705 91
April .....	124,155	104,115 60	6,743	5,589 54
May .....	142,019	117,332 76	11,206	8,660 15
June .....	152,655	125,067 88	15,826	14,011 74
July .....	130,668	110,782 24	20,100	17,026 14
August .....	155,251	130,401 46	19,300	16,302 08
September .....	189,488	149,971 19	24,805	21,871 51
October .....	225,262	176,237 37	23,939	22,227 44
November .....	232,116	185,771 32	28,166	23,323 15
December .....	256,700	200,413 01	31,133	25,455 01
Total .....	2,246,190	\$1,821,144 55	223,964	\$189,680 70

MONTHS.	PARKE COUNTY.		PERRY COUNTY.	
	Tonnage.	Wages.	Tonnage.	Wages.
January .....	64,673	\$70,376 61	303	\$405 45
February .....	67,859	73,910 04	71	158 37
March .....	52,396	48,200 50	775	777 82
April .....	44,165	40,920 13	865	747 02
May .....	39,616	36,815 97	1,012	966 97
June .....	45,480	47,024 70	974	933 66
July .....	61,936	67,432 69	786	721 77
August .....	63,588	83,073 37	702	660 99
September .....	62,969	69,566 71	456	502 26
October .....	75,912	80,656 71	684	696 60
November .....	76,584	75,821 49	528	599 71
December .....	80,105	72,896 20	739	734 45
Total .....	741,013	\$766,895 19	7,895	\$7,905 07

MONTHS.	PIKE COUNTY.		SULLIVAN COUNTY.	
	Tonnage.	Wages.	Tonnage.	Wages.
January .....	31,879	\$25,847 66	212,353	\$171,489 38
February .....	33,624	26,386 11	177,681	135,944 88
March .....	26,679	22,060 29	182,816	147,368 41
April .....	20,994	17,602 74	145,393	118,051 47
May .....	20,932	17,477 49	145,974	118,150 67
June .....	25,022	20,261 54	146,829	125,548 17
July .....	30,976	25,933 15	173,143	147,714 29
August .....	28,476	24,375 02	154,622	142,690 45
September .....	40,015	31,912 58	195,541	159,635 95
October .....	45,280	35,338 89	227,448	166,877 18
November .....	41,833	33,195 40	199,504	151,687 25
December .....	43,135	33,520 74	437,614	359,795 82
Total .....	388,845	\$313,911 61	2,395,918	\$1,944,953 92

MONTHS.	VANDERBURGH COUNTY.		VERMILLION COUNTY.	
	Tonnage.	Wages.	Tonnage.	Wages.
January .....	31,092	\$26,149 71	87,901	\$74,146 30
February .....	32,379	26,921 87	74,344	64,986 37
March .....	19,143	16,844 08	96,802	78,346 16
April .....	15,906	14,252 94	112,956	93,346 65
May .....	12,778	12,809 11	134,035	103,796 60
June .....	13,995	15,598 08	132,668	103,877 27
July .....	18,211	17,558 77	129,170	101,066 13
August .....	22,202	21,082 42	110,405	87,668 04
September .....	28,691	25,268 02	113,550	97,093 63
October .....	36,326	30,719 11	116,539	94,430 62
November .....	39,539	32,294 98	128,716	102,169 34
December .....	37,519	32,080 21	144,160	108,375 18
Total .....	307,781	\$271,579 10	1,381,246	\$1,108,802 29

MONTHS.	VIGO COUNTY.		WARRICK COUNTY.	
	Tonnage.	Wages.	Tonnage.	Wages.
January .....	150,067	\$129,980 20	37,149	\$23,505 65
February .....	152,280	124,125 70	38,274	23,039 78
March .....	153,417	124,851 10	26,637	16,595 78
April .....	151,494	120,170 79	20,413	13,071 76
May .....	154,470	132,441 55	20,255	12,434 37
June .....	139,166	120,601 87	23,543	12,967 68
July .....	141,846	121,505 73	22,930	9,794 36
August .....	139,336	117,091 23	23,947	14,314 84
September .....	164,465	132,789 08	23,202	13,802 43
October .....	155,489	129,360 98	31,710	19,297 31
November .....	193,333	151,313 55	35,570	21,046 49
December .....	203,254	159,743 65	36,978	21,903 06
Total .....	1,898,617	\$1,563,975 43	340,608	\$201,363 51

## PRODUCTION OF COAL AND MINING CONDITIONS.

A review of the coal industry in Indiana for the year 1905 discloses it to be one of marked features. During the spring and summer months the business was apparently in a depressed condition. A majority of the mines throughout the State were running less than half time, while a number were closed entirely for indifferent periods. The selling price of coal was also very low during these months, ranging from 85 cents to \$1.25 per ton, mine run, at the mine. Business, however, was much better commencing in September, and continued so throughout the remainder of the year. The selling price of coal was also much better during that period, ranging from \$1.25 to \$1.50 per ton, mine run, at the mines. Notwithstanding the idle time above mentioned, the total production for the year was 10,995,972 tons, an increase of 1,003,419 tons, or a fraction over 10 per cent. greater than any preceding year in the history of the State.

The aggregate wages paid to mine employes in 1905 was \$9,353,894.55, an increase of \$188,490.17, or a fraction over 2 per cent. greater than in any preceding year. The total number of employes for 1905 was 18,609, an increase of 771 employes, or a fraction over 4 3-10 per cent. greater than in any previous year. Considering the time the mines were idle, the above increase in production, wages paid and number of employes may be surprising to some, yet the following reasons should explain the situation thoroughly, viz.: In 1904, 42 new mines were opened, a majority of which had only reached their full producing capacity at the close of the year. All of these new mines, of course, secured a proportionate share of the trade. One other reason is the fact that, while some of the mines were closed indefinitely by the large coal companies who purchased them, yet the trade thus apparently lost was concentrated at other mines owned by them. This was especially true in Greene, Sullivan, Vermillion and Vigo counties. A fair illustration can be had from the Southern Indiana Coal Company. While their Hoosier No. 2 mine was practically closed the entire year, yet their Lattas Creek mine produced 214,853 tons, or 30,721 tons more than in 1904.

The average wage table shows the average earnings of employes to be \$463.26 per miner, \$579.76 per inside day and monthly man, and \$650.98 per outside day and monthly man. Taken as

a whole, the above figures speak favorably as to the condition of mine employes; also that of coal trade generally.

The labor conditions during the entire year were good, no trouble of any consequence having occurred, with the exception of a few strikes of only a few days' duration. The contract between miners and operators covers the period from April 1st, 1904, to April 1st, 1906. This contract was given in our last report, hence we will make no further mention of it.

### NEW MINES.

The number of new mines opened and developed during the year was much smaller than in any one of the three years preceding.

In 1902 twenty new mines were opened, and in 1903 thirty-seven, in 1904 forty-two and in 1905 fourteen. This large decrease in the development of new property is probably due to three causes, viz., the unusual activity exhibited in the opening of new mines during the three years prior to 1905, thereby causing an over-production, the reduction in selling prices of coal commencing in 1904 and continuing through 1905, and the organization of large consolidations of the coal interests affected in the State, of which we will make mention later.

The fourteen new mines opened in 1905 are distributed in different counties as follows: Clay County 5, 3 block and 2 bituminous, all of which are hand or pick mines; Knox County 2, both bituminous machine mines; Sullivan County 4, 1 pick and 3 machine, all of which are bituminous mines; Vigo County 2, 1 block and 1 bituminous, both pick mines; Warrick County 1 bituminous, machine mine.

Each of the above mines, especially in the bituminous field, has been opened with a view to having a large output, being equipped throughout with the latest up-to-date machinery, and should add materially to the producing capacity of the State. In the annexed table will be found the names of the different companies owning these mines, the names of the mines, the geological number and thickness of the coal seam mined, the depth and size of shaft, railroad on which the mines are located, location and distance from nearest town or city, and the date on which the first shipment of coal was made.



## TABLE OF NEW MINES.

### BLOCK COAL MINES.

#### CLAY COUNTY.

COMPANY.	MINE.	Geological Number of Seam.	Thickness of Seam.	Depth of Shaft.	Size of Shaft.	Machine or Pick.	Date of First Shipment of Coal.	Location.	Railroad.
Monarch Block Coal and Mining Co.....	Monarch.....	IV	4' 6"	70	7 x 16	Pick.....	9-29-05	3 miles east of Clay City.....	Evansville & Ind'pls.
Vandalia Coal Co.....	Asherville No. 1...	III	3'	105	8 x 18	Pick.....	2-1-05	¼ mile west of Asherville...	South B'ch Vandalia.
Progressive Coal and Min- ing Co.....	Progressive.....	III	3' 9"	105	8 x 18	Pick.....	7-25-05	½ mile south of Brazil.....	Main line Vandalia.

#### VIGO COUNTY.

Domestic Block Coal Co....	Domestic Block....	IV	4'	110	8 x 15	Pick.....	6-1-05	4 miles west of Brazil.....	Chicago & East. Ill.
----------------------------	--------------------	----	----	-----	--------	-----------	--------	-----------------------------	----------------------

## TABLE OF NEW MINES—Continued.

## BITUMINOUS MINES.

## CLAY COUNTY.

COMPANY.	MINE.	Geological Number of Seam.	Thickness of Seam.	Depth of Shaft.	Size of Shaft.	Machine or Pick.	Date of First Shipment of Coal.	Location.	Railroad.
C. Ehrlich Coal Co.....	Klondike.....	VI	7'	25	8 x 20	Pick.....	8-20-05	3 miles west of Brazil.....	Main line Vandalia.
Mestor Coal Co.....	Chicago No. 7.....	VI	7'	Slope	.....	Pick.....	8-19-05	1½ miles S. E. of Coal Bluff.	Chicago & East. Ill.

## KNOX COUNTY.

Lynn Coal Co.....	Lynn.....	V	6'	190	7 x 13	Machine..	6-15-05	Towns limits of Bicknell....	I. & V. (Vandalia).
Freeman Coal Co.....	Freeman.....	V	7'	234	9 x 18	Machine..	11- 0-05	1 mile S. W. of Bicknell.....	I. & V. (Vandalia).

## SULLIVAN COUNTY.

United Fourth Vein Coal Co	Black Hawk.....	III	6' 4"	240	9 x 15	Machine..	12- 0-04	¾ mile S. W. of Coalmont...	Southern Indiana.
Carlisle Coal and Clay Co..	Viola.....	VI	4' 6"	245	10 x 20	Pick.....	No shipment	¼ mile west of Carlisle.....	Evansville & T. H.
Clover Leaf Coal Co.....	Clover Leaf.....	IV	5' 8"	306	8 x 19	Machine..	3- 0-05	¼ mile west of Cass.....	Illinois Central.
Shirley Hill Coal Co.....	Shirley Hill No. 2..	IV	4' 7"	307	9 x 18	Machine..	12- 0-05	¾ miles S. W. of Dugger....	I. & V. (Vandalia).

VIGO COUNTY.

Lower Vein Coal Co.....	Lower Vein.....	V	4' 6"	201	8 x 16	Pick.....	7- 3-05	2 miles N. W. of W. Terre Haute .....	Big Four.
-------------------------	-----------------	---	-------	-----	--------	-----------	---------	---------------------------------------	-----------

WARRICK COUNTY.

Elberfield Mining Co.....	Elberfield.....	V	4' 4"	175	7 x 15	Pick.....	8- 1-05	½ mile South of Elberfield .	Evansville & Ind'pls.
---------------------------	-----------------	---	-------	-----	--------	-----------	---------	------------------------------	-----------------------

## IMPROVEMENTS.

Large sums of money were spent on improvements of various kinds at the mines in the State during the past year. This expenditure is represented in new tipples, the sinking of second outlets, installation of new machinery and other general improvements. The monthly reports of Coal Companies made to this office during that time show a total of \$149,838.12 to have been expended for this purpose, and the following data, while not representing the total amount expended, will show some of the most important improvements made:

The Vivian Coal Company of Clay County has installed an automatic steam lift for handling empty cars at the bottom of their No. 2 mine, which will quite materially reduce the cost of caging the coal as well as increasing the capacity of the mine.

The Clinton Coal Company has installed shaker screens, built additional side tracks and made other general improvements at their No. 1 mine, amounting to about \$8,000.

The Caladonia Coal Company of Chandler, Warrick County, sank a new manway during the year and have located their power plant at that point, effecting great improvement in the ventilation of the mine; also adding to its capacity.

The Princeton Coal and Mining Company of Gibson County suspended operations May 1st at their Oswald mine for the purpose of building a new tipple, which was completed August 26th at a cost of \$6,500.

The Indiana Southern Coal Company, Sullivan County, has built a new tipple and installed shaker screens at their Citizens' mine, in addition to which they have built side tracks from S. I. R. R., placing the mine on the list of railroad shipping mines.

The Southern Indiana Coal Company, Sullivan County, has sunk and equipped with stairs a second outlet at their Semi-Block Mine.

The Ayrshire Coal Company, Pike County, during the month of September installed a Link Belt Washer at their No. 4 mine. The washer has a capacity of 150 tons per eight hours, and cost \$6,000.

The Oak Hill Coal Company of Vermillion County has installed an electric light plant of 125 volts at the bottom of the Oak

Hill mine, the purpose being to light the bottom of the shaft and double partings.

The Diamond Coal Company, Vanderburgh County, has erected a new pit head and tipple, built two new cages and made other extensive improvements at the Diamond mine.

The Indiana Southern Coal Company has installed motor haulage in their Farnsworth mine, Sullivan County; also made other improvements incident to a large output.

The Jackson Hill Coal Company, Sullivan County, has installed a third-rail motor haulage system in the Jackson Hill No. 2 mine.

The Vandalia Coal Company has installed traction motor haulage in the east side of the Island No. 1 mine, Greene County, in addition to which they have expended about \$20,000 on improvements of various kinds at many of their other mines.

The Charles F. Keeler Coal Company has added a new generator to their electric light plant at their Atherton mine, Vigo County, also installed two new tubular boilers.

The Crawford Coal Company has completed and equipped with a stairway the second outlet at their No. 4 and No. 8 mines.

The Southern Indiana Coal Company has installed a system of light motor gatherers at the Hoosier No. 1 mine, which not only will reduce the cost of handling the coal, but will add greatly to the producing capacity of the mine.

#### CHANGES IN OWNERSHIP AND ORGANIZATION OF NEW COAL COMPANIES.

Coal trade during part of 1904 and all of 1905 was generally in a depressed condition. Notwithstanding this fact capital has been more eagerly seeking investment in mining property within the past twelve months than ever before in the history of the State. During that period 81 of the largest producing mines in the State changed hands, these transfers representing an aggregate of approximately thirteen million eight hundred thousand (\$13,800,000) dollars, or more than half the production and value of operating plants in the State. There were also seven new coal companies formed during that time, three of which are operating block coal and four bituminous mines. The names and location of these new companies are as follows: The Monarch Block Coal Com-

pany and Progressive Coal Company, both operating block coal mines, are located in Clay County, and the Domestic Block Coal Company in Vigo County. One of the Bituminous Coal Company's mines, the Metzger Coal Company, is located in Clay County. The Clover Leaf Coal Company and Carlisle Coal and Clay Company, both bituminous, are located in Sullivan County. The Lower Vein Coal Company, also bituminous, is located in Vigo County.

Of the 81 mines changing hands, 71 bituminous and 1 block coal mine were bought and their operations assumed by six large coal companies, viz.: The Dering Coal Company, Indiana Southern Coal Company, Southern Indiana Coal Company, Consolidated Indiana Coal Company, United Fourth Vein Coal Company and the Vandalia Coal Company.

The Dering Coal Company was the first of these to organize. On February 1st this company assumed the ownership and operations of the following mines: Bruilettes Creek No. 5, now called Dering No. 5; Riverside, Dering No. 6; Bruilettes Creek No. 3, Dering No. 7; Rhodes, Dering No. 8; Glen Oak, Dering No. 9; Klondike, Dering No. 10; Bruilettes Creek No. 6, Dering No. 12; Mildred, now called Dering No. 13; Wilfred, now the Dering No. 14, and the Willow Grove, which is now known as Dering No. 15.

April the 1st the Indiana Southern Coal Company assumed the ownership and operations of the Gilmour, Bunker Hill, Caladonia, Green Hill, Phoenix No. 1, Phoenix No. 3, Phoenix No. 4, Cummins, Hocking, Citizens' and Forest Park mines. About the same date as above the Southern Indiana Coal Company took over control of seven mines, five of which are located in Greene and two in Sullivan, as follows: Greene County, Hoosier No. 1, Hoosier No. 2, Midland, Tower Hill, Lattis Creek, and in Sullivan County the Semi-Block and Mammoth Vein. June 1st the Consolidated Indiana Coal Company assumed the ownership and operation of 10 mines in Sullivan County, as follows: The Union, now called Consolidated No. 25; Glendoria, now the Consolidated No. 26; Virginia, now Consolidated No. 28; Star City, now Consolidated No. 29; St. Clair, Consolidated No. 30; White Ash, Consolidated No. 31; Hymera No. 2, Consolidated No. 32; Hymera

No. 3, Consolidated No. 33; and Hymera No. 4, now called Consolidated No. 34.

The Vandalia Coal Company was the next to form. September 1st this company took over and assumed the operation of 27 mines, situated along the I. & V., the Logansport Branch, and main line of the Vandalia Railroad, 5 of which are in Clay County, 9 in Greene, 1 in Knox, 3 in Parke, 2 in Sullivan and 7 in Vigo County. The names of the mines prior to the time of their purchase and the numbers under which they are now operated are here given. In Clay County the Asherville No. 1, now called the Vandalia No. 50; Fairview, Vandalia No. 60; Pearl, Vandalia No. 63; Cloverland No. 1, Vandalia No. 64 and the Cloverland No. 2, now called Vandalia No. 65. In Greene County, Island No. 1, now called Vandalia No. 2; Island No. 5, Vandalia No. 4; Island No. 2, Vandalia No. 5; Island No. 3, Vandalia No. 6; South Linton, Vandalia No. 3; Atlas No. 1, Vandalia No. 8; Atlas No. 2, Vandalia No. 9; Island Valley No. 2, Vandalia No. 21, and the White Rose, now called Vandalia No. 20.

In Knox County the Enterprise, now called Vandalia, No. 40. In Parke County, the Minshall No. 1, Vandalia No. 316, Minshall No. 2, Vandalia No. 317, and the Raccoon, now called Vandalia No. 314. In Sullivan County, the Dugger Mine, now called Vandalia No. 30; Island No. 4, Vandalia No. 10. In Vigo County, the Hector, now the Vandalia No. 68; Rose-bud, Vandalia No. 67; Royal, Vandalia No. 66; Broadhurst, Vandalia No. 81; Greenfield No. 1, Vandalia No. 80; Lost Creek, Vandalia No. 69 and Sugar Creek No. 1, now called Vandalia No. 82.

A short time later the United Fourth Vein Coal Company was organized and purchased the following mines: Island Valley No. 4, Black Creek, Island Valley No. 3, Glenburn, Antioch, North Linton and Black Hawk. Sixty-eight of the mines owned and operated by the above coal companies are located in the 5 following counties: Clay, 5; Greene, 22; Sullivan, 26; Vermillion, 5 and Vigo, 10. These 5 counties produced in 1904 7,281,445 tons of coal, or more than  $\frac{3}{4}$  of the entire production of bituminous coal of the State; Greene and Sullivan counties alone producing 3,897,938 tons, or nearly 1-3 the total output. Con-

sidering the fact that out of 25 mines in Greene County the 6 companies above mentioned own 22 and of the 34 in Sullivan County they own 26, while in Clay, Knox, Parke, Vermillion and Vigo counties they have purchased none but the largest producing mines, it is evident that considerable more than  $\frac{1}{2}$  the production of bituminous coal in the State will be controlled by them. In addition to the above the following changes in ownership were made in 1905, viz.: The North West Mine, in Greene County, was bought and operation taken over in December by the Central Coal & Mining Company. The Carbon Mine, in Pike County, was sold during the fall to the Ayrshire Carbon Coal Company. The Winslow Gas Coal Company's property was sold at public sale during the summer, but we have been unable to learn the name of the company who made the purchase. The S. H. Wulfman Coal Company, also in Pike County, reorganized during the fall months and is now known as the Patoka Valley Coal Company. The Lewis Coal & Mining Company, in Clay County, disposed of their mine at Coalmont to the Big Vein Coal Company, of Terre Haute. The Oak Hill and McClellan Sons coal properties in Vermillion County were purchased in October by the Shirkie Bros. The Reliance Coal Company, in Sullivan County, changed hands in November. It was sold to the Peabody Coal Company of Chicago. In Vigo County the old Chicago No. 6, or Monkey Mine, was purchased during October by M. D. West and 3 partners who have secured a new block of coal near the old mine which they will open up.

### ABANDONED MINES.

Sixteen mines were abandoned during the year, in addition to which the Caladonia mine, owned by Indiana Southern Coal Company, reduced its working force to less than 10 men. This shows an increase of 2 in number of abandoned mines over the new ones opened.

We exhibit in the following table the names of the mines abandoned, the names of the companies owning them, date of abandonment and the counties in which the mines were located.



TABLE OF ABANDONED MINES.

MINR.	COMPANY.	DATE.	COUNTY.
Gart No. 10.....	Brazil Block Coal Co.....	Jan. 1....	Clay.
Cornwall.....	Jackson Coal and Mining Co.....	Aug. 1....	Clay.
Klondike.....	C. Ehrlich Coal Co.....	Nov. 14....	Clay.
Crawford No. 5.....	Crawford Coal Co.....	Feb. 1....	Clay.
Montgomery No. 2.....	Daviess County Coal Co.....	March 1....	Daviess.
Templeton.....	Coal Bluff Mining Co.....	May 1....	Greene.
Cox No. 3.....	Brazil Block Coal Co.....	Aug. 11....	Parke.
Lucia.....	Mecca Coal Co.....	May 1....	Parke.
Raccoon.....	Vandalia Coal Co.....	Jan. 1....	Parke.
Clay County No. 1.....	Clay County Coal Co.....	Jan. 1....	Parke.
Green Hill.....	Indiana Southern Coal Co.....	Jan. 1....	Sullivan
Dugger.....	Vandalia Coal Co.....	Sept. 10....	Sullivan.
Phoenix No. 3.....	New Pittsburg Coal Co.....	Jan. —....	Sullivan.
Buckeye.....	McClellan Coal Co.....	Jan. 1....	Vermillion.
Brick Works.....	Terre Haute Brick and Pipe Co.....	Jan. 1....	Vigo.
Seelyville.....	J. Ehrlich Coal Co.....	Jan. 1....	Vigo.
Caladonia.....	Indiana Southern Coal Co.....	Sept. 1....	Sullivan.

The Caladonia mine has not been entirely abandoned; about six miners are employed loading coal for the Illinois Central Railroad engines.

Added to the above quite a number of large producing mines suspended operations for indefinite periods on account of slack trade, accidents, strikes, etc., all of which combined explains the shortage as shown in the table of production for 1905. We show in the following table the names of mines suspending operations for a period of 30 days or more, the length of time they were idle and the cause of suspension.

SUSPENSIONS.  
CLAY COUNTY.

NAME OF MINE.	LENGTH OF TIME IDLE.	CAUSE OF SUSPENSION.
Rebstock.....	May 1 to July 31.....	Slack trade.
Superior No. 4.....	April 1 to July 31.....	Slack trade.
Fairview.....	January 1 to December 31.....	Strike in 1904.
Pearl.....	August 1 to October 31.....	During change of ownership.
Crawford No. 8.....	February 1 to December 31.....	Slack trade.
Fortner.....	January 1 to July 31.....	Slack trade.
Glen No. 1.....	April 1 to April 30.....	Cause unknown.
World's Fair No. 2.....	April 1 to August 31.....	Slack trade.
Island Valley No. 4.....	April 1 to August 31.....	Slack trade, change in ownership.
Superior No. 4.....	March 1 to July 31.....	Slack trade.
Gifford No. 2.....	February 11 to October 31.....	Slack trade, making repairs.
Harrison No. 3.....	April 1 to October 31.....	Making repairs, slack trade.

GREENE COUNTY.

Island Valley No. 3.....	April 1 to Sep'tember 30.....	Flooded, changed ownership.
Glenburn.....	June 1 to August 31.....	Slack trade.
Atlas No. 2.....	April 1 to October 31.....	Slack trade.
Island No. 3.....	June to September.....	Mine flooded and no orders.
Hoosier No. 2.....	January to September.....	Slack trade.
Midland.....	April 11 to May 31.....	Slack trade.
Letsinger.....	September, 1904, to October, 1905.....	Cause unknown.
Island No. 4.....	May 1 to 31.....	Strike.

## SUSPENSIONS—Continued.

## KNOX COUNTY.

NAME OF MINE.	LENGTH OF TIME IDLE.	CAUSE OF SUSPENSION.
Bicknell.....	June 1 to July 31.....	Slack trade.
Lynn.....	February 1 to April 30.....	Slack trade.
Enterprise.....	March 1 to October 1.....	Slack trade.

## PARKE COUNTY.

Superior No. 3.....	April 1 to June 30.....	Slack trade.
Minshall No. 1.....	April 1 to August 31.....	No orders. change ownership.
Minshall No. 2.....	April 1 to June 30.....	Slack trade.

## PIKE COUNTY.

Blackburn.....	June 1 to August 31.....	Mine flooded.
Winslow Nos. 3 and 5	Idle entire year.....	In hands receiver, sold.

## SULLIVAN COUNTY.

Shirley Hill No. 1...	May 1 to June 30.....	Making repairs.
Bunker Hill.....	April 1 to July 31.....	Making repairs.
New Linton.....	June 1 to December 1.....	Strike, slack trade.
Shelburn.....	January to September.....	Completing equipment.
Reliance.....	September 1 to October 30.....	In hands of receiver, sold.
Linton Bituminous.	April to October.....	Slack trade.
Freeman.....	May 1 to October 1.....	Making repairs.

## GIBSON COUNTY.

Oswald.....	May 1 to August 26.....	Rebuilding tittle.
-------------	-------------------------	--------------------

## VIGO COUNTY.

Hector.....	April 1 to September 1.....	No orders, change ownership.
-------------	-----------------------------	------------------------------

## WARRICK COUNTY.

Chandler.....	June 1 to August 31.....	Slack trade.
Star City No. 1.....	April 1 to October 1.....	Slack trade.

## 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.	26,361	5,110	.....	31,471	110	20	.....	130	14,339	17,262	\$20,926 51	\$13,818 16	\$6,917 68	\$41,662 35
Brazil Block No. 8.	1,873	380	.....	2,253	16,556	3,330	.....	19,886	2,028	20,111	19,966 69	13,103 76	6,844 82	33,915 27
Total.....	28,234	5,490	.....	33,724	16,666	3,350	.....	20,016	16,367	37,373	\$40,893 20	\$26,921 92	\$13,762 50	\$81,577 62

#### PARKE COUNTY.

Brazil Block No. 12	255	30	.....	285	16,074	3,230	.....	19,304	5,252	14,337	\$18,062 67	\$9,819 30	\$5,402 16	\$33,314 13
Mary.....	37,408	3,656	.....	41,064	4,213	475	.....	4,688	858	44,894	31,879 53	17,262 29	8,263 04	57,409 86
Total.....	37,663	3,686	.....	41,349	20,287	3,705	.....	23,992	6,110	59,231	\$49,972 20	\$27,081 59	\$13,670 20	\$90,723 99
Total Machine Block Coal...	65,897	9,176	.....	75,073	36,953	7,055	.....	44,008	22,477	96,604	\$90,865 40	\$54,003 51	\$27,432 70	\$172,301 61

BITUMINOUS 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.
Gifford No. 1.....	17,544	9,770	3,240	30,554	13,049	.....	.....	13,049	13,049	30,554	\$26,163 66	\$13,337 28	\$5,118 82	\$44,619 76
Gifford No. 2.....	4,356	3,545	1,801	9,702	10,254	229	927	11,410	5,217	15,995	14,021 27	8,791 86	2,890 02	25,703 15
Lewis.....	.....	.....	68,732	68,732	.....	.....	865	865	46,014	23,583	31,287 30	4,974 40	5,621 52	41,883 22
Vivian No. 1.....	4,040	6,932	33,119	10,972	864	2,048	.....	2,912	8,068	5,816	8,595 57	2,639 04	5,686 26	16,920 87
Vivian No. 2.....	10,073	11,596	.....	54,782	.....	.....	.....	.....	47,491	7,291	27,567 12	8,420 97	6,306 35	42,294 44
Gold Knob.....	27,598	12,553	7,368	47,519	1,452	379	179	2,010	16,694	32,635	19,438 84	13,191 18	9,705 70	42,335 72
Island Valley No. 4	15,717	7,350	8,128	31,193	.....	.....	.....	.....	17,720	13,473	15,817 22	6,309 66	3,178 59	23,335 47
Total.....	79,328	51,740	122,386	253,454	25,619	2,656	1,971	30,246	154,453	129,247	\$1,092,098 98	\$57,664 39	\$38,507 26	\$237,092 63

GREENE COUNTY.

Black Creek.....	29,369	16,840	11,293	57,502	26,673	15,949	10,245	52,867	66,524	43,815	\$55,918 21	\$22,798 21	\$7,884 54	\$86,630 87
Vandalia No. 2.....	.....	.....	35,172	35,172	.....	.....	71,133	71,133	84,220	22,086	52,300 69	23,173 74	7,437 53	82,911 96
Vandalia No. 5.....	36,546	15,266	17,209	69,021	36,876	15,724	17,937	70,537	91,316	48,242	73,618 51	27,909 69	12,914 79	114,442 99
Vandalia No. 21.....	10,135	5,225	18,761	34,121	.....	.....	.....	.....	19,357	14,764	13,867 01	7,422 54	6,144 95	27,434 50
Vandalia No. 8.....	38,237	23,912	76,675	138,824	4,140	1,909	7,259	13,308	139,884	12,248	74,661 98	31,295 75	12,111 22	118,068 95
Vandalia No. 9.....	.....	.....	9,691	9,691	.....	.....	13,169	13,169	22,860	.....	12,721 69	4,958 07	4,021 26	21,701 02
Gilmour.....	.....	.....	103,229	103,229	.....	.....	.....	.....	49,529	53,700	63,015 00	19,555 00	7,316 00	89,886 00
Hossier No. 1.....	22,566	16,224	23,154	61,944	.....	.....	.....	.....	12,694	49,250	28,003 13	17,959 11	8,346 41	54,308 65
Midland.....	25,949	13,328	16,624	55,601	42	13	11	66	15,833	39,834	26,454 45	10,444 04	8,341 25	45,235 74
Summitt No. 2.....	43,219	21,802	72,712	137,733	.....	.....	.....	.....	80,681	57,052	59,667 28	27,931 43	15,576 33	108,175 04
Glenburn.....	7,355	3,412	4,854	15,621	14,635	7,968	8,490	31,093	39,040	7,654	29,538 98	15,906 97	5,545 42	50,991 37
Antioch.....	329	198	293	820	13,403	11,221	43,927	68,551	62,395	6,976	44,300 96	17,245 80	7,617 20	69,163 96
Lattis Creek.....	90,205	84,813	35,680	210,698	2,435	812	878	4,155	117,684	97,169	112,951 70	44,692 92	16,609 73	174,254 35

Twin.....	62,164	28,284	61,167	151,615	.....	.....	.....	.....	127,614	24,001	78,698 05	19,844 07	12,484 40	111,026 52
North Western....	24,549	12,236	12,788	49,573	403	163	38	604	39,575	10,602	23,111 62	16,230 15	8,143 29	47,485 06
Tower Hill.....	18,042	9,724	2,725	30,491	8,361	4,594	10,813	23,758	12,791	41,458	28,995 87	9,319 22	6,312 37	44,627 46
Green Valley.....	54,109	34,656	21,442	110,206	.....	.....	.....	.....	87,963	42,244	49,158 39	17,216 85	9,396 29	75,771 53
Total.....	462,474	285,920	523,470	1,271 864	106,958	58,383	183,900	349,241	1,049,980	571,125	\$827,013 52	\$333,899 47	\$156,202 98	\$1,317,115 97

KNOX COUNTY.

Lynn.....	.....	.....	12,764	12,764	.....	.....	5,796	5,796	16,382	2,178	\$7,683 84	\$4,121 45	\$3,704 71	\$15,510 00
Enterprise.....	.....	.....	1,512	1,512	1,449	1,242	7,915	10,606	12,118	.....	5,819 19	2,135 55	2,053 98	10,008 72
Pine Knot.....	11,809	5,909	3,900	21,618	150	350	150	650	16,875	5,393	11,612 65	8,513 50	11,406 30	31,532 45
Total.....	11,809	5,909	18,176	35,894	1,599	1,592	13,861	17,052	45,375	7,571	\$25,115 68	\$14,770 50	\$17,164 99	\$57,051 17

PARKE COUNTY.

Mecca No. 3.*.....	25,602	8,363	6,024	39,989	50,519	22,519	14,270	87,308	77,489	49,808	\$69,084 09	\$19,839 38	\$10,805 86	\$99,729 33
Lyford No. 1.....	3,327	1,981	4,482	9,790	6,213	3,814	27,995	38,022	.....	47,812	27,542 15	14,791 29	7,404 23	49,737 67
Parke No. 11.....	.....	.....	92,456	92,456	.....	.....	22,358	22,358	84,685	30,129	55,349 55	16,767 89	6,664 10	78,781 54
Total.....	28,929	10,344	120,962	142,235	56,732	26,333	64,623	147,688	162,174	127,749	\$151,975 79	\$51,398 56	\$24,874 19	\$228,248 54

PIKE COUNTY.

Hartwell.....	.....	.....	.....	.....	7,105	4,621	66,555	78,281	61,011	17,270	\$46,158 21	\$13,546 37	\$7,633 41	\$67,337 99
Total.....	.....	.....	.....	.....	7,105	4,621	66,555	78,281	61,011	17,270	\$46,158 21	\$13,546 37	\$7,633 41	\$67,337 99

## BITUMINOUS MACHINE MINES—Continued.

## SULLIVAN 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.
Bunker Hill.....	9,262	5,090	19,434	33,726	2,770	1,385	.....	4,155	10,200	27,681	\$18,821 84	\$8,135 26	\$4,070 55	\$31,027 65
Caladonia.....	13,542	5,157	2,492	21,191	.....	.....	225	225	2,314	19,102	7,270 98	6,208 82	4,964 13	18,443 93
Consolidated No. 32	30,127	33,119	37,933	101,179	861	1,346	1,506	3,713	19,754	85,138	41,122 02	15,230 74	11,046 85	67,399 61
Consolidated No. 33	50,696	42,526	56,222	149,444	3,181	5,443	504	9,128	19,656	188,916	64,517 51	21,581 40	12,086 54	98,185 45
Consolidated No. 34	2,141	3,403	49,427	59,971	.....	.....	.....	.....	27,306	32,665	28,944 24	12,897 90	13,562 76	55,404 90
Consolidated No. 29	58,705	37,271	256	96,232	118	232	.....	350	15,586	80,996	49,343 65	29,260 99	13,655 64	92,260 28
Consolidated No. 31	1,537	589	624	2,750	3,851	2,182	20,693	26,726	7,188	22,228	17,408 75	4,430 30	3,213 62	25,052 67
Consolidated No. 26	34,626	17,596	.....	52,222	90	187	.....	277	8,766	43,733	25,360 99	12,490 08	5,759 96	43,611 03
Consolidated No. 28	33,586	25,505	42,434	101,525	29	60	.....	89	41,143	60,471	28,033 46	12,434 56	7,507 38	47,975 40
Consolidated No. 30	24,728	14,484	613	39,803	.....	.....	.....	.....	13,541	26,282	19,270 85	11,367 43	7,879 31	38,517 59
Consolidated No. 25	9,966	11,640	85	21,691	72	141	.....	213	4,146	17,758	12,117 60	6,878 86	3,930 06	22,926 52
Vandalia No. 30	13,872	5,397	5,941	25,210	104	21	83	208	17,262	8,156	12,514 50	8,408 65	6,607 37	27,530 52
Vandalia No. 10	.....	.....	.....	.....	41,217	17,120	35,186	93,523	93,523	.....	56,768 95	12,169 35	6,796 62	75,734 92
New Linton.....	4,024	2,000	6,506	12,530	.....	.....	.....	.....	12,530	.....	5,557 60	4,375 17	2,755 50	12,688 27
Jackson Hill No. 2	86,745	29,175	32,235	148,155	.....	.....	.....	.....	14,371	133,784	70,459 22	27,919 35	10,380 56	108,759 13
Jackson Hill No. 4	15,850	8,325	.....	24,175	16,806	18,555	4,483	39,844	6,791	87,228	36,277 84	8,270 06	7,671 20	52,219 14
Phoenix No. 4	.....	.....	38,349	38,349	.....	.....	.....	.....	16,884	21,465	20,315 83	8,323 00	5,623 00	34,287 83
Shelburn.....	3,220	4,180	7,400	14,800	.....	.....	.....	.....	2,568	4,832	4,300 00	2,795 00	6,371 90	13,466 90
Sun Flower.....	102,535	30,070	719	133,324	.....	.....	.....	.....	2,697	130,627	72,068 06	12,497 61	11,581 63	96,147 30
Hamilton.....	Idle, no report.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Dering No. 14.....	86,390	67,873	7,625	161,888	.....	.....	.....	.....	6,594	155,304	80,279 76	27,297 07	21,296 29	128,873 12
Dering No. 12.....	.....	.....	.....	.....	34,865	14,879	15,850	65,594	12,346	53,248	45,717 60	15,349 26	10,005 77	71,072 63
Dering No. 13.....	17,343	8,592	59,446	85,381	8,709	4,466	7,782	1,097	19,751	86,587	50,854 99	17,272 62	11,461 70	79,589 31
Semi-Block.....	15,309	9,164	11,724	36,197	193	113	223	529	7,621	29,105	19,879 75	15,183 31	8,377 83	43,440 89
Mammoth Vein.....	15,028	9,943	26,765	51,746	.....	.....	.....	.....	.....	26,765	12,805 83	7,428 36	6,165 50	26,399 69
Shirley Hill No. 1	5,809	1,823	52,196	59,828	3,277	1,555	23,670	28,502	88,390	33,768 55	11,040 80	5,828 60	5,828 60	50,639 95
Cummins.....	.....	.....	13,264	13,264	.....	.....	17,180	17,180	12,744	17,700	19,065 00	7,772 00	4,038 00	30,865 00

Hocking.....	71,179	44,537	33,885	149,601	1,838	862	128	2,828	47,970	104,459	77,577 71	25,353 90	16,145 10	119,076 71
Citizens.....	2,914	986	5,988	9,888					9,888		4,928 13	1,972 40	2,211 89	9,012 42
Kettle Creek.....	19,102	10,410	3,954	33,466	200	50	10	260	21,101	12,625	18,238 21	11,201 39	6,574 81	36,014 41
Reliance.....	8,819	4,896	3,338	17,053			2,250	2,250	87	19,216	10,006 46	10,931 83	9,702 92	30,641 21
Little Giant.....	17,397	7,516	100,448	125,361	13,251	2,226	14,733	30,210	155,571		64,020 39	28,568 47	14,218 19	106,807 05
Black Hawk.....	2,793	1,475	8,597	12,865	2,365	1,413	856	4,634	9,427	8,072	8,440 66	9,587 85	5,519 54	23,548 05
Clover Leaf.....	3,760	991	1,768	6,519	72	18	31	121	3,161	3,479	4,022 79	1,983 56	3,967 36	9,973 71
Total.....	761,063	444,473	601,477	1,807,013	133,869	72,254	145,393	351,516	730,867	1,427,662	\$1,038,564 76	\$118,022 35	\$270,984 08	\$1,727,571 19

VIGO COUNTY.

Atherton.....	29,890	15,880	13,716	59,486	5,370	2,971	2,289	10,630	9,248	60,868	\$34,057 67	\$15,631 42	\$8,377 64	\$58,066 73
Parke No. 10.....	19,925	19,023	65,195	104,143			5,222	5,222	82,641	26,724	55,028 14	20,852 00	12,717 29	88,597 43
Ray No. 2.....	7,898	4,376	9,505	21,779	26,000	12,011	27,808	65,819	64,983	22,615	52,344 25	8,752 01	7,433 95	63,530 21
Forrest Park.....			35,652	35,652					17,226	18,426	20,421 00	5,925 00	4,701 00	31,047 00
Glen Oak.....	798			798	20,795	10,856	70,600	102,251	798	102,251	52,353 37	29,123 05	9,224 54	90,700 96
Klondike.....	798			798	169	181	103,343	103,693	838	103,653	54,019 25	23,350 02	8,593 08	85,962 35
Vandalia No. 82...	11,671	3,244	5,751	20,666	31,922	12,983	7,125	52,030	52,851	19,345	46,576 66	14,007 06	7,395 18	67,978 90
Total.....	70,980	42,523	129,819	243,322	84,256	39,002	216,387	339,645	228,585	354,382	\$314,800 34	\$117,640 56	\$58,442 68	\$490,883 58

WARRICK COUNTY.

Big Four.....	7,294	4,856	45,651	57,801	230	149	6,085	6,464	51,330	12,935	\$27,305 09	\$7,184 74	\$4,903 12	\$39,392 95
Big Vein No. 3.....			95,606	95,606					95,606		40,934 16	3,359 53	5,276 05	54,569 74
Chandler.....	6,717	3,028	16,074	25,819					25,819		12,097 55	2,381 55	1,816 55	18,295 65
De Forrest.....	4,070	1,970	240	6,280					6,280		2,792 87	613 78	423 52	3,330 17
Electric.....			122,409	122,409					48,752	73,657	49,120 05	14,585 78	6,162 68	69,868 51
Total.....	18,081	9,854	279,980	307,915	230	149	6,085	6,464	227,787	86,592	\$132,249 72	\$33,125 38	\$18,581 92	\$183,957 02
Total Bituminous Machine Mines..	1,432,664	850,763	1,778,270	4,061,697	416,368	204,990	698,775	1,320,133	2,660,232	2,721,598	\$2,676,799 00	\$1,040,067 58	\$592,391 51	\$4,369,258 09

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.
Brazil Block No. 4.....	33,947	6,795		40,742	5,227	35,515	\$37,815 49	\$11,573 08	\$7,917 51	\$57,306 08
Gart No. 7.....	42,892	8,585		51,477	31,606	19,871	47,609 07	10,045 91	6,223 44	63,878 42
Continental No. 1.....	1,126	212	5,133	6,471	6,471		6,110 69	1,996 01	1,448 24	8,554 94
Rabstock.....	13,208	2,845		16,053	2,112	13,941	12,565 14	5,010 81	2,771 92	20,347 87
Superior No. 4.....	13,653	3,310		16,963	15,834	1,129	18,197 58	7,674 47	3,451 76	29,323 81
Superior No. 7.....	20,465	5,025	219	25,709	25,427	282	23,559 68	10,790 56	4,970 51	39,320 75
Cornwall.....	10,189	673		10,862		10,862	10,713 28	2,418 95	1,181 82	14,314 05
Crawford No. 4.....	15,576	3,804	20	19,400	14,262	5,138	17,246 67	6,962 19	4,003 60	28,212 46
Crawford No. 5.....	1,632	350		1,982	482	1,500	1,631 64	499 27	337 20	2,468 11
Crawford No. 8.....	732	150		882	532	400	773 66	319 92	260 17	1,353 75
Crawford No. 9.....	14,571	3,280		17,851	6,457	11,394	14,503 00	6,769 11	4,113 68	25,385 79
Monarch.....	9,407		5,355	14,762	5,355	9,407	9,450 00	2,976 88	1,020 04	13,446 92
Indiana Block.....	2,160		1,537	3,697	5,105	7,999	13,780 58	7,598 55	3,824 16	25,203 29
World's Fair No. 2.....	5,931	1,748		7,679	7,679		8,312 30	2,902 19	2,303 37	13,517 86
Crawford No. 6.....	50,415	11,520	381	62,316	22,479	39,837	52,100 48	11,029 51	5,564 79	68,694 78
Vandalia No. 50.....	9,210	3,427	56	12,693	10,659	2,034	10,869 07	3,992 93	2,621 40	17,483 40
Eureka No. 5.....	10,469	1,845	32	12,346	7,227	5,119	12,180 20	2,576 90	3,542 45	18,299 55
Totals.....	253,473	55,729	12,733	321,935	166,914	155,021	\$296,418 53	\$95,137 24	\$55,556 06	\$447,111 83



PARKE COUNTY.

Brazil Block No. 9 .....	30,113	6,030	.....	36,143	11,562	24,581	\$32,893 63	\$11,606 81	\$6,419 08	\$50,919 52
Superior No. 1 .....	39,494	10,070	122	49,686	49,686	.....	41,803 63	17,079 50	8,148 48	67,031 61
Superior No. 2 .....	44,760	11,585	671	57,016	57,016	.....	48,776 90	19,947 76	9,913 75	78,638 41
Superior No. 3 .....	19,013	4,980	.....	23,993	23,993	.....	20,336 58	5,614 69	2,597 68	28,548 95
Pan American .....	36,030	6,585	145	42,760	14,730	28,030	39,767 45	13,350 70	6,125 80	59,143 95
Totals .....	169,410	39,250	938	209,598	156,987	52,611	\$183,578 19	\$67,499 46	\$33,204 79	\$284,282 44

VIGO COUNTY.

Domestic block.....	4,871	3,250	.....	8,121	4,957	3,164	\$9,010 35	\$2,678 38	\$2,116 61	\$13,805 34
Totals .....	4,871	3,250	.....	8,121	4,957	3,164	\$9,010 35	\$2,678 38	\$2,116 61	\$13,805 34
Total hand mined block.....	427,754	98,229	13,671	539,654	328,868	210,796	\$489,007 07	\$165,315 08	\$90,877 46	\$745,199 61

## BITUMINOUS 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.
Vandalia No. 64 .....	39,208	17,141	6,665	63,014	60,980	2,034	\$36,376 34	\$9,783 64	\$5,171 34	\$51,331 32
Vandalia No. 65 .....	44,962	22,061	10,944	77,967	74,470	3,497	49,876 05	8,484 12	4,086 14	62,446 31
Vandalia No. 60 Idle, no report.										
Vandalia No. 63 .....	10,336	6,563	1,256	18,155	17,031	1,124	9,390 44	1,947 71	1,447 07	12,785 22
Fortner .....	1,549	494	.....	2,043	2,043	.....	1,915 61	755 90	120 44	2,791 95
Klondike .....	2,580	1,338	.....	3,918	3,918	.....	2,209 28	515 34	514 72	3,239 34
Glenn No. 1 .....	14,211	2,866	.....	17,077	.....	17,077	14,047 40	4,320 05	2,159 90	20,527 35
Glenn No. 2 .....	6,642	1,680	.....	8,322	.....	8,322	6,743 55	3,283 15	1,641 55	11,668 25
Total .....	119,488	52,143	18,865	190,496	158,442	32,054	\$120,558 67	\$29,089 91	\$15,141 16	\$164,789 74

## DAVIESS COUNTY.

Stucky .....			2,355	2,355	2,355	.....	\$1,365 15	\$234 87	\$198 94	\$1,798 96
Montgomery No. 3 .....	36,312	1,476	2,441	40,229	31,591	8,638	30,610 56	13,539 25	7,640 35	51,790 16
Mutual .....	8,600	950	14,700	24,250	15,600	8,650	22,163 00	6,450 00	4,700 00	33,313 00
Mandabach .....			9,819	9,819	9,819	.....	6,747 53	672 81	727 48	8,147 82
Total .....	44,912	2,426	29,315	76,653	59,365	17,288	\$60,886 24	\$20,896 93	\$13,266 77	\$95,049 94

FOUNTAIN COUNTY.

Rush.....	21,213	8,366	11,075	40,654	40,224	430	\$26,489 99	\$6,106 84	\$4,762 62	\$37,350 45
Silverwood.....	832	620	28,984	30,436	29,863	573	20,750 57	6,587 81	3,721 71	31,060 09
Total.....	22,045	8,986	40,059	71,090	70,087	1,003	\$47,231 56	\$12,694 65	\$8,484 33	\$68,410 54

GIBSON COUNTY.

Oswald.....	18,209	16,185	8,160	42,554	38,941	3,613	\$24,557 78	\$7,228 33	\$5,931 46	\$37,718 07
Massey.....	7,143	5,455	26,835	39,433	39,433	.....	23,352 28	7,630 20	5,689 50	36,671 98
Fort Branch.....	.....	.....	18,959	18,959	18,959	.....	12,720 17	3,378 92	2,230 10	18,329 19
Total.....	25,352	21,640	53,954	100,946	97,333	3,613	\$60,630 23	\$18,237 95	\$13,851 06	\$92,719 24

GREENE COUNTY.

Vandalia No. 6.....	.....	.....	31,435	31,435	31,435	.....	\$17,173 82	\$6,970 46	\$3,353 71	\$27,497 99
Vandalia No. 4.....	10,900	4,891	37,337	53,128	53,128	.....	31,967 73	7,210 56	3,563 54	42,741 83
Vandalia No. 3.....	36,086	20,218	51,205	107,509	81,576	25,933	61,673 05	19,118 99	7,230 02	88,022 06
Hoosier No. 2.....	.....	.....	4,238	4,238	4,238	.....	5,660 51	2,028 42	1,214 41	8,903 34
Island Valley No. 3.....	9,604	4,886	10,603	25,093	16,172	8,921	15,530 85	5,442 15	3,235 96	24,208 96
Templeton.....	1,273	430	15,556	17,259	17,259	.....	10,067 50	3,369 00	1,674 25	15,110 75
Victoria.....	93,380	73,597	113,991	280,768	262,988	17,780	158,863 87	32,775 92	13,166 18	204,825 97
North Linton.....	31,246	16,246	8,545	56,037	39,683	16,354	37,302 29	11,596 02	5,911 33	54,809 64
Pennsylvania.....	8,867	4,448	5,110	18,425	9,121	9,304	8,968 31	2,475 83	3,008 43	14,452 57
Total.....	191,356	124,516	278,020	593,892	515,600	78,292	\$347,207 93	\$90,987 35	\$42,377 83	\$480,573 11

KNOX COUNTY.

Bicknell.....	14,752	12,499	13,427	40,678	28,438	12,240	\$22,728 97	\$6,156 39	\$4,570 12	\$33,455 48
Knox.....	29,981	30,210	17,443	77,634	35,000	42,634	41,833 84	11,036 86	4,691 44	57,562 14
Wheatland.....	1,320	544	50,842	52,706	52,706	.....	31,556 26	6,320 04	3,735 61	41,611 91
Total.....	46,053	43,253	81,712	171,018	116,144	54,874	\$96,119 07	\$23,513 29	\$12,997 17	\$132,629 53

GENERAL TABLE—HAND MINES.

## BITUMINOUS HAND OR PICK MINES—Continued.

## PARKE 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.
Cox No. 3.....			44,897	44,897	26,214	18,683	\$25,253 74	9,106 52	\$5,001 28	\$39,361 54
Harrison.....			12,822	12,822	12,822		8,372 78	1,453 37	970 00	10,796 15
Lucia.....	4,514	1,738	5,920	12,172	9,500	2,672	7,317 06	4,147 47	1,618 63	13,083 19
Vandalia No. 316.....	41,390	13,661	360	55,411	36,221	19,190	38,324 09	14,113 48	7,005 64	59,443 21
Vandalia No. 317.....	38,397	11,421	31	49,849	25,658	24,191	36,217 71	8,305 12	3,974 40	48,497 23
Total.....	84,301	26,820	64,030	175,151	110,415	64,736	\$115,485 38	\$37,125 96	\$18,569 95	\$171,181 26

## PERRY COUNTY.

Troy.....			7,895	7,895	7,895		\$5,121 42	\$1,641 15	\$1,142 50	\$7,905 07
Total.....			7,895	7,895	7,895		\$5,121 42	\$1,641 15	\$1,142 50	\$7,905 07

PIKE COUNTY.

Aberdeen .....	Idle no	report.								
Carbon .....	Idle no	report.								
Ayrshire No. 3 .....	34,622	21,611	4,179	60,412	36,083	24,329	\$31,498 73	\$11,715 63	\$5,483 33	\$48,697 69
Ayrshire No. 4 .....	50,862	35,643	45,432	131,937	60,205	71,732	75,746 24	20,540 56	9,515 81	105,802 61
Ayrshire No. 5 .....			3,587	3,587	3,587		2,436 04	929 79	630 99	3,996 82
Rogers .....			6,986	6,986	6,986		3,852 76	885 43	119 57	4,857 76
Blackburn .....			6,584	6,584	6,584		3,460 31	1,300 00	1,064 14	5,824 45
Littles .....	39,953	56,365	4,742	101,060	63,847	37,213	55,639 11	15,341 66	6,413 52	77,394 29
Winslow No. 2 .....	Idle no	report.								
Winslow No. 5 .....	Idle no	report.								
Total .....	125,437	113,619	71,510	310,566	177,292	133,274	\$172,633 19	\$50,713 07	\$23,227 36	\$246,573 62

SULLIVAN COUNTY.

Phoenix No. 1 .....			2,210	2,210	1,000	1,210	\$1,300 00	\$620 00	\$240 00	\$2,160 00
Freeman .....	6,618	3,306	2,404	12,358	3,674	3,684	7,363 01	2,178 79	1,364 16	11,405 96
Vandalia No. 10 .....	41,217	17,120	35,186	93,523	33,523		56,768 95	12,169 35	6,795 62	75,734 92
Dering No. 12 .....	34,865	14,879	15,850	65,594	12,946		45,717 60	15,349 26	10,005 77	71,072 63
Superior .....	24,125	14,699	16,641	56,465	33,157		30,240 72	14,302 64	4,166 35	48,769 71
Total .....	106,855	50,004	72,291	229,150	143,700	85,450	\$141,890 28	\$44,620 04	\$22,572 90	\$209,083 22

VANDEBURGH COUNTY.

Unity .....	28,722	25,837	65,122	119,681	119,681		\$72,221 85	\$17,420 70	\$9,710 05	\$99,362 60
Diamond .....	17,194	10,634	7,387	35,215	35,215		21,717 94	5,709 06	4,562 72	31,989 72
First Avenue .....	9,253	8,974	9,242	27,469	25,945	1,524	17,332 45	4,412 35	3,883 15	25,627 95
Ingleside .....	1,988		40,036	42,024	42,024		25,613 43	6,680 10	5,956 72	38,250 25
Sunnyside .....	30,784	28,075	269	59,128	50,144	8,984	26,842 23	11,355 07	11,557 63	49,754 93
Union .....	9,698	5,414	9,152	24,264	24,264		18,646 50	3,379 85	4,567 30	26,593 65
Total .....	97,639	78,934	131,208	307,781	297,273	10,508	\$182,374 40	\$48,967 13	\$40,237 57	\$271,579 10

BITUMINOUS HAND OR PICK MINES—Continued.

VERMILLION 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.
Dering No. 5.....	58,444	32,025	120,791	211,260	19,679	191,581	\$111,017 53	\$41,891 16	\$9,951 58	\$162,860 27
Dering No. 6.....	15,232	6,055	173,866	194,653	14,778	179,875	10,664 08	30,348 86	7,031 14	138,014 08
Dering No. 7.....			145,012	145,012	1,865	143,147	76,687 73	26,442 37	6,601 52	109,731 62
Dering No. 8.....	61,182	42,183	81,106	187,471	25,894	161,577	105,046 36	38,198 21	8,981 76	152,226 33
Dering No. 15.....	576	610	105,900	107,086		107,086	54,548 36	20,737 40	5,657 40	80,943 16
Eureka.....			10,655	10,655	10,655		6,011 18	2,457 42	2,265 36	10,923 96
Buckeye No. 2.....										
Crown Hill No. 1.....	23,366	7,763	50,945	82,074	21,249	60,825	61,821 15	12,493 17	4,323 80	78,638 12
Crown Hill No. 2.....	30,912	10,636	75,512	117,060	26,479	90,581	91,114 40	17,488 80	4,846 58	113,449 78
Oak Hill.....	6,397	4,310	58,165	68,872		68,872	39,043 32	10,814 66	1,844 22	51,702 20
Prince.....			165,884	165,884		165,884	97,667 41	27,820 88	7,799 71	133,288 00
Maple Valley.....	6,636	4,945	83,074	94,655	17,226	77,429	59,040 37	11,443 75	6,510 65	76,994 77
<b>Total.....</b>	<b>205,745</b>	<b>108,527</b>	<b>1,070,410</b>	<b>1,384,682</b>	<b>137,825</b>	<b>1,246,857</b>	<b>\$302,851 89</b>	<b>\$240,136 68</b>	<b>\$65,813 72</b>	<b>\$1,108,802 29</b>

VIGO COUNTY.

Chicago No. 6.....	No report									
Diamond.....	49,080	22,964	41,385	113,429	113,429		\$96,174 30	\$22,858 70	\$9,314 10	\$98,347 10
Peerless.....	6,108	1,110	12,257	19,475	2,229	17,246	12,566 35	6,865 10	3,432 60	22,844 05
Lawton.....	88,671	52,566	45,697	186,934	186,934		113,769 10	25,766 30	10,391 05	149,926 45
Grant No. 2.....	393	26,525	122,162	149,080	124,147	24,933	86,359 20	30,496 42	12,475 04	129,330 66
Miami No. 1.....	84,741	78,584		163,275		163,275	98,002 76	28,214 53	9,028 17	135,245 46
Miami No. 2.....	35,770	37,695	14,267	87,732		87,732	41,192 15	11,590 85	3,979 92	56,762 92
Miami No. 3.....	57,521	27,699	15,266	100,486		100,486	60,560 83	13,978 13	4,230 69	78,769 65
Redbird.....	18,177	15,334	12,654	46,165	46,165		21,834 76	11,507 61	3,008 49	36,350 86

Vandalia No. 67.....	29,978	16,388	76,285	122,651	116,214	6,437	73,236 26	21,707 86	5,923 37	100,867 49
Vandalia No. 66.....	27,743	17,211	6,733	51,697	50,569	1,118	29,453 42	11,014 29	3,719 26	44,186 97
Vandalia No. 81.....	25,556	24,927	17,867	68,350	49,422	18,928	24,462 58	6,587 20	6,487 73	37,537 51
Vandalia No. 80.....	6,132	4,070	14,431	24,633	24,493	140	15,376 42	4,688 15	1,642 49	21,707 06
Vandalia No. 69.....	34,597	58,104	4,234	96,935	93,182	3,753	53,059 90	12,198 82	6,348 25	71,606 97
Deep Vein.....	31,438	18,036	21,362	70,886	51,634	19,252	49,375 42	8,623 80	6,105 22	64,104 44
Vandalia No. 68.....	5,097	3,020	23	8,140	6,570	1,570	4,830 48	2,231 58	1,697 62	8,809 68
Totals.....	501,052	404,183	404,623	1,309,858	864,988	444,870	\$750,253 93	\$218,379 34	\$67,784 00	\$1,056,417 27

## WARRICK COUNTY.

Air Line.....	400	200	.....	600	400	200	\$325 00	\$115 00	\$65 00	\$505 00
Star No. 1.....	.....	.....	17,709	17,709	17,709	.....	10,390 77	2,765 03	1,577 08	14,732 88
Burk.....	.....	.....	7,920	7,920	.....	7,920	4,118 40	1,204 73	860 37	6,183 50
Caladonia.....	Reduced	to less th	an ten m	en.....	.....	.....	.....	.....	.....	.....
Totals.....	400	200	25,629	26,229	18,109	8,120	\$14,834 17	\$4,084 76	\$2,502 45	\$21,421 38
Total bituminous pick-mined coal..	1,570,635	1,035,251	2,349,521	4,955,407	2,774,468	2,180,939	\$2,918,078 36	\$841,088 21	\$367,968 77	\$4,127,135 34

## RECAPITULATION.

*Showing Total Production and Wages of Indiana Mines for 1905.*

## 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 machine mined block coal .....	65,897	9,176	.....	75,073	36,953	7,055	.....	44,008	22,477	96,604	\$90,865 40	\$54,003 51	\$27,432 70	\$172,301 61
Total pick mined block coal .....	.....	.....	.....	.....	427,754	98,229	13,671	539,654	328,858	210,796	489,007 07	165,315 08	90,877 46	745,199 61
Total block coal..	65,897	9,176	.....	75,073	464,707	105,284	13,671	583,662	351,335	307,400	\$579,872 47	\$219,318 59	\$118,310 16	\$917,501 22



TOTAL PRODUCTION OF BITUMINOUS COAL.

Total bituminous machine mined coal.....	1,432,664	850,763	1,778,270	4,061,697	416,368	204,990	698,775	1,320,133	2,660,232	2,721,598	\$2,676,799 00	\$1,040,067 58	\$592,391 51	\$4,309,258 09
Total bituminous pick mined coal.....					1,570,635	1,035,251	2,349,521	4,955,407	2,774,468	2,180,939	2,918,078 36	841,088 21	367,968 77	4,127,135 34
Total bituminous coal.....	1,432,664	850,763	1,778,270	4,061,697	1,987,003	1,240,241	3,048,296	6,275,540	5,434,700	4,902,537	\$5,594,877 36	\$1,881,155 79	\$960,360 28	\$8,436,393 43
Total machine mined coal.....	1,498,561	859,939	1,778,270	4,136,770	453,321	212,045	698,775	1,364,141	2,682,709	2,818,202	\$2,767,664 40	\$1,094,071 09	\$619,824 21	\$4,481,559 70
Total pick mined coal.....					1,998,369	1,133,480	2,363,192	5,495,061	3,108,326	2,391,735	3,407,085 43	1,006,403 29	458,846 23	4,872,334 95
Grand total.....	3,950,271	2,205,464	4,840,237	10,995,972					5,786,035	5,209,937	\$6,174,749 73	\$2,100,474 38	\$1,078,670 44	\$9,353,894 55

TABLE

Showing by Counties the Number of Miners, Number of Outside Day and Monthly Men, Number of Inside Day and Monthly Men, Total Wages Earned by Same and the Average Wages per Employee.

BITUMINOUS MINES.

COUNTY.	Number of Miners.	Wages Paid.	Average Wages per Miner.	Number Inside Day and Monthly Men.	Wages Paid.	Average Wages per Inside Man.	Number Outside Men.	Total Wages Paid Outside Men.	Average Wages per Outside Man.
Clay.....	1,681	\$598,791 38	\$356 21	394	\$208,813 48	\$529 98	228	\$122,966 98	\$539 33
Daviess.....	160	60,386 24	405 91	46	20,896 93	522 17	26	13,266 77	510 26
Fountain.....	92	47,231 56	513 39	20	12,694 35	634 73	11	8,484 33	771 30
Greene.....	2,569	1,174,221 45	457 07	771	424,886 82	551 10	267	198,580 81	743 75
Gibson.....	130	60,630 23	466 39	38	15,237 95	479 95	19	13,851 06	729 00
Knox.....	286	121,234 75	423 89	56	38,283 79	680 06	61	30,162 16	494 46
Parke.....	1,189	501,011 56	421 37	344	183,105 57	532 28	130	90,319 73	694 77
Perry.....	15	5,121 42	341 43	3	1,641 15	547 05	3	1,142 50	380 83
Pike.....	551	218,791 30	397 08	134	64,250 34	479 55	70	30,860 77	440 85
Sullivan.....	2,659	1,180,455 04	443 98	825	462,642 39	563 84	394	293,556 98	745 07
Vanderburgh.....	291	182,374 40	626 72	57	48,937 13	730 85	58	40,237 57	693 75
Vermillion.....	1,173	802,351 89	684 53	299	240,136 68	836 58	97	65,513 72	678 49
Vigo.....	2,232	1,074,064 62	481 21	553	333,698 28	612 49	244	148,343 29	607 96
Warrick.....	311	147,083 89	472 94	68	37,210 14	547 21	49	21,084 37	430 29
General average.....	13,329	\$6,174,749 73	\$463 26	3,623	\$2,100,474 38	579 76	1,657	\$1,078,670 44	\$650 98

TABLE

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

CLAY COUNTY.

NAME OF MINE.	Pick Miners.	Machine Runners and Helpers.	Loaders.	Inside Day and Monthly Men.	Outside Day Men.	Total Employes.	Days Worked.	Mules Used.	Improvements.
Brazil Block No. 1.....		6	22	20	6	54	271	9	
Brazil Block No. 4.....	75			22	22	119	190	4	
Brazil Block No. 8.....	24			14	7	45	184	8	
Gart No. 7.....	88			15	9	112	192	1	
Continental No. 1.....	12			13	3	18	200	3	
Rebstock.....	50			9	6	65	125	3	
Vandalia No. 64.....	51			12	8	71	206	7	
Vandalia No. 65.....	92			10	8	110	183	6	
Superior No. 4.....	38			12	5	55	153	3	
Superior No. 7.....	36			14	5	55	207	6	
Vandalia No. 60.....	Idle.								
Vandalia No. 63.....	70			18	8	96	92	7	
Cornwall.....	39			6	3	48	144	3	
Crawford No. 4.....	43			8	6	57	173	3	
Crawford No. 5.....	30			5	4	39	22	2	
Crawford No. 8.....	42			5	4	51	10	2	
Crawford No. 9.....	37			6	4	47	190	3	
Fortner.....	33			9	4	46	85	2	
Gifford No. 1.....	30	6	32	16	8	92	172	7	
Gifford No. 2.....	80	6	27	34	9	156	88	10	\$1,344 72
Glenn No. 1.....	45			9	6	60	123	3	
Glenn No. 2.....	23			3	4	30	143		
Monarch.....	12			7	2	21	251	2	
Lewis.....	4	12	40	11	10	77	155	4	
Vivian No. 2.....	22	18	60	20	12	132	225	7	553 52
Vivian No. 1.....	6	12	45	12	10	85	193	8	127 25
Indiana Block.....	36			12	5	53	15	4	
Gold Knob.....	7	10	36	11	11	75	178	4	2,215 09
World's Fair No. 2.....	25			6	4	35	167	2	75 00
Brazil Block No. 9.....	44			22	7	73	7	6	
Crawford No. 6.....	118			17	8	143	171	8	
Vandalia No. 50.....	36			7	5	48	180	2	1,191 10
Bureka No. 5.....	45			6	6	57	115	2	2,264 35
Island Valley No. 4.....		10	46	13	9	78	74	8	
Total.....	1,293	80	308	394	228	2,303	4,884	153	\$7,771 03

DAVIESS COUNTY.

Stuckey.....	7			1	2	10	22		\$80 50
Montgomery No. 3.....	58			20	13	91	204	11	
Mutual.....	71			17	8	96	175	9	815 00
Mandabach.....	14			2	3	19	140	2	
Total.....	150			40	26	216	541	22	\$895 50

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

## FOUNTAIN COUNTY.

NAME OF MINE.	Pick Miners.	Machine Runners and Helpers.	Loaders.	Inside Day and Monthly Men.	Outside Day Men.	Total Employes.	Days Worked.	Mules Used.	Improvements.
Rush .....	55	.....	.....	11	6	72	179	5	\$365 00
Silverwood.....	37	.....	.....	9	5	51	231	4	.....
Total.....	92	.....	.....	20	11	123	410	9	\$365 00

## GIBSON COUNTY.

Oswald.....	56	.....	.....	21	9	86	105	10	.....
Massey.....	57	.....	.....	12	5	74	210	8	\$500 00
Fort Branch.....	17	.....	.....	5	5	27	220	1	225 00
Total.....	130	.....	.....	38	19	187	535	19	\$725 00

## GREENE COUNTY.

Black Creek.....	57	8	40	25	9	139	126	13	.....
Vandalia No. 2.....	82	14	27	50	13	186	124	19	\$2,527 71
Vandalia No. 5.....	47	16	34	50	14	161	125	20	6,811 67
Vandalia No. 6.....	36	.....	.....	12	5	53	143	7	551 40
Vandalia No. 4.....	39	.....	.....	13	6	58	171	4	1,682 57
Gilmour.....	26	18	114	58	17	233	151	25	.....
Hoosier No. 1.....	2	10	41	27	6	86	224	7	.....
Hoosier No. 2.....	25	.....	.....	4	4	33	33	2	.....
Vandalia No. 21.....	.....	14	34	8	10	66	129	3	.....
Island Valley No. 3.....	84	.....	.....	24	11	119	49	17	.....
Vandalia No. 3.....	133	.....	.....	28	10	171	152	17	5,485 64
Midland.....	2	10	42	33	11	98	147	6	.....
Vulcan.....	35	.....	.....	5	7	47	20	3	.....
Summitt No. 2.....	14	18	91	55	10	188	182	21	.....
Victoria.....	202	.....	.....	51	17	270	244	21	.....
Glenburn.....	61	4	18	26	6	115	82	10	.....
Antioch.....	81	.....	.....	31	13	125	215	10	.....
Tower Hill.....	138	6	38	11	8	201	103	6	.....
Green Valley.....	1	18	100	37	11	167	116	13	652 79
Lattis Creek.....	32	20	110	63	20	245	189	24	.....
Vandalia No. 8.....	23	20	100	40	12	195	179	18	4,434 53
Vandalia No. 9.....	10	20	140	34	12	216	76	21	3,944 37
Twin.....	.....	20	92	17	10	139	184	8	.....
North Linton.....	84	.....	.....	31	8	123	101	9	.....
Pennsylvania.....	28	.....	.....	6	6	40	157	3	500 00
North Western.....	9	10	71	32	11	133	72	10	.....
Total.....	1,251	226	1,092	771	267	3,607	3,494	317	\$26,590 68

## KNOX COUNTY.

Bicknell.....	53	.....	.....	13	9	75	111	8	.....
Knox.....	68	.....	.....	18	9	95	193	9	.....
Lynn.....	1	4	18	7	8	38	80	3	\$128 60
Vandalia No. 40.....	23	4	27	8	6	68	72	3	1,601 78
Wheatland.....	51	.....	.....	9	7	67	205	4	.....
Pine Knot.....	.....	10	27	11	22	70	182	4	900 00
Total.....	196	18	72	66	61	413	843	31	\$2,629 78

TABLE OF EMPLOYES.

1095

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

NAME OF MINE.	Pick Miners.	Machine Runners and Helpers.	Loaders.	Inside Day and Monthly Men.	Outside Day Men.	Total Employes.	Days Worked.	Mules Used.	Improvements.
<b>PARKE COUNTY.</b>									
Brazil Block No. 12.....	40	4	7	16	3	70	159	6	
Cox No. 3.....	67			16	13	96	158	7	
Brazil Block No. 9.....	71			23	7	101	163	6	
Lucia.....	50			13	6	69	50	11	\$300 00
Mecca No. 3.....	77	6	33	32	13	161	191	16	500 00
Lyford No. 1.....	44	8	18	20	9	99	185	8	
Mary.....	5	16	48	33	12	114	181	9	
Superior No. 1.....	112			30	7	149	175	12	
Superior No. 2.....	110			38	11	159	213	12	
Superior No. 3.....	65			12	6	83	98	3	
Minshall No. 1.....	109			45	12	166	130	15	3,037 80
Minshall No. 2.....	81			15	7	103	184	6	3,085 28
Pan American.....	70			15	10	95	209	6	
Parke No. 11.....	21	28	48	20	11	128	207	9	
Harrison.....	40	4	7	16	3	70	159		
Total.....	962	66	161	344	130	1,663	2,462	126	\$6,923 08
<b>FERRY COUNTY.</b>									
Troy.....	15			3	3	21	211	2	
Total.....	15			3	3	21	211	2	
<b>PIKE COUNTY.</b>									
Aberdeen.....	16			3	3	22	26	2	
Carbon.....	40			12	8	60	212	12	
Ayrshire No. 3.....	72			20	7	90	201	15	\$32,234 96
Ayrshire No. 4.....	118			31	12	161	205	13	
Ayrshire No. 5.....	25			3	3	31	110	3	
Rogers.....	17			5	5	27	220	1	
Blackburn.....	27			6	5	38	33	3	
Littles.....	137			31	14	182	143	13	
Hartwell.....	99			23	13	135	182	13	
Petersburg.....	Idle.								
Winslow No. 2.....	Idle.								
Winslow No. 5.....	Idle.								
Total.....	551			134	70	755	1,332	75	\$32,234 96

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

## SULLIVAN 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.	Improvements.
Bunker Hill	26	8	38	34	18	124	144	10	.....
Caladonia	14	72	34	12	137	73	10	.....	
Dugger	10	90	28	12	143	93	7	\$1,500 00	
Consolidated No. 32	22	114	41	10	192	190	11	4,955 34	
Consolidated No. 33	20	102	37	15	179	202	10	6,808 12	
Consolidated No. 34	10	35	23	10	78	233	4	4,403 37	
New Linton	3	6	30	17	7	63	68	6	.....
Jackson Hill No. 2	20	112	33	15	180	181	15	.....	
Jackson Hill No. 4	47	12	63	18	152	235	7	542 00	
Phoenix No. 4	2	10	61	30	18	121	164	11	.....
Shelburn	5	8	12	24	7	36	139	11	.....
Consolidated No. 29	7	14	65	45	18	149	180	15	6,554 18
Consolidated No. 31	49	6	13	6	68	133	6	71 69	
Freeman	58	.....	10	7	75	101	6	.....	
Sun Flower	1	16	92	27	12	147	167	11	.....
Consolidated No. 26	1	16	38	42	14	161	207	13	1,921 78
Dering No. 14	2	16	96	50	25	189	180	16	.....
Vandalia No. 10	90	.....	20	13	123	165	7	2,872 20	
Semi-Block	3	8	36	28	11	86	183	3	.....
Mammoth Vein	2	16	70	18	13	119	95	8	.....
Shirley Hill	28	12	40	11	7	98	228	5	.....
Cummins	68	.....	26	10	104	160	12	.....	
Hocking	18	22	86	39	14	179	184	14	.....
Citizens	.....	4	14	17	7	32	135	2	3,700 00
Dering No. 12	69	.....	23	9	101	175	8	.....	
Dering No. 13	24	12	44	17	10	107	223	8	289 20
Consolidated No. 28	10	12	54	19	13	108	161	7	605 80
Superior	76	.....	18	8	102	142	5	982 00	
Consolidated No. 30	.....	10	45	15	12	82	159	4	4,414 10
Pearl	10	8	33	8	7	66	166	4	150 00
Reliance	.....	6	22	17	18	53	123	3	1,726 03
Union	.....	8	31	32	12	83	120	3	8,957 92
Hamilton	Idle	.....	.....	.....	.....	.....	.....	.....	.....
Little Giant	43	14	64	29	10	160	229	8	.....
Black Hawk	12	6	15	7	6	46	188	2	.....
Clover Leaf	.....	4	20	6	6	36	106	2	.....
Total	671	344	1,644	826	394	3,879	5,632	274	\$50,434 23

## VANDERBURGH COUNTY.

Diamond	35	.....	7	8	50	222	4	.....
First Avenue	27	.....	4	9	40	261	3	.....
Ingleside	51	.....	10	10	71	308	8	.....
Sunnyside	53	.....	16	12	81	139	12	.....
Union	33	.....	8	7	48	215	5	.....
Unity	92	.....	22	12	126	232	15	.....
Total	291	.....	67	58	416	1,377	47	.....

## VERMILION COUNTY.

Dering No. 7	140	.....	35	9	184	195	18	.....
Dering No. 5	152	.....	51	12	215	222	24	.....
Dering No. 6	85	.....	25	8	118	296	8	.....
Eureka	20	.....	5	3	28	198	3	\$235 50
Buckeye No. 2	Not reported.	.....	.....	.....	.....	.....	.....	.....
Crown Hill No. 1	96	.....	20	7	123	176	11	5,110 00
Crown Hill No. 2	122	.....	18	8	148	167	10	3,605 00
Oak Hill	132	.....	34	11	177	198	15	.....
Prince	154	.....	48	13	215	234	14	2,069 10
Dering No. 15	82	.....	15	8	105	195	9	.....
Dering No. 8	120	.....	31	10	161	238	15	.....
Maple Valley	70	.....	17	8	95	189	8	.....
Total	1,173	.....	299	97	1,569	2,308	135	\$11,019 60

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

## VIGO COUNTY.

NAME OF MINE.	Pick Miners.	Machine Runners and Helpers.	Loaders.	Inside Day and Monthly Men.	Outside Day Men.	Total Employes.	Days Worked.	Mules Used.	Improvements.
Atherton.....	9	12	50	19	10	100	174	7	
Chicago No. 6.....	118			16	8	142	111	6	
Diamond.....	115			37	12	164	214	17	
Peerless.....	37			9	6	52	209	4	
Lawton.....	190			33	14	237	227	19	
Seeleyville, Idla.									
Grant No. 2.....	157			61	13	231	224	23	\$1,000 00
Glen Oak No. 9.....		16	88	50	15	169	206	6	
Vandalia No. 68.....	38			14	10	62	55	8	155 10
Klondike No. 10.....	90			22	12	124	190		
Miami No. 1.....	190			35	10	235	94	18	
Miami No. 2.....	90			13	8	111	166	9	
Miami No. 3.....	102			17	8	127	196	6	
Parke No. 10.....	54	16	33	39	15	157	178	13	
Redbird.....	45			12	7	64	230	6	
Vandalia No. 67.....	173			33	12	218	141	14	2,413 03
Vandalia No. 66.....	80			20	13	113	162	8	2,384 19
Vandalia No. 81.....	72			14	12	98	185	8	1,146 32
Deep Vein.....	65			18	9	92	212	6	1,725 00
Vandalia No. 80.....	59			25	6	90	153	6	1,109 03
Vandalia No. 69.....	64			16	8	88	202	8	2,110 57
Vandalia No. 82.....	56	12	12	12	7	99	225	4	1,750 23
Ray No. 2.....	64	12	23	12	9	120	210	5	
Forrest Park.....		20	37	19	12	88	184	5	
Domestic Block.....	33			7	8	48	104	2	1,595 65
Total.....	1,901	88	243	553	244	3,029	4,252	202	\$15,389 12

## WARRICK COUNTY.

Big Four.....	11	12	36	12	9	80	219	7	\$859 55
Big Vein No. 3.....	8	18	54	13	9	102	204	8	
Chandler.....		8	16	4	4	32	100	2	
De Forrest.....		4	10	3	3	20	73	2	
Star No. 1.....	44			9	8	61	75	8	
Electric.....		12	57	23	11	103	221	10	
Burke.....	21			4	5	30	104	2	
Total.....	84	54	173	68	49	428	996	39	\$859 55

TABLE

*Showing Comparative Statement of Coal Produced, Number of Employes, Wages Paid and Per Cent. Increase and Decrease for Each Year from 1900 to 1905, Inclusive.*

YEAR.	Employes.	Per Cent. In-crease.	Per Cent. De-crease.	Tons Produced.	Per Cent. In-crease.	Per Cent. De-crease.	Wages Paid.	Per Cent. In-crease.	Per Cent. De-crease.
1901 over 1900.....	12,096	22	.....	7,019,203	11	.....	\$5,680,539 86	17	.....
1902.....	13,139	.08	.....	8,763,197	24	.....	7,078,913 12	24	.....
1903.....	15,128	15	.....	9,992,553	14	.....	9,149,572 12	29	.....
1904.....	17,838	17	.....	9,872,404	.....	.01	9,165,404 38	.01/10	.....
1905.....	18,609	.043	.....	10,995,972	11	.....	9,353,894 55	.02	.....

TABLE

*Showing a Comparison of Average Wages Earned by Miners, Inside Day and Monthly Men and by Outside Day and Monthly Men from 1901 to 1905, Inclusive.*

YEAR.	Miners.	Inside Day and Monthly Men.	Outside Day and Monthly Men.
1901.....	\$436 29	\$544 47	\$593 24
1902.....	500 27	642 46	631 85
1903.....	566 14	699 67	689 54
1904.....	450 30	631 38	609 36
1905.....	463 26	579 36	650 98

NOTE —In 1904 the block coal miners' wages were separated from the bituminous, while in the above table the block coal and bituminous wages are combined.



MINING MACHINERY.

We exhibit in the 6 following tables the number of steam boilers, number of hoisting engines, number of dynamos, number of compressors, number of automatic cages, number of shaker screens, number of box car loaders, number of coal washers, number of mines having rope haulage, number of mine motors, number of electric chain mining machines and the number of compressed air punching machines now in use at Indiana mines. Also an estimated cost of the various kinds of machinery.

TABLE

*Of Steam Boilers and Hoisting Engines.*

COUNTY.	STEAM BOILERS.				HOISTING ENGINES.		
	Tubular Boilers.	Flued Boilers.	Cylinder Boilers.	Total.	Direct.	Geared.	Total.
Clay .....	34	4	16	54	8	29	34
Daviess.....			8	8		4	4
Fountain.....			3	3		2	2
Greene.....	53	10	4	67	22	7	29
Gibson.....	5			5	1	2	3
Knox.....	3	1		4	3	4	7
Parke.....	11	4	7	22	5	8	13
Perry.....		1		1		1	1
Pike.....	4	4		8		7	7
Sullivan.....	91	2	4	97	24	12	36
Vanderburgh.....	6	10		16	3	3	6
Vermillion.....	24	4		28	11	1	12
Vigo.....	32	12	17	61	12	13	25
Warrick.....	6	5		11		8	8
Total .....	269	57	59	385	89	101	190

Total estimated cost of tubular boilers.....	\$196,185 00
Total estimated cost of flued boilers.....	22,200 00
Total estimated cost of cylinder boilers.....	17,000 00
Total estimated cost of all kinds of boilers.....	\$235,385 00
Total estimated cost of direct hoisting engines.....	\$156,350 00
Total estimated cost of geared hoisting engines.....	87,500 00
Total estimated cost of all kinds of engines.....	\$243,850 00
Total estimated cost of engines and boilers.....	\$479,235 00

## TABLE

Showing by Counties the Number of Dynamos in Use and Names of Manufacturers.

COUNTY.	Manufacturers											Total.				
	Goodman.	Jeffrey.	Morgan Gardner.	Link Belt.	General Electric.	Jenny.	Kester.	Ridgeway.	Thompson & Ryan.	Walker.	Independent.		Coker & Wheeler.	Milwaukee Electric Co.	Ideal.	Western Electric Co.
Clay .....	7	1	5	3	1	1				1	1					10
Greene .....		5	6		1											2
Knox .....					1							1				2
Parke .....			2													2
Pike .....		1	1													2
Sullivan .....	6	6	13			1	1	1	4				1	1	1	35
Vermillion .....	1		5													6
Vigo .....	1			1			1									3
Warrick .....		1														1
<b>Total .....</b>	<b>15</b>	<b>14</b>	<b>34</b>	<b>5</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>1</b>	<b>4</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>85</b>

Estimated cost of dynamos f. o. b. factory.....\$153,000 00  
 The above number of dynamos will require the same number of steam engines to drive them, the estimated cost of which will be ..... 136,000 00  
 Total estimated cost of dynamos and engines.....\$289,000 00

## TABLE

Showing Number and Kind of Mining Machines and Compressors; Also Names of Manufacturers of Same.

COUNTY.	Electric Chain Machines.						Compressed Air Punchers.				Air Compressors.					
	Morgan Gardner.	Jeffrey.	Link Belt.	Goodman.	Morgan Standard.	Sullivan.	Total.	Harrison.	Ingersol-Sargent.	Sullivan.	Total.	Norwalk.	Sullivan.	Ingersol-Sargent.	Allison.	Total.
Clay .....	30	9			3		42		5		6			1		1
Greene .....	32	39	18	17	4	3	112	37		9	48	5	1			6
Knox .....		4					7	7	3		3			1		1
Parke .....	12						12			14	14	2				2
Pike .....	1						1	1						1		1
Sullivan .....	114	15	16	30			175	21	3		21	3	3			28
Vanderburgh .....								3			3					3
Vigo .....	16			3			19	25	4	1	14	40	3	1	1	6
Warrick .....	4	2					6	4	7		12	23	3	2		4
<b>Total .....</b>	<b>209</b>	<b>69</b>	<b>34</b>	<b>50</b>	<b>7</b>	<b>5</b>	<b>374</b>	<b>91</b>	<b>18</b>	<b>49</b>	<b>158</b>	<b>16</b>	<b>4</b>	<b>4</b>	<b>1</b>	<b>25</b>

Estimated cost electric chain machines f. o. b. factory.....\$411,400 00  
 Estimated cost compressed air puncher machines f. o. b. factory..... 46,400 00  
 Estimated value compressors f. o. b. factory ..... 75,000 00  
 Total estimated cost machines and compressors.....\$532,800 00

TABLE

Showing by Counties the Number of Shaker Screens and Automatic Cages in Use, Also Names of Manufacturers.

COUNTY.	SHAKER SCREENS.									AUTOMATIC CAGES.						
	George Parker.	Prox & Brinkman	Duncan Bros.	S. W. Little.	Schuttig Steel & Iron Works.	Powell.	George Ingie.	Jeffrey.	Hone Made.	Total.	George Parker.	Prox & Brinkman	Duncan Bros.	Halbert.	John Gilmore.	Total.
Clay.....	3		1							4	14	14				28
Greene.....	8						1			9	24	12		4	2	42
Gibson.....									2	2	8	8			2	10
Knox.....	1				1		1			3	8	8		2		12
Parke.....												14				14
Pike.....			1	2		1			1	1	5	2				4
Sullivan.....	7	3					1	1		14	36	25	4	2		68
Vermillion.....	1	2								3	8	12				20
Vigo.....	1		1							2	26	10				36
Warrick.....											4					6
<b>Total.....</b>	<b>21</b>	<b>5</b>	<b>5</b>	<b>2</b>	<b>1</b>	<b>1</b>	<b>3</b>	<b>1</b>	<b>3</b>	<b>42</b>	<b>134</b>	<b>94</b>	<b>4</b>	<b>8</b>	<b>4</b>	<b>244</b>

Total estimated value of shaker screens..... \$63,000 00  
 Total estimated cost of automatic cages ..... 73,200 00  
 Total estimated cost of cages and screens ..... \$136,200 00

TABLE

Box Car Loaders and Coal Washers.

COUNTY.	BOX CAR LOADERS AND NAME OF MANUFACTURERS.				COAL WASHERS.
	Autuwa.	Christy.	Victor.	Total.	Link Belt.
Clay.....	3		1	4	
Greene.....	3	1		4	
Parke.....	1			1	
Pike.....		1		1	1
Sullivan.....	11	2		13	
Vermillion.....	2	1		3	
<b>Total.....</b>	<b>20</b>	<b>5</b>	<b>1</b>	<b>26</b>	<b>1</b>

Total estimated cost of box car loaders installed..... \$65,000 00  
 Total estimated cost of coal washers..... 6,000 00  
 Total estimated cost of loaders and washers..... \$71,000 00

TABLE  
Of Mine Haulage by Counties.

COUNTY.	TRACTION MOTORS.					THIRD RAIL MOTORS.			Total Number All Kinds of Motors.	Tail Rope.
	General Electric.	Morgan Gardner.	Jeffrey Mfg. Co.	Goodman.	Total.	Friction Clutch, Morgan Electric Co.	Third Rail Sprocket, Morgan Electric Co.	Total.		
Clay.....		2	1		3	1		1	4	1
Greene.....		1	2	5	8		1	1	9	1
Parke.....										1
Pike.....			1		1		1	1	2	1
Sullivan.....		3	2		5		5	5	10	1
Vermillion.....	2			2	4				4	1
Vigo.....	2				2		3	3	5	2
Totals.....	2	8	6	7	23	1	10	11	34	7

Total estimated cost of motors f. o. b. factory.....	\$58,400 00
Total estimated cost of rope-haulage plants, complete, including engine, ropes, sheaves, labor, etc.....	28,000 00
Total estimated cost of motors and rope-haulage.....	\$86,400 00

## SUMMARY OF MINING MACHINERY.

Total number of direct hoisting engines.....	89
Total number of geared hoisting engines.....	101
Grand total number of hoisting engines.....	190
Total estimated cost of direct hoisting engines.....	\$156,350 00
Total estimated cost of geared hoisting engines.....	87,500 00
Grand total estimated cost of hoisting engines.....	243,850 00
Total number of tubular boilers.....	269
Total number of flued boilers.....	57
Total number of cylinder boilers.....	59
Grand total number of boilers.....	385
Total estimated cost of tubular boilers.....	\$196,185 00
Total estimated cost flued boilers.....	22,200 00
Total estimated cost cylinder boilers.....	17,000 00
Grand total estimated cost of boilers.....	235,385 00
Grand total hoisting engines and boilers.....	479,235 00
Total number shaker screens.....	42
Total estimated cost shaker screens.....	\$63,000 00
Total number automatic cages.....	244
Total estimated cost automatic cages.....	\$73,200 00
Total number box car loaders.....	26
Total estimated cost box car loaders.....	\$65,000 00
Total number coal washers.....	1
Cost of coal washer.....	\$6,000 00

## ELECTRIC MACHINERY.

Total number of dynamo engines.....	85
Total number of dynamos.....	85
Total number of chain mining machines.....	374
Total number of mine motors.....	34
Total estimated cost of dynamo engines.....	\$136,000 00
Total estimated cost of dynamos.....	153,000 00
Total estimated cost of chain mining machines.....	411,400 00
Total estimated cost of mine motors.....	58,400 00
Grand total estimated cost electrical machinery.....	758,800 00
Total number of mines having rope haulage.....	7
Total estimated cost of rope haulage.....	\$28,000 00

## COMPRESSED AIR MACHINERY.

Total number of compressors.....	25
Total number compressed air punching machines.....	158
Total estimated cost of compressors.....	\$75,000 00
Total estimated cost punching machines.....	46,400 00
Grand total estimated cost compressed air machinery.....	121,400 00

## RECAPITULATION.

Total estimated cost of hoisting engines.....	\$243,850 00
Total estimated cost of steam boilers.....	235,385 00
Total estimated cost of automatic cages.....	73,200 00
Total estimated cost of box car loaders.....	65,000 00
Total estimated cost of coal washers.....	6,000 00
Total estimated cost of electrical machinery.....	758,800 00
Total estimated cost of rope haulage.....	28,000 00
Total estimated cost of compressed air machinery.....	121,000 00
Grand total .....	<u>\$1,531,235 00</u>

Note 1. There are no electric hoisting engines at any of the Indiana mines.

Note 2. The above, while representing the important parts of machinery, cost, etc., that make up the complement of a mine, does not represent by far the actual amount expended in opening and developing a mine. To this must be added the sinking and timbering of shaft, tippie, engine room, boiler room and other buildings ventilating fan, scales, ropes, blacksmith shop, smithing tools, mine cars, mine pumps, mine mules, railroad switch and many other articles all of which would amount to a sum about equal to that represented in the recapitulation.

## TABLE

Showing names of mines in which mining is done with mining machines, also number of Loaders, Machine Runners and Helpers and Average Tons Per Machine and Per Loader and Number of Days Worked.

## BLOCK COAL MINES.

## CLAY COUNTY.

NAME OF MINE.	Electric Chain.	Comp.-Air Puncher.	Total Tons Produced.	Loaders.	Machine Runners and Helpers.	Average Tons per Loader.	Average Tons per Machine.	Days Worked.
Brazil Block No. 1.....	3	.....	31,471	22	6	1,748	10,490	271
Brazil Block No. 8.....	4	.....	2,253	15	8	150	563	16
Total .....	7	.....	33,724	37	14	913	4,817	143

## PARKE COUNTY.

Brazil Block No. 12.....	2	.....	285	7	4	40	142	8
Mary .....	8	.....	41,064	45	16	855	5,120	181
Total .....	10	.....	41,349	55	20	757	4,134	94

## BITUMINOUS MACHINE MINES.

## CLAY COUNTY.

Gifford No. 1.....	3	.....	30,554	32	6	954	4,349	172
Gifford No. 2.....	3	.....	9,702	27	6	359	3,418	70
Lewis .....	6	6	68,732	56	12	1,227	11,455	155
Vivian No. 4.....	6	.....	54,732	60	18	913	6,086	225
Vivian No. 5.....	6	.....	10,972	45	12	243	1,328	87
Gold Knob .....	5	.....	47,519	36	.....	1,319	9,503	178
Total .....	26	6	222,261	256	54	869	6,945	177

## GREENE COUNTY.

Black Creek .....	4	.....	57,509	40	8	1,437	14,375	126
Vandalia No. 2.....	7	.....	35,173	27	14	1,302	5,025	124
Vandalia No. 5.....	8	.....	69,021	34	16	2,030	8,627	125
Gilmour .....	9	.....	103,229	114	18	905	11,469	151
Hoosier No. 1.....	5	.....	61,944	41	10	1,510	12,388	224
Island Valley No. 2.....	7	.....	34,121	34	14	1,003	4,374	129
Midland .....	5	.....	55,661	42	10	1,323	11,120	147
Summitt No. 2.....	9	.....	137,733	91	18	1,513	15,303	182
Glenburn .....	4	.....	15,621	13	8	867	3,905	82
Antioch.....	1	.....	1,320	8	2	102	820	10
Tower Hill.....	3	.....	30,491	38	6	802	10,163	103
Green Valley.....	9	.....	110,207	100	18	1,102	12,215	116
Lattas Creek.....	10	.....	210,696	110	20	1,915	27,069	189
Atlas No. 1.....	10	.....	138,824	100	20	1,388	13,882	179
Atlas No. 2.....	10	.....	9,691	140	20	69	969	30
Letsinger.....	4	.....	4,309	20	8	215	1,077	37
Twin .....	5	.....	151,615	92	20	1,648	15,161	184
North West.....	5	.....	49,573	71	10	698	9,914	73
Total .....	94	26	1,276,173	1,120	308	1,139	10,634	122

NOTE.—Employees in the Letsinger and Antioch mines are not shown in table of employees.

KNOX COUNTY.

NAME OF MINE.	Electric Chain.	Comp. Air Puncher.	Total Tons Produced.	Loaders.	Machine Runners and Helpers.	Average Tons per Loader.	Average Tons per Machine.	Days Worked.
Lynn .....	2	.....	12,764	18	4	709	6,382	80
Pine Knot .....	5	.....	21,618	37	10	584	4,323	182
Enterprise .....	.....	2	1,512	27	4	56	756	27
<b>Total</b> .....	<b>7</b>	<b>2</b>	<b>35,894</b>	<b>82</b>	<b>18</b>	<b>437</b>	<b>3,988</b>	<b>96</b>

PARKE COUNTY.

Mecca No. 3 .....	3	.....	3,989	33	6	1,211	13,329	191
Lyford No. 1 .....	4	.....	9,790	18	8	544	2,447	52
Parke No. 11 .....	.....	14	92,456	48	28	1,924	6,604	150
<b>Total</b> .....	<b>7</b>	<b>14</b>	<b>142,235</b>	<b>99</b>	<b>42</b>	<b>1,436</b>	<b>6,773</b>	<b>450</b>

SULLIVAN COUNTY.

Bunker Hill .....	4	.....	33,726	38	8	887	8,431	124
Caledonia .....	7	.....	21,191	73	14	294	3,027	52
Vandalia No. 30 .....	5	.....	25,210	90	10	280	5,042	93
Consolidated Southern Ind. No. 32 .....	11	.....	101,179	104	22	972	9,198	190
Consolidated Southern Ind. No. 33 .....	10	.....	149,444	102	20	1,465	14,944	202
Consolidated Southern Ind. No. 34 .....	5	.....	59,971	35	10	1,713	11,994	233
Consolidated Southern Ind. No. 29 .....	7	.....	96,232	65	14	1,480	13,747	180
Consolidated Southern Ind. No. 31 .....	No report.	.....	2,750	Mach	hines	not reported.	.....	20
Consolidated Southern Ind. No. 26 .....	8	.....	52,222	88	16	593	6,527	207
Consolidated Southern Ind. No. 28 .....	6	.....	101,525	54	12	1,880	16,920	161
Consolidated Southern Ind. No. 30 .....	5	.....	39,803	45	10	884	7,960	159
Consolidated Southern Ind. No. 30 .....	4	.....	21,691	31	8	699	5,422	120
Consolidated Southern Ind. No. 25 .....	3	.....	12,530	30	6	415	4,176	68
New Linton .....	10	.....	148,155	112	20	1,322	14,815	181
Jackson Hill No. 2 .....	6	.....	24,175	63	12	383	4,029	68
Jackson Hill No. 4 .....	5	.....	38,349	61	10	628	7,669	164
Phoenix No. 4 .....	4	.....	7,400	12	8	616	1,850	139
Shelburn .....	4	.....	133,324	92	16	1,449	16,665	167
Sunflower .....	8	.....	85,381	44	12	1,917	14,230	223
Dering No. 13 .....	6	.....	161,888	96	16	1,894	20,236	180
Dering No. 14 .....	8	.....	36,197	36	8	1,005	9,049	183
Wolford .....	4	.....	26,765	70	16	3,382	3,345	95
Mammoth .....	4	.....	59,839	40	12	1,497	9,999	141
Shirley Hill No. 1 .....	6	.....	13,264	Mach	hines	taken	out.	.....
Cummins .....	.....	.....	148,801	36	22	1,739	13,600	184
Hocking .....	11	.....	14,888	13	4	706	4,944	135
Citizens .....	2	.....	33,466	33	8	1,014	8,366	166
Kettle Creek .....	4	.....	17,053	22	6	775	5,684	123
Reliance .....	3	.....	125,361	64	14	1,958	17,908	229
Little Giant .....	7	.....	12,865	15	16	857	4,288	188
Black Hawk .....	3	.....	6,519	20	4	325	3,259	60
Clover Leaf .....	2	.....	.....	.....	.....	.....	.....	.....
<b>Total</b> .....	<b>172</b>	<b>.....</b>	<b>1,807,013</b>	<b>1,634</b>	<b>344</b>	<b>1,106</b>	<b>10,505</b>	<b>147</b>

VIGO COUNTY.

Atherton .....	6	.....	59,486	50	12	1,189	9,914	174
Parke No. 10 .....	.....	13	104,143	33	26	3,155	8,011	178
Vandalia No. 82 .....	6	.....	20,666	12	12	1,722	3,444	212
Ray No. 2 .....	6	.....	21,779	23	12	946	3,629	210
Forrest Park .....	.....	10	35,652	37	20	966	3,565	184
Klondike .....	.....	.....	798	Mach	hines	taken	out.	.....
<b>Total</b> .....	<b>18</b>	<b>23</b>	<b>242,524</b>	<b>135</b>	<b>82</b>	<b>1,055</b>	<b>5,915</b>	<b>191</b>

## WARRICK COUNTY.

NAME OF MINE.	Electric Chain.	Comp. Air Puncher.	Total Tons Produced.	Loaders.	Machine Runners and Helpers.	Average Tons per Loader.	Average Tons per Machine.	Days Worked.
Big Four.....	.....	6	57,801	36	12	1,605	9,633	219
Big Vein.....	.....	9	95,606	54	18	1,770	10,822	204
Chandler.....	.....	4	25,819	16	8	1,613	6,454	100
De Forrester.....	.....	2	6,280	10	4	628	3,141	73
Electric.....	6	0	122,409	57	12	2,147	20,401	221
Caledonia.....	0	3	not rep'd	12	6	.....	.....	.....
Total.....	6	24	367,915	185	60	1,664	10,263	163

NOTE. See General Table for Cummins, Consolidated Southern Indiana No. 31, Klondike

## TABLE

*Showing the Number of Tons of Coal produced in each County, the Number of Kegs of Powder used, Number of Tons of Coal produced per each Keg and the Total production for the State for the year 1905 and a general average of Tons produced per Keg of Powder.*

County.	Total Tons of Coal.	No. Kegs of Powder.	Tons per Keg.
Clay.....	815,860	22,457	25.1
Daviess.....	76,653	3,921	19.5
Fountain.....	70,535	4,231	16.6
Greene.....	2,246,190	53,601	41.9
Gibson.....	100,847	4,674	21.1
Knox.....	223,964	11,993	18.6
Parke.....	741,013	29,327	25.2
Perry.....	7,895	443	17.8
Pike.....	388,845	18,307	21.2
Sullivan.....	2,395,918	45,333	52.8
Vanderburgh.....	307,781	13,886	22.1
Vermillion.....	1,381,246	87,939	15.7
Vigo.....	1,898,617	73,443	25.8
Warrick.....	340,608	5,895	57.7
Grand Total.....	10,995,972	427,650	25.7

NOTE. 1. The price paid for powder during the year was one dollar and seventy-five cents (\$1.75) per keg, which represents a total sum of seven hundred and forty-eight thousand three hundred and eighty-seven dollars and fifty cents (\$748,387.50) or a fraction over six and eight tenths (6.8 cents per ton for each ton of coal produced.

NOTE. 2. Mining in Daviess, Fountain, Gibson, Perry, Pike, Vanderburgh and Vermillion Counties is done by hand exclusively. By referring to the above table it will be seen that the average tons of coal produced per keg of powder in these counties is far below the general average for the state. It will also be noticed that the averages in Greene, Sullivan and Warrick Counties are very high; this is accounted for by reason of the fact that the greater portion of coal mined in these three counties is done with machines.



TABLE

Showing by Counties the Geological Number of coal seams operated in the Bituminous Coal fields of Indiana and the Number of Tons mined from each seam in 1905.

GEOLOGICAL NUMBER OF SEAMS AND NUMBER OF TONS MINED.							TOTAL.
County.	II.	III.	IV.	V.	VI.	VII.	
Clay.....		139,643	99,859	71,640	163,054		474,196
Daviess.....		26,605		50,048			76,653
Fountain.....		71,090					71,490
Greene.....		128,275	1,972,556	114,166			2,214,997
Gibson.....				81,987	18,959		100,946
Knox.....				18,560		52,706	223,964
Parke.....		244,729	12,822		207,523		465,074
Pike.....				388,847			388,847
Perry.....	7,895						7,895
Sullivan.....		114,196	100,163	302,557	1,719,260	151,503	2,387,679
Vanderburgh.....				307,781			307,781
Vermillion.....						1,384,682	1,384,682
Vigo.....					1,824,475	68,350	1,892,825
Warrick.....				340,608			340,608
Total.....	7,895	724,538	2,185,400	1,689,016	4,086,369	1,657,241	10,337,237

EXAMINATIONS.

Examinations of applicants for certificates of competency to serve as mine boss, fire boss and hoisting engineers were held in Terre Haute on the following dates during the year 1905, and the result of each examination exhibited in the table below:

	Applicants.			Passed.			Failed.		
	M. B.	F. B.	H. E.	M. B.	F. B.	H. E.	M. B.	F. B.	H. E.
April 11 to 13.....	47	8	55	25	5	23	22	3	32
August 23, 24, 25.....	35	8	24	21	1	10	11	7	14
December 27, 28.....	37	24	35	27	18	23	12	6	12
Total.....	119	40	114	74	24	56	45	16	58

We give herewith a list of the names and addresses of persons who passed at the above examinations and to whom certificates were granted, also number of certificate and per cent. of grade:

HOISTING ENGINEERS.

Examination Held April 11, 12 and 13, 1905.

No. Certificate.	Name.	Address.	Per Cent.
7.....	Wm. H. Southerlin.....	Carlisle.....	79
8.....	Lon Wilson.....	Carlisle.....	78
9.....	Hershel Wence.....	Shelburn.....	80
10.....	Isaac Kauble.....	Linton.....	76

<i>No. Certificate.</i>	<i>Name.</i>	<i>Address.</i>	<i>Per Cent.</i>
11.....	J. N. Arthur.....	Gilmour.....	76
15.....	John Strietelmier.....	Linton.....	75
17.....	Frank Gambill.....	Sullivan.....	77
18.....	George A. Gastineau.....	Sullivan.....	77
22.....	Thad Miller.....	Seeleyville.....	79
31.....	A. M. Dale.....	Bicknell.....	77
33.....	Joseph Fox.....	Bicknell.....	84
63.....	Jas. N. Watson.....	Linton.....	78
66.....	Oscar L. Lind.....	Sandborn.....	83
65.....	W. B. Beattie.....	Littles.....	77
70.....	Allen Ruble.....	Tritchton.....	77
85.....	J. A. Baker.....	Coalmont.....	79
90.....	Charles Miller.....	Linton.....	77
93.....	Jas. C. Winn.....	Brazil.....	76
94.....	J. E. West.....	Linton.....	78
95.....	C. H. Rumbaugh.....	Brazil.....	77
99.....	Benj. H. Ruble.....	Wheatland.....	76
104.....	Albert Weaver.....	Bicknell.....	79
113.....	Scott Amour.....	Linton.....	76

## MINE BOSS.

Examination Held April 11, 12 and 13, 1905.

<i>No. Certificate.</i>	<i>Name.</i>	<i>Address.</i>	<i>Per Cent.</i>
6.....	Arch Fisher.....	Diamond.....	81
25.....	Herbert M. Stewart.....	Burnett.....	84
26.....	Ambrose Johnson.....	Terre Haute.....	77
29.....	E. Kent Davis.....	Shelburn.....	77
32.....	George H. Burton.....	Princeton.....	81
36.....	William Treager.....	Brazil.....	84
37.....	James Gray.....	Diamond.....	78
39.....	Reuben H. Crabb.....	Edwards.....	77
42.....	Thomas E. Cassady.....	Cannelburg.....	82
43.....	John Pintin.....	Edwards.....	77
45.....	George Benefield.....	Shelburn.....	84
46.....	Oliver Houstin.....	Clinton.....	87
51.....	Alex Wright.....	Ehrmandale.....	79
52.....	Harry Harvey.....	Linton.....	79
72.....	T. A. Mathews.....	Jasonville.....	80
75.....	William Sampson.....	Linton.....	77
76.....	Charles E. Sherwood.....	Linton.....	86
78.....	John D. Harper.....	Linton.....	87
79.....	Stephen J. Robinett.....	Linton.....	81
91.....	Charles S. Perry.....	Cates.....	91
96.....	Otto R. Chamberlain.....	Seeleyville.....	76
24.....	Charles McAtee.....	Linton.....	79
106.....	Thomas Race.....	Brazil.....	77
108.....	Archie McCulloch.....	Clinton.....	82
109.....	L. L. Reese.....	Bicknell.....	77

## FIRE BOSS.

Examination Held April 11, 12 and 13, 1905.

<i>No. Certificate.</i>	<i>Name.</i>	<i>Address.</i>	<i>Per Cent.</i>
53.....	Jules Surmont.....	Linton.....	80
54.....	Robert E. Collins.....	Linton.....	78
58.....	Patrick Byrne.....	Linton.....	76
82.....	George Murdock.....	Linton.....	76
97.....	W. H. Chandler.....	Clinton.....	81

EXAMINATIONS.

1109

HOISTING ENGINEERS.

Examination Held August 22, 23 and 24, 1905.

<i>No.</i>	<i>Name.</i>	<i>Address.</i>	<i>Per Cent.</i>
2.	John Memmert	Pleasantville	80
4.	Ed A. Allen	Jasonville	76
7.	Charles Beadley	Midland	78
8.	Fred G. Marshall	Sullivan	81
9.	Otis Ethridge	Farmersburg	78
11.	W. H. Coker	Linton	78
13.	William Roseberry	Farnsworth	75
14.	D. E. Alumbaugh	Sullivan	75
15.	Henry Ballard	Dugger	75
16.	Daniel Brown	Dugger	76

MINE BOSS.

Examination Held August 23, 24 and 25, 1905.

<i>No.</i>	<i>Name.</i>	<i>Address.</i>	<i>Per Cent.</i>
18.	George W. Chambers	Clinton	90
20.	Charles A. Thompson	Carbon	76
21.	Uriek Decker	Sullivan	85
23.	W. S. Harris	Terre Haute	82
25.	J. A. Crabb	Terre Haute	77
26.	Robt. P. McKinney	Linton	78
27.	Frank Crooks	Caladonia	80
28.	Mont Ayler	Carbon	82
30.	Robert T. Peel	Farmersburg	90
32.	Clay Moss	Jasonville	77
33.	Jules Surmont	Paxton	92
35.	Edgar Livingston	Linton	76
36.	Albert Wheatley	Linton	75
37.	Iver Risher	Linton	80
40.	Reuben Street	Terre Haute	79
42.	George H. Richards	Terre Haute	76
43.	Arthur Love	Linton	83
44.	Scott Amour	Linton	84
45.	J. F. Leigh	Linton	75
46.	Oscar J. Pleschner	Linton	75
41.	Noah Duchene	Brazil	76
22.	Clem Phillips	Brazil	78
79.	Alvah Halbert	Linton	89

HOISTING ENGINEERS.

Examination Held December 27 and 28, 1905.

<i>No.</i>	<i>Name.</i>	<i>Address.</i>	<i>Per Cent.</i>
11.	Wm. Meiring	Brazil	83
16.	Charles McCarter	Shelburn	78
20.	James Powell	Dugger	75
22.	R. C. Lewellyn	Dugger	76
23.	Charles Weaver	Sullivan	77
25.	J. O. Stewart	Linton	78
27.	Sherman Turvy	Linton	76
28.	Garnet Gardner	Linton	77
30.	Robert Baird	Cardonia	77
31.	William Smith	Boonville	76
32.	Harry Lewis	Princeton	90
35.	Edward Jones	Linton	76
37.	Ed Shott	Burnett	75
65.	Alpha M. Withrow	Diamond	81

<i>No.</i>	<i>Name.</i>	<i>Address.</i>	<i>Per Cent.</i>
66.....	Oscar Hall.....	Caladonia.....	89
76.....	George Chadwick.....	Fontanett.....	80
77.....	Bluford Gadberry.....	Shelburn.....	79
79.....	Garfield Dugger.....	Shelburn.....	76
78.....	Vick Vandoir.....	Coal Bluff.....	78
83.....	Samuel Fleming.....	Carlisle.....	75
85.....	Ollie Ring.....	Farmersburg.....	93
89.....	J. Thomas Williams.....	Carlisle.....	79
94.....	George B. Russell.....	Burnett.....	89

## MINE BOSS.

Examination Held December 27 and 28, 1905.

<i>No.</i>	<i>Name.</i>	<i>Address.</i>	<i>Per Cent.</i>
2.....	John J. Rowa.....	Farmersburg.....	84
5.....	Cooper Taylor.....	Jasonville.....	76
6.....	Morgan Thomas.....	Rosedale.....	90
7.....	Adam Vonderschmitt.....	Vicksburg.....	76
10.....	William Pierce.....	Boonville.....	76
12.....	W. L. Brown.....	Harmony.....	88
14.....	William Burcham.....	Linton.....	78
15.....	Theodore Linder.....	Terre Haute.....	76
17.....	P. Wiggs.....	Littles.....	79
33.....	Jess Thomas.....	Shelburn.....	80
41.....	Wm. Gregory.....	Cass.....	85
43.....	T. H. Mills.....	Shelburn.....	83
47.....	R. M. Hughes.....	Burnett.....	77
49.....	David Wilson.....	Sullivan.....	88
51.....	Charles Martin.....	Jasonville.....	76
51.....	John Henry.....	Coxville.....	82
54.....	William Anderson.....	Linton.....	87
58.....	William Gambill.....	West Terre Haute.....	81
61.....	James Kennedy.....	West Terre Haute.....	82
63.....	James Simons.....	Ayrshire.....	78
72.....	Milburn Little.....	Winslow.....	75
74.....	James White.....	Jasonville.....	83
75.....	David Evans.....	Coal Bluff.....	79
78.....	William Hays.....	Terre Haute.....	80
81.....	George Anderson.....	Farmersburg.....	86
86.....	Jas. Vanderver.....	Coal Bluff.....	82
98.....	Wm. W. Hughes.....	Clinton.....	76

## FIRE BOSS.

Examination Held December 27 and 28, 1905.

<i>No.</i>	<i>Name.</i>	<i>Address.</i>	<i>Per Cent.</i>
2.....	John J. Rowa.....	Farmersburg.....	84
3.....	Steve Robinett.....	Linton.....	79
4.....	Walter Lambert.....	Jasonville.....	86
40.....	John Sutton.....	Farmersburg.....	87
42.....	Clay Moss.....	Jasonville.....	85
45.....	Thos. Thomas.....	Shelburn.....	85
46.....	James Nolan.....	Linton.....	83
57.....	Harve Conrad.....	Bicknell.....	86
59.....	Sol Davis.....	Bicknell.....	80
71.....	John Archer.....	Shelburn.....	91
73.....	William Myers.....	Turner.....	87
93.....	R. B. Coleman.....	Sullivan.....	76
80.....	Urie Decker.....	Sullivan.....	80

<i>No. Certificate.</i>	<i>Address.</i>	<i>Per Cent.</i>
82.....	S. J. Wilton..... Linton.....	82
87.....	James Dunn..... Vicksburg.....	86
91.....	Harry Evans..... Hymera.....	85
92.....	E. B. Rouse..... Sullivan.....	83
99.....	William Burrows..... Shelburn.....	99

Certificates of service granted the following in 1905:

MINE BOSS.

H. E. Hosteller.....	Jasonville.
Benjamin King.....	Seeleyville.
David Wesley.....	Clinton.
George B. Stuthard.....	Clinton.
W. F. Bosley.....	Troy.
Joseph Heiron.....	Evansville.
William Seckinger.....	Farmersburg.
Thomas Wilson.....	Washington.
Martin Cahill.....	Cannelburg.

HOISTING ENGINEERS.

John H. Merrill.....	Newburgh.
Charles A. Wilder.....	Boonville.

MINE CASUALTIES.

The monthly reports of coal companies and mine bosses made to this office during the year 1905 show an aggregate of 251 accidents to mine employes, classified as follows: Fatal, 47; serious, 103, and minor, 101. The causes of these accidents are shown in the annexed table:

TABLE

*Exhibiting Number of Casualties Arising in Indiana Mines During the Year 1905 and the Different Causes Thereof.*

CAUSES OF ACCIDENT.	Fatal.	Serious.	Minor.	Total.
Falling slate.....	18	37	30	85
Falling coal.....		6	25	31
Smoke explosion.....	1		2	3
Delayed shots.....	2	6		8
Premature shots.....	2	2		4
Blown-out shots.....		7		7
Misplaced shots.....	9			9
Ascending cage.....	4			4
Decending cage.....		2		2
Kicked by mule.....		4	10	14
Mine cars.....	3	21	12	36
Falling down shaft.....	2			2
Mining machines.....		2	6	8
Railroad cars.....	1			1
Coal falling down shaft.....	1			1
Explosion of fire-damp.....	1	9		10
Shot blowing through pillar.....	1			1
Powder explosion.....	3	2		5
Miscellaneous.....	4		16	20
<b>Totals.....</b>	<b>47</b>	<b>103</b>	<b>101</b>	<b>251</b>

## FATAL ACCIDENTS.

We give herewith, by months, a detailed statement of facts and circumstances attending each of the above fatal accidents as established by investigation made by this department, acting in conjunction with the coroner of the county in which the accident occurred, also such comments on same as we deem necessary, with recommended legislation relating to mine accidents.

## JANUARY.

The records for this month show a total of 4 fatal accidents arising from different causes. The first of them occurred on the 4th inst., in the McClelland Coal Company's Buckeye Mine, Vermillion County. John Galloway, American, a shot firer, aged 26 years, met his death as the result of a smoke explosion, caused by blown out shots. Decedent and a fellow miner by the name of Charles Houser, were employed to fire the shots in this mine after the miners and other workmen had completed their day's work and left the mine. About 3:30 o'clock p. m. (firing time) of above date, they had commenced firing the shots, as usual, which had been prepared by the miners during the working hours of the mine and had completed all of their work on the north side of the mine, except one pair of cross entries, viz., the 1st and 2d northwest. Both men were lighting shots on the 2d west, Galloway commencing at the head of the entry and Houser a number of rooms farther back, each to continue lighting shots one after the other as long as there were any to light in the district allotted him. Some 8 or 10 shots had been lighted in this manner before any one of them had time to explode, when a shot located in face of the entry and one in room 4 (both resulting in blown out shots) exploded simultaneously, the flames of which entering the dense body of heated powder smoke made by the shots previously fired, caused a smoke explosion of such violence as to almost wreck the interior of the mine. The shot firers evidently feared an explosion would follow some one of the shots they had lighted, as they had gone over into room 1 on the first west for safety. The explosion, however, covered the entire area of both entries and when found by searching parties several hours

later, Galloway was dead, having succumbed either to after damp or powder smoke, possibly both. Houser was unconscious, but on being taken to the surface was revived with much difficulty, otherwise he suffered no serious inconvenience and was at his work again in a few days.

A very dangerous practice, one for that matter which a majority of shot firers are guilty of, is exhibited in this instance, viz., that of lighting a number of shots in succession, frequently causing a dozen or more to explode at the same moment, thus creating a dense body of powder smoke, sometimes at almost white heat. Also the extra heavy concussion of so many shots raising the coal dust in suspension and should the flame of a blown out shot enter the atmosphere in this condition an explosion of greater or less violence is sure to follow.

On January 12th, Fred Willis, American, aged 18 years, single, was fatally injured by being run over by a loaded mine car, in the Victory Mine, Greene County. At the time of the accident he was coming down a slight grade with a trip of loaded cars at a rapid rate of speed, riding by standing with one foot on the draw bar in the front end of the first car and the other foot on the tail chain. Just as he reached the bottom of the grade, his foot slipped and he fell under the front car and dragged for some distance, crushing him about the head and chest, injuring him so that he died a few days later.

On January 17th, George Hugh, American, aged 46 years, was killed by falling slate in the Linton Semi-Block Mine, Sullivan County. At the time of the accident Hugh and 3 other persons were at work cleaning up a slate fall near the face of a cross entry. A few feet inside the point where they were working was a very dangerous piece of loose slate, which the mine boss had examined when starting the men to work, and gave them orders that no one should go under it until it had been properly secured or taken down, but for some reason decedent, at about 11:30 o'clock, had gone under it and was working when suddenly, without warning, it gave way and a large piece of the slate, measuring 8 feet wide, 10 feet long and 13 inches thick, fell on him, killing him instantly. He leaves as dependents a wife and 5 children. A conformance to the orders given by the mine boss in this instance would have prevented the loss of a life.

On January 25th, Andrew Trueblood, American, loader, aged 25 years, was fatally injured by falling slate in the Wilfred No. 1 Mine, also in Sullivan County. At about 8:00 o'clock a. m. of above date, Trueblood and his buddy were engaged in loading a car of coal and were working within 6 or 8 feet of the face of this room, when a piece of slate 7 feet wide, 8 feet long and  $5\frac{1}{2}$  inches thick fell, striking decedent, injuring him so badly that he died 9 hours later at his home. He leaves a wife and 1 child. The accident was investigated by Assistant Inspector Mr. Dodds, who reported plenty of timbers of proper length and cap-pieces on hand, and that the accident could have been prevented had a number of them been set under the slate, which was not done.

#### FEBRUARY.

Three deaths resulting from mine accidents occurred during this month, the first of which was that of Lew E. Webb, American, aged 52 years, night foreman at the Glendora Mine, Sullivan County. At about 11 o'clock p. m. of the 14th, Webb and 1 other person were engaged thawing out some steam pipes with burning waste. The pipes were located a short distance above the surface, and in order to reach them they were using the east cage. After they had completed the work of thawing out the pipes they came down to the ground, landing on the cage, and the night being very cold they went into the engine room to warm, leaving the cage stationary at the ground landing. After staying in the engine room about 5 minutes decedent started to go down the shaft for the purpose of starting the pump. Both of the shaft gates were standing open and although the pit head was well lighted with electric lights, he in some way made a mistake and stepped into the open or west side of the shaft, falling to the bottom, a distance of 160 feet, killing him instantly. He leaves as dependents a wife and 2 children. An observance on the part of decedent of the statute requiring the mine management to keep shaft gates closed, except when in use, would have prevented this accident.

On February 18th Tillman Shoemaker, American, miner, aged 28 years, was fatally injured by a premature blast in the Oswald Mine, Gibson County. At about 3 o'clock p. m. of above date,



deceased was attempting to charge a shot and his cartridge having stuck fast before reaching the back of the drill hole, it is presumed that he was trying to drill it out with the steel bitt on his tamping bar, and fired the powder by the steel coming in contact with a piece of sulphur, making a spark. This opinion is based on the fact that a fresh cartridge of powder was standing about 4 feet back from where he was working. Also from the fact that the tamping bar was found some 20 feet back from the face of the room, with the bitt pointing toward the drill hole. The bitt was also very warm when examined a few minutes after the accident. When found, decedent was lying about 21 feet back from the drill hole where he was thrown by the shot, and although conscious, his pain was so intense from injuries received that he was unable to give any information as to how the accident occurred, and died 20 hours later without having done so. He leaves a wife and 1 child.

On February 28th, Daniel Shake, American, miner, aged 44 years, was fatally burned by an explosion of blasting powder in the Knox Mine, Knox County. From evidence given at the investigation by deceased himself, he at the time of the accident (12:20 p. m.) was engaged making up cartridges preparatory to charging his shots. He had made and filled with powder 1 cartridge about  $2\frac{1}{2}$  feet in length and about 2 inches in diameter, which he leaned up against the coal within a foot or so of his lamp, which was setting on the floor, and while preparing a second cartridge the one leaning against the coal was in some way knocked over on the lamp, igniting the powder, exploding both cartridges and nearly a full keg of powder, from which he was filling the cartridges, burning him both internally and externally, from which injuries he died on March 3d following. He leaves as dependents a wife and 4 children.

#### MARCH.

Eleven fatal accidents were recorded during this month, the first of which occurred in the Jackson Hill No. 2 Mine, Sullivan County, when on the 6th inst. Jacob Brumitt, American, a driver, aged 26 years, was fatally injured by falling down the hoisting shaft off an ascending cage. At about 3:45 o'clock p. m. deceased having completed his day's work was bringing his mule up the

shaft and when within about 10 feet of the surface landing he in some way fell over and was caught and dragged through between the cage bottom and the buntins, crushing him about the head and chest, permitting him to fall to the bottom of the shaft, a distance of about 90 feet, injuring him so badly that he died 7 days later. He leaves a wife and 2 children. There were no eye witnesses to this accident and it is not known what caused him to fall. It is reported, however, that he stated to some persons a short time after the accident that his mule had reared up while he was holding it, causing him to lose his footing. This statement is, in all probability, true and will explain the cause of his fall.

On March 9th Harlin Lee, American, loader, aged 19 years, single, was killed by a premature blast in the Island Valley No. 2 Mine, Greene County. Decedent and his father were working together as loaders, their duties being to shoot down and load out the coal after it had been under cut with an electric chain machine. Also to timber their working place. On the evening of the above date they had prepared their shots in one of their rooms, which had been under cut 6 feet deep. One of the shots known as the breaking down shot was located in the center of the room, the other two were located one on each rib of the room, the two latter being tamped on fuse, while the center or breaking down shot was tamped on a needle to be fired with a squib. When firing time came the center shot was lighted and both men ran to a place of safety, where they waited until they heard it explode. When they returned to light the 2 shots remaining, the father taking the one on the left and the son the one on the right rib, the father succeeded in lighting his shot, but just as the son was attempting to light the one on the right he discovered that the powder in the fuse was burning, having been lighted from the flame made by the center shot. He called to his father warning him of the danger and they both started to run, the son in the lead, and when he had reached a point some 20 feet from the face of the room, the shot exploded, a piece of the flying coal striking him on the head, killing him instantly. Had common squibs been used to fire these shots, one more victim sacrificed to the practice of using fuse in shot firing would have been spared.

On March 22d occurred in the Oswald Mine, Gibson County, one of the most appalling mine accidents in the history of the

State. Nine lives were sacrificed on that date, 5 of whom were taken from the mine dead and 4 fatally injured, as a result of an explosion of powder smoke, blasting powder and a small amount of coal dust, caused by a windy or blown out shot. This shot had been prepared by a miner named Roscoe Hedrick, and his utter disregard of the statute governing the use of powder and the manner of placing and preparing shots in coal mines, as well as the general methods of mining followed by miners, amounted to nothing more nor less than criminal negligence. An examination of the scene of the accident was made on the day following the explosion by Assistant Inspectors Dodds and Thomas, 2 practical mine superintendents, viz.: Michael King and John Eddy, and myself, which, together with the investigation made by the coroner of Gibson County, and myself, disclosed the following facts: That during the forenoon of the above date, Roscoe Hedrick had prepared a shot in the face of room 10 (his working place) on the fourth south cross entry, on the west side of the mine, by drilling a hole 6 feet 4 inches deep in an almost straight line of face, there being no loose end or chance whatever, other than an offset of probably 18 inches in depth at a point  $9\frac{1}{2}$  feet distant, measured at right angles from the drill hole. This hole, probably 4 inches in diameter, was drilled perfectly straight with no lift whatever, and according to testimony given by Hedrick, was charged with 3 feet of powder. It is evident to persons conversant with mining that there could be no other result from a shot so arranged than that which occurred, viz.: a windy or blown out shot. After having prepared the shot Hedrick, wishing to leave the mine for the balance of the day (it then being 11 o'clock a. m.), requested his father, whose working place was on the same entry, to fire it for him at firing time. The father refused to do so and requested him to ask some one else to fire it. He then asked Harry Tagett, whose working place was room 11, adjoining that of Hedrick, to fire it for him, which he agreed to do. Hedrick then left the mine and did not return during the day. The hour as above stated being 11 o'clock a. m. would have given him until 3:30 o'clock p. m. (firing time)  $4\frac{1}{2}$  hours in which to have made a shearing, or chance for his shot to do the work intended. It was customary, when firing shots on this entry, to begin at the first rooms and fire toward the face of the entry,

the miners leaving the mine in that direction, traveling against the air, thus avoiding the powder smoke. This same rule was followed on the evening of the accident and some 6 or 8 very heavy shots had been fired one after the other in turn in quick succession. Immediately before Tagett fired that of Hedrick, these shots were all shot off the solid. In addition to the dense body of heated powder smoke made by them, was a certain amount of coal dust brought into suspension by the extra heavy concussion. When Hedrick's shot exploded, the point of least resistance being along the drill hole, it merely seamed the coal from roof to floor, resulting in a windy or blown out shot, the flame of which entering the body of powder smoke and coal dust mentioned, was followed by a smoke explosion which in turn exploded a number of kegs of powder located along the entry in different working places. This, combined with the other two elements, i. e., smoke and dust, added greatly to the intensity of heat, as well as the force of the explosion, which covered the entire area from the face to the mouth of both the third and fourth south entries, also extending down the main entry to within a short distance of the hoisting shaft, tearing out doors and brattices, overturning mine cars, knocking out cross bars, props, etc., wrecking that part of the mine generally. Immediately after the explosion the mine boss, fire boss and others began the work of rescue at great peril to their own lives. No serious results followed, however, and within about 2 hours after the explosion all of the dead bodies and all of the injured, as well as the uninjured, had been rescued. The following is a list of the names of the dead:

Alfred Geiser (German), miner, age 20, single.

Edmun Geiser (German), miner (brother of above), age 22, also single.

William Biggs (American), miner, age 38.

Harry Tagett (English), miner, age 48.

Hudson Weatherly (American), miner, age 30.

Those fatally injured were:

John Dill (American), miner, age 21.

George Dill (American), miner, age 47.

Joseph Ward (American), miner, age 52.

William Jones (English), miner, age 65.

After the investigation had been completed and having secured ample evidence, which in my opinion would justify the prosecution of Hedrick, I placed all of the facts and circumstances relative to the case before the deputy prosecutor of Gibson County, and requested that prosecution be filed against Hedrick in 2 counts, also requesting that he be arrested and placed under bond so that he might not escape punishment, but for some reason the affidavits were not made for several days and when arrested Hedrick was placed under a bond of \$150. Later I was informed that Hedrick had plead guilty in the Circuit Court to the charges preferred against him. Up to the present time, however, I have been unable to learn what decision the court has rendered, but am informed that the judge still has the case under advisement, and that Hedrick has been released on his own recognizance, and it is supposed that he had left the place.

## APRIL.

Two fatal accidents occurred during this month, the first of which occurred in the yards of the Oak Hill Mine, Vermillion County, when on the 14th inst. James Haga, American, a flat trimmer, was instantly killed by railroad cars at about 1:30 o'clock p. m. Decedent was chalking a car on the scales, and after he had chalked the car and stopped it, he stepped backward out onto the passing or main railroad track just as a coal train was approaching. The brakeman was on the front end of the train and shouted at him, but owing to the noise made by the hoisting and screening machinery, dumping of coal, etc., he could not make him hear. There was a train of 18 cars ahead of the engine and he was struck by the first car, the entire train passing over him before it could be stopped, severing his head and legs from the body.

On April 19th J. W. Spraggins, American, driver, aged 19 years, was fatally injured by being crushed between a loaded mine car and the roof in the Ayrshire No. 8 Mine, Pike County. On the morning of above date, at about 10 o'clock, decedent was coming out of the mine with a trip of 10 loaded cars, riding on the front end of the first car. At the time of the accident he was coming down a steep grade and was fixing his lamp so that it

would give better light, and his attention being so absorbed, he did not notice a low place in the roof which he was approaching and failed to stoop low enough to avoid it. His head struck the roof, crushing him down on the car, injuring his spine, causing total paralysis, from which he died 19 hours later. He leaves as dependents a wife and a younger brother.

#### MAY.

But 1 fatal accident occurred in this month, viz., that of Anton Lackman, German, a miner, aged 55 years, single, who was killed on May 9th in the Lost Creek Mine, Vigo County. At about 12 o'clock noon decedent was engaged drilling a hole when suddenly, without warning, a large piece of rock 12 feet long, 9 feet wide and 18 inches thick gave way and fell on him, killing him instantly. But one prop had been set under the slate where at least 4 or 5 were needed. Lackman was warned of his danger by a fellow miner, who advised him not to work under the rock, he continuing to do so, however, with the above result.

#### JUNE.

The records for this month show a total of 8 fatalities occurring in or about the mines, as follows: On June 2d James Phillips, Scotch, miner, aged 30 years, and Jack Ferells, Scotch, also a miner, aged 30 years, were killed by falling slate in the Hocking Mine, Sullivan County. At about 1:30 o'clock p. m. both of the decedents, who worked buddies, were engaged loading a car of coal at the face of a cut off entry. The entry was about 10 feet wide, under cut, 6 feet deep, with an electric chain mining machine, and the empty car which they were loading stood within about 6 feet of the face of the entry. They had loaded out about 2-3 of a shot or undercut, which had uncovered a slip extending directly across the place and up into the roof. They had nearly completed the loading of their car, when suddenly a piece of slate, 9 feet long, 3 feet wide at the bottom (in V shape), 19 inches thick in the center, tapering to a feather edge on the sides, fell out of this slip, striking both men, killing them instantly. Both decedents were married. Phillips leaves a wife and 3 children, and Ferells a wife and 1 child. Both families are in Kilmarnock, Ayrshire, Scotland.

On June 3d, Franz Gerper, Polander, miner, aged 38 years, was killed by a blast in the Lattas Creek Mine, Greene County. At firing time on the evening of above date, Gerper had prepared 2 shots to fire, 1 on each side of his room, both of which were tamped on fuse. When firing time came, he fired 1 of the shots, and his place being filled with powder smoke he called to a neighbor by the name of Steve Kotchis to hold a light for him while he lighted his remaining shot. Kotchis went up into the room and happened to notice that the fuse was burning in the shot, it having been lighted from the flame of the first shot. He shouted to Gerper notifying him of the fact and both men started to run, but when they had reached a point about 11 feet distant from the shot it exploded, pieces of flying coal striking decedent, breaking his neck and killing him instantly. Kotchis was also knocked down and badly bruised, but managed to walk to the bottom of the shaft, where he gave the alarm. Decedent leaves a wife and 5 children, supposed to be in Westphalia, Deutchland. This accident is identical to that occurring in the Island Valley No. 2 Mine. Had common squibs been used in preference to fuse, a life might have been spared.

On June 9th, Paul Phillips, American, loader, aged 19 years, single, was fatally burned by an explosion of fire damp in the Reliance Mine, Sullivan County. From evidence adduced at the investigation of this accident it was learned that prior to the accident William and Paul Phillips had been driving the main east entry. Their duties were to shoot down and load out the coal from this place after it had been under cut with an electric chain mining machine. On the afternoon of the 8th the machine runner in undercutting the place struck a fault from which fire damp was generated after the coal had been shot down by Phillips at firing time (3:30 p. m.). On the morning of the 9th the fire boss, when examining the mine for fire damp, discovered a body of gas extending from the face of the entry back nearly to the first break through, a distance of 40 feet. This he immediately reported to the machine boss, who instructed him to take 2 other persons with him and put up a temporary brattice along the side of the entry to the face, thus directing the air current into the place for the purpose of driving out the gas. The fire boss, however, took 4 men with him instead of 2, viz., his two brothers,

Fred and Henry White, and the two trackmen, J. A. Garwood and Fred Jones, the two Phillips boys also going along so as to be on hand when their working place had been cleared of the fire damp and made safe. The brattice had been constructed to within 10 or 12 feet of the face of the entry and the fire boss was brushing out the gas inside that point with his coat. At this time (7:45 a. m.) the other parties, 6 in number, were sitting in the last break through and some one or more of them had left their lamps, through oversight or carelessness, setting on the entry directly in the path the gas would have to travel when brushed out. The moment the gas came in contact with the open lights, an explosion followed, fatally burning Paul Phillips, also burning the other 6 persons, some of whom were injured more seriously than others; among the latter was William White, the fire boss, whose injuries for a time it was thought would prove fatal. Fred White and Fred Jones were also very seriously burned, the others escaping with slight burns about the face and hands. Phillips died of his injuries on the 12th following.

On June 13th Clinton Harris, American, driver, aged 33 years, was killed by falling slate in the Indiana Block Coal Company's No. 1 Mine at Saline City, Clay County. At about 2:30 o'clock p. m. decedent had gone into a room for the purpose of pulling a car of clay and had sat down near the face of the room and was talking to the two miners who had loaded the car of clay. While so engaged a piece of slate 8 feet long, 4 feet wide and 2 inches thick fell on him, breaking his neck, killing him instantly. He leaves a wife and 1 child.

On Sunday morning, June 25th, Viola Yates, daughter of J. W. Yates, a miner, was killed by falling down the Island No. 1 hoisting shaft, Greene County. Mr. Yates was employed as a loader in the above mine and lived but a short distance from the works, and on the morning of above date had gone over to the shaft to visit, taking his little daughter with him. He was sitting talking to a number of other miners and the child was playing under the tippie and around the shaft with some other children. At about 9:30 o'clock she was missing and search was immediately instituted. Parties descending the shaft found her at the bottom, dead, where she had fallen a distance of 66 feet. There were no eye witnesses to the accident and the general sup;



position is that the child was looking down the shaft, became dizzy and losing her balance, fell in.

On June 28th Richard A. Spurr, American, jerryman, aged 46 years, was killed by falling slate in the Pan American Mine, Parke County. Decedent at the time of the accident was engaged removing some iron rails from an abandoned part of the mine where the pillars had been drawn. At about 11:50 o'clock a. m., while lifting some rails, a large piece of slate 16 feet long, 7 feet wide and 7 inches thick, suddenly gave way, falling on him, killing him instantly. He leaves a wife and 7 children.

On June 30th Matt Karnge, Russian, miner, aged 37 years, was fatally injured by falling slate in the Jackson Hill No. 4 Mine, Sullivan County. Decedent was in his working place as usual on the morning of above date and while engaged in loading a car of coal at about 10 o'clock, working within a few feet of the face of his room, which was well timbered up to that point, a piece of slate six feet long, three feet wide and four inches thick fell on him, inflicting injuries from which he died on July 10th following. He leaves as dependents a wife and four children.

#### JULY.

Two fatal accidents is also the record for this month. On the 13th inst. Samuel Anderson, Scotch, miner, aged 38 years, was killed by falling slate in the Brazil Block Company's No. 7 Mine, Clay County. At the time of the accident—11:45 a. m. of above date—decedent was engaged mining off a block of coal at the face of his room, when a piece of slate 14 feet long, 11 feet wide and 8 inches thick on the inside, tapering to a thin edge on the outside, fell on him, killing him instantly, also slightly injuring his buddy, John O'Neil, who was loading a car at the time. This slate fall was in the nature of a flat or sand-rock roll, and a slip extending up over the rock along the outside edge and around each end had been uncovered, but not noticed by either of the men. They had sounded and examined the rock earlier in the day, and while they knew it was loose, considered it safe to work under, and proceeded to do so with above results. There were ample timbers in the room of proper length to have secured the rock had they been set under it as they should have been. Decedent leaves a wife and two children.

On July 27th George Hillagas, American, miner, aged 23 years, was fatally burned by an explosion of blasting powder in the Island No. 4 Mine, Sullivan County. At the time he received his injury, decedent was and has been for some time employed driving the fourth southwest entry in the above mine and on the evening of the 27th had arranged to fire two shots, one a snubber and the other a back or butt shot. When firing time (3:30 o'clock p. m.) came he tamped up his snubber shot and after lighting it ran back to the first break through, a distance of 27 feet, and while waiting for it to explode was standing about the center of the break through and directly over a full cartridge of powder, 40 inches in length and 2 inches in diameter. There was also an open keg containing about 16 pounds of powder setting beside the cartridge. When the snubber shot exploded, either the flame from the shot traveled back to where he was standing or the extra heavy concussion from the shot jarred a spark from his lamp, falling into the powder, exploding it. Hillagas was unable to furnish us any information on the matter whatsoever, but owing to the fact that the distance from the shot to the break through was but 27 feet and the shot being very heavily charged, I believe the former theory correct—i. e., that the powder was exploded by the flame from the snubber shot. His burns were supposed to be only external and thought not fatal at first, yet he died as a result of his injuries August 9th following. He leaves a wife and two children.

#### AUGUST.

Seven fatalities is the record for this month, the first of which occurred on the 2d inst., in the Lawton Mine, Vigo County, at which time Earl Martin, American, a trapper, aged 16 years, met his death—resulting from being hurled against a mine door by an extra heavy rush of air. There was no eyewitness to the accident, but from evidence brought forward at the investigation held by Assistant Inspector Thomas and the Coroner of Vigo County, together with an examination of the scene of accident made by Mr. Thomas, it was learned that decedent was trapping a door within a short distance of a portion of the mine in which a number of rooms had been worked out and the pillars drawn. At about 1:20 o'clock p. m. of the above date an extra heavy fall of

roof occurred in two of these rooms, the fall or cave having an area of 80 by 100 feet, or 8,000 square feet, and falling a distance of six feet, the height of the coal seam, caused a rush of air equal to a tornado. A driver with a loaded car had just passed through door which decedent was tending, and the supposition is that he was in the act of closing the door when the cave occurred and the rush of air came, which hurled him against the door, crushing his head and breaking his neck, killing him instantly.

On August 3d Peter Francone, Italian, miner, aged 25 years, single, was killed by falling slate in the Glen No. 1 Mine, Clay County. At about 10 o'clock a. m. of above date decedent was assisting Dominic Maretta, a day man, to roll a heavy piece of slate off the roadway, which the latter had pulled down when a second fall came and a piece of slate 4 feet long, 4 feet wide and 6 inches thick fell on him, killing him instantly. Maretta had examined the slate which fell on decedent a few minutes prior to the accident, and decided it was safe to work under, yet his examination could not have been very rigid, as the accident occurred immediately after he made it.

August 7th Ed Evans, American, driver, aged 18 years, was fatally injured by being caught and crushed under a loaded mine car in the Dering No. 8 Mine, Vermillion County. At about 9:00 o'clock a. m. on this date decedent was coming out of the mine with a trip of loaded cars, riding by standing with one foot on the drawbar of the first car and the other on the tail chain. At the time of the accident he was passing through a cut-off and down a short grade, on which was located a canvas door. There were no spraggs in the cars, although there should have been, and the cars were running at rather a high rate of speed. When the mule reached the door for some reason it checked its speed, allowing the cars to run up against it, causing decedent to lose his footing and fall under the front end of the first car, crushing and injuring him so that he died at 5 o'clock p. m. of the same date.

August 8th Victor Bombasorow, Italian, loader, aged 56 years, single, was fatally injured by falling slate in the Big Muddy Mine, Knox County. From evidence adduced at the investigation of the accident, it was learned that some days prior to the accident decedent had fired three shots in his room, which had been undercut with an electric mining machine. Two of the shots were

placed one on each rib and the third one in the center of the room. The latter was known as the breaking-down shot, and was drilled up into the roof some three inches. This shot when fired loosened a piece of slate 7 feet long, 6 feet wide and from 3 to 4 inches thick. At about 10:30 o'clock a. m. of above date deceased was loading a car of coal, working directly under this loose slate when suddenly, without warning, it gave way, falling on him, crushing him and inflicting injuries from which he died at 2:30 o'clock p. m. of the same date.

On August 9th Archie McClelland, Scotch, boss timber man, aged 45 years, was killed almost instantly by falling slate at a double parting in the Glendora Mine, Sullivan County. There was no one immediately present at the time of the accident and little was learned as to the cause other than decedent had charge of the timbering and caring for loose slate on that side of the mine in which the accident occurred and that he knew the slate was loose, having a few minutes prior to his death warned a driver not to pass under it, as it was dangerous. The presumption is that he was either trying to take the slate down or was making arrangements to timber it. When found he was lying under a piece of slate 8 feet long, 5 feet wide and 4 inches thick, and lived about twenty minutes after it had been taken off him. He leaves as dependents two children.

August 21st, at about 8:00 a. m., Ross Williams, American, driver, aged 28 years, was instantly killed in the Cloverland No. 2 hoisting shaft, Clay County. Little could be learned as to the exact cause of this accident except the fact that the mine being idle, the drivers and mules were being sent out of the mine. When it came his turn Williams, with his mule, got on the cage and gave the word to bell it away, the hoisting signal was given and after the cage had ascended the shaft some distance an unusual noise was heard and the engineer was signaled to stop. As soon as the cage was stopped the mine boss called up the shaft to Williams, but got no reply. A miner by the name of Cliff Jackson then climbed up the shaft a distance of 53 feet to where the cage was and found decedent lying on his back on the floor of the cage, his head hanging over and between the cage bottom and a buntin, life extinct. The presumption is that he in some way lost his balance and fell, or was probably thrown against the buntins

by the mule. He leaves a wife and three children. Charges of fast driving and incompetency were preferred by some members of the local union against the hoisting engineer, Fred Shefferman. These charges were investigated by the State President of the miners' organization and myself, at which investigation the charges were proven false and the engineer exonerated from any blame whatever.

August 25th John Duning, American, miner, age unknown, was killed by a shot blowing through a pillar in the Shirley Hill No. 1 Mine, Sullivan County. From evidence brought forward at the investigation of this accident, together with my inspection of the premises, it was learned that the course of room one on the third southwest entry, which was being driven parallel to the main entry, had in some way been turned off its proper course and that the barrier pillar between the two places reduced to about eight feet two inches in thickness. This room was undercut six feet deep with an electric chain mining machine on the day of the accident and a hole drilled five and one-half feet deep on the rib next to the main entry. This shot was charged with 18 inches (possibly two pounds) of powder, and when fired blew through the pillar, throwing out probably one-half a ton of coal, expending its entire force on that side of the pillar. The main entry was the traveling road into and out of the mine for all persons working inside that point. Dunning, whose working place was on the third northwest entry, having completed his day's work, was on his way to the shaft bottom and had reached a point directly opposite that where the shot came through the pillar just as it exploded, receiving the full force of the blast, pieces of flying coal striking him, crushing his skull and mangling him otherwise, killing him instantly. He leaves a wife and five children. Considerable negligence on the part of the mine boss is shown in this accident, as he testified on the witness stand that he thought the pillar was 19 feet thick, but that the only examination made by him to determine that fact was listening to the machine retreat after it had made an undercut. Considering the fact that all of the persons working inside the point where the accident occurred must pass directly by that point, also the additional fact that the men who were driving the room were not English-speaking people, unused to the custom and methods of this country, should

have caused him to take every precaution possible to prevent an accident such as occurred.

#### OCTOBER.

Three deaths due to mine accidents occurred during this month, the first of which was that of William Mattingly, American, miner, aged 62 years, who was killed instantly on the 16th inst. by falling slate in the Montgomery No. 3 Mine, Daviess County. No one witnessed this accident, and little was learned at the investigation other than the fact that Mattingly had been driving an entry in which the roof was very bad. He had been warned repeatedly to be careful of it by the mine boss, who at one time seriously contemplated stopping the place on account of having so much falling slate to handle, but at the insistence of Mattingly decided to drive it a short distance farther in hopes that the roof would get better. Decedent when discovered by the driver at about 10 o'clock a. m., was lying under a large piece of rock which would weigh probably two tons, and life had been extinct for some time. He leaves a wife and three children.

October 23d Edward Boger, German, driver, aged 30 years, was killed by falling slate at the Big Muddy Mine, Knox County. At the time he met his death (9:00 o'clock a. m.), decedent was going into a room with his mule for the purpose of pulling a car of coal, and when within about 35 feet of the face of the room, while passing under a fault or slip in the roof, a large piece of slate, V-shaped and of slip formation, 7 feet in length, 5 feet wide and 12 inches thick in the center, suddenly, without warning, gave way, falling on him, killing him almost instantly. He leaves a wife, but no children.

On October 24th a second fatal accident occurred in Knox County, when Wilson Moore, American, trackman, was killed by a falling boulder (commonly called by miners "nigger head"), in the Lynn mine. At firing time on the afternoon of the day previous to the accident the coal had caught fire from a shot in the face of one of the working places, and on the following day Moore and several other persons were at work trying to extinguish the fire by mining off the coal that was on fire and throwing water on it. At the time he met his death (2:30 o'clock p. m.) decedent, knowing the boulder which caused his death and the slate sur-

rounding to have been loosened very much by the heat of the fire, was at work shoveling out some fallen slate from under it, preparatory to setting up some props. The place was filled with smoke and steam made by throwing water on the fire, which prevented as thorough an examination of the roof as should have been made, and later development proved the boulder and slate much looser than it was supposed to be. Decedent had just commenced shoveling, and while standing directly under the boulder it and the entire mass surrounding it gave way, falling on him, killing him almost instantly. A son and daughter survive him, but no dependents.

## NOVEMBER.

Four fatalities were recorded during this month, the first of which was the death of John Stoivanof, a Servian miner, aged 25 years, single, who was killed on the 19th inst. by an ascending cage in the Mecca No. 3, hoisting shaft, Parke County: Decedent had been showing a couple of friends through the mine, the latter never having been in or seen a mine prior to this time, and at about 3:30 o'clock p. m., having completed their visit, they were returning to the surface. When about twenty feet up from the bottom of the shaft, decedent from some cause fell over against the buntins and the cage, which was running very fast, caught and dragged him through a space of about four and one-half inches between the buntins and the cage bottom, killing him instantly and permitting him to fall back to the bottom of the shaft. There were hand bars within easy reaching distance and had decedent taken the precaution of holding to them the accident would in all probability not have happened.

On November 24th John Kiddele, a Polish miner, aged 40 years, was fatally injured by falling slate in the Lawton Mine, Vigo County. At about 12:00 noon decedent was engaged in loading a car of coal, when a piece of draw slate 5 feet long, 2½ feet wide and 3 inches thick fell on him, dislocating his spine, breaking his leg and injuring him otherwise, so that he died two days later. A dependent wife and three children survive him.

On the same date as that on which the above accident occurred Charles Groves, a Russian miner, aged 28 years, single, was killed

by an ascending cage in the Vigo County Coal Company's Ray Mine, Vigo County. Decedent had forgotten his dinner pail and left it on the pit head when going into the mine to work on the morning of above date, and was returning to the surface to get it at about 6:45 a. m. He stepped on the cage and gave the word to bell it away, and when the cage had reached a point about 25 feet from the bottom he in some way fell over against the buntins and was drawn through between them and the cage bottom, crushing his head and chest, killing him instantly. The cage was well provided with handle bars or supports, and had decedent taken the precaution of holding to them his life might have been spared.

November 28th Lorenzo Patritto, an Italian miner, aged 28 years, was killed by an explosion of fire damp and blasting powder combined in the Zellar McClelland Superior No. 2 Mine, Parke County. From evidence adduced at the investigation of the accident it was learned that Patritto's working place was room No. 2, on the third east entry, and that a heavy fall or cave-in occurred in room No. 1 the evening prior to the accident, opening a small pocket of gas, which accumulated at the face of No. 2 room, and when decedent entered his working place at 7:30 a. m. of above date he fired this gas, which in turn exploded a keg of powder and possibly some dynamite. The force of the explosion hurled decedent across the entry and against the opposite pillar, crushing almost every bone in his body, killing him instantly. He leaves a wife and one child.

#### DECEMBER.

Two fatalities occurred in this month as follows: On the 18th inst. Frank Ashey, an Austrian miner, aged 26 years, single, was killed by falling slate in the Zellar McClelland Coal Company's Superior No. 3 Mine, Parke County. At the time of the accident—8:00 o' clock a. m.—decedent was engaged mining off a loose shot, when a large piece of slate 20 feet long, 4½ feet wide and 2 feet thick fell on him, killing him instantly.

December 22d George Cassey, American, miner, aged 26 years, was instantly killed by a delayed shot in the Sunnyside Mine, Vanderburgh County. At firing time on the evening of above date decedent had prepared two shots to fire, one of which was tamped



on a needle to be fired with a squib and the other on fuse. After lighting the squib he ran to a place of safety, where he waited until he thought the shot should have had time to explode, and thinking the squib had either missed or had gone out, he returned to light the fuse. When within a few feet of the shot which he was trying to fire with the squib it exploded, hurling him about 25 feet or more down the room, killing him instantly. He leaves as dependents a wife and one child.

The following summary table contains the names, age and occupation of persons killed, cause and date of each accident, the name of mine and county in which the accident occurred, the name of the mine owner and the number of persons dependent on those killed.

## SUMMARY OF FATAL ACCIDENTS.

DATE.	NAME.	AGE.	DEPEND- ENTS.	OCCUPATION.	CAUSE.	MINE.	COMPANY.	COUNTY.
Jan. 4.	John Galloway	26	3	Shot firer	Smoke explosion	Buckeye No. 2	McClelland Coal Co.	Vermillion
Jan. 12.	Fred Willis	18	0	Driver	Fell under mine car.	Victoria	L. T. Dickason Coal Co.	Greene
Jan. 17.	George Hugh	46	6	Day laborer	Falling slate	Semi-Block	Linton Semi-Block Coal Co.	Sullivan
Jan. 28.	Andrew Trueblood	25	2	Loader	Falling slate	Wilfred	Wilfred Coal Co.	Sullivan
Feb. 8.	Tilman Shoemaker	28	2	Miner	Premature blast	Oswald	Princeton Coal & Mining Co.	Gibson
Feb. 12.	Len E. Webb	52	2	Night foreman	Fell down shaft	Glendoria	W. S. Bogle Coal Co.	Sullivan
Feb. 28.	Dan Shake	44	3	Miner	Powder explosion	Knox	Knox Coal Co.	Knox
Mar. 6.	Jacob Brummitt	26	3	Driver	Fell off ascending cage	Jackson Hill No. 2	Jackson Hill Coal Co.	Sullivan
Mar. 10.	Alfred Geiser	20	0	Miner	Misplaced shot	Oswald	Princeton Coal & Mining Co.	Gibson
Mar. 10.	Edward Geiser	22	0	Miner	Misplaced shot	Oswald	Princeton Coal & Mining Co.	Gibson
Mar. 10.	William Biggs	38	5	Miner	Misplaced shot	Oswald	Princeton Coal & Mining Co.	Gibson
Mar. 10.	Harry Tagget	48	0	Miner	Misplaced shot	Oswald	Princeton Coal & Mining Co.	Gibson
Mar. 10.	George Dill	47	5	Miner	Misplaced shot	Oswald	Princeton Coal & Mining Co.	Gibson
Mar. 10.	John Dill	21	0	Miner	Misplaced shot	Oswald	Princeton Coal & Mining Co.	Gibson
Mar. 10.	Joseph Ward	52	3	Miner	Misplaced shot	Oswald	Princeton Coal & Mining Co.	Gibson
Mar. 10.	William Jones	65	3	Miner	Misplaced shot	Oswald	Princeton Coal & Mining Co.	Gibson
Mar. 10.	Hodson Weatherly	30	3	Miner	Misplaced shot	Oswald	Princeton Coal & Mining Co.	Gibson
Mar. 10.	Harlin Lee	19	0	Miner	Premature blast	Island Valley No. 2	Island Valley Coal Co.	Greene
Apr. 14.	James Haggas	19	3	Flat trimmer	Run over by railroad cars	Maple Valley	Maple Valley Coal Co.	Vermillion
Apr. 19.	J. W. Spraggins	19	2	Driver	Crushed between mine car and roof	Ayrshire No. 3	D. Ingle Coal Co.	Pike
May 8.	Anton Lackman	55	0	Miner	Falling slate	Lost Creek	Lost Creek Coal Co.	Vigo
June 2.	James Phillips	30	4	Miner	Falling slate	Hocking	Southern Indiana Coal Co.	Sullivan
June 7.	Jack Ferrells	30	4	Miner	Falling slate	Hocking	Southern Indiana Coal Co.	Sullivan
June 3.	Franz Gerper	38	5	Miner	Delayed shot	Lattas Creek	Lattas Creek Coal Co.	Greene
June 9.	Paul Phillips	19	0	Loader	Explosion fire damp	Reliance	Reliance Coal Co.	Sullivan
June 13.	Clinton Harris	33	2	Driver	Falling slate	Ind. Block	Ind. Block Coal Co.	Clay
June 25.	Viola Yates	6	0	Female	Not an Employee	Island No. 1	Island Coal Co.	Greene
June 28.	Richard A. Spur	46	8	Day laborer	Falling slate	Pan American	Plymouth Block Coal Co.	Parke
June 30.	Mat Karpge	37	5	Miner	Falling slate	Jackson Hill No. 2	Jackson Hill Coal Co.	Sullivan
July 13.	Samuel Anderson	38	3	Miner	Falling slate	Brazil Block No. 7	Brazil Block Coal Co.	Clay
July 27.	George Hilligas	23	3	Miner	Powder explosion	Island No. 4	Island Coal Co.	Sullivan
Aug. 2.	Earl Martin	16	0	Trapper	Crushed by mine door	Lawton	Coal Bluff Mining Co.	Vigo
Aug. 3.	Peter Francone	25	0	Miner	Falling slate	Glen No. 1	Coal Bluff Mining Co.	Clay
Aug. 7.	Ed Evans	18	0	Driver	Fell under mine car	Dering No. 8	Dering Coal Co.	Vermillion
Aug. 8.	Victor Bomborrow	56	0	Loader	Falling slate	Big Muddy	Big Muddy Coal Co.	Knox
Aug. 9.	Archie McClelland	49	2	Timberman	Falling slate	Glendoria	W. S. Bogle Coal Co.	Sullivan

Aug. 21..	Ross Williams.....	28	4	Driver.....	Ascending cage.....	Cloverland No. 2.....	Zellar-McClellan Coal Co....	Clay
Aug. 25..	John Dunning.....	.....	6	Miner.....	Shot blowing through pillar.....	Shirley Hill No. 1.....	Coal Bluff Mining Co.....	Sullivan
Oct. 16.	Wm. Mattingly.....	62	4	Miner.....	Falling slate.....	Montgomery No. 3....	Davies Coal Co.....	Davies
Oct. 23..	Edward Burges.....	30	1	Driver.....	Falling slate.....	Big Muddy.....	Big Muddy Coal Co.....	Knox
Oct. 24..	Wilson Moore.....	58	0	Trackman.....	Falling slate.....	Lynn.....	Lynn Coal Co.....	Knox
Nov. 19..	John Slovenoff.....	25	0	Miner.....	Ascending cage.....	Mecca No. 3.....	Mecca Coal Co.....	Parke
Nov. 24..	John Kiddle.....	40	4	Miner.....	Falling slate.....	Lawton.....	Coal Bluff Mining Co.....	Vigo
Nov. 24..	Charles Groves.....	28	0	Miner.....	Ascending cage.....	Ray.....	Vigo County Coal Co.....	Vigo
Nov. 28..	Lorenzo Patritto.....	28	2	Miner.....	Powder explosion.....	Cloverland No. 2.....	Cloverland Coal Co.....	Parke
Dec. 18..	Frank Ashey.....	26	0	Miner.....	Falling slate.....	Superior No. 3.....	Zellar-McClellan Coal Co....	Parke
Dec. 22..	George Cassey.....	26	2	Miner.....	Delayed shot.....	Sunnyside.....	Sunnyside Coal Co.....	Vanderburgh

## TABLE

Showing Nationality of Persons Killed in or Around the Mines of Indiana During the Year 1905, Also Persons Dependent on Them for Support.

NATIONALITY.	Number Killed.	DEPENDENTS.				
		Wives.	Children.	Father.	Mother.	Other Dependents.
American.....	29	17	53	1	2	4
Irish.....	1	1	2			
English.....	1					
Scotch.....	4	4	8			
Polish.....	1	1	3			
Russian.....	1				1	
Servian.....	1				1	
Austrian.....	1				1	
Welsh.....	1	2	7			
German.....	4			2	3	4
Italian.....	3	1	1	1	2	
Total.....	47	26	74	4	10	8

## COMPARATIVE TABLE

Showing Number of Tons of Coal Mined Each Year, the Number of Persons Employed and the Number of Tons per Each Death from January 1, 1879, to January 1, 1906.

Year.	Tons Produced.	Employes.	Deaths.	Tons per Death.
1879.....	1,196,490	3,459	Not reported.	
1880.....	1,550,375	No report.	Not reported.	
1881.....	1,771,536	4,567	10	177,153
1882.....	1,900,000	No report.	Not reported.	
1883.....	2,560,000	5,403	11	232,227
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	228,571
1887.....	3,217,711	No report.	Not reported.	
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	198,586
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	7,934	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	55	181,683
1904.....	9,872,404	17,838	34	290,364
1905.....	10,995,972	17,856	47	233,956

## SERIOUS ACCIDENTS.

Of the one hundred and one serious accidents occurring during the year, little can be said other than the fact that they are due to the ordinary risks or dangers incident to mining. The above number includes those who have received broken bones, internal injuries, cuts, bruises, or such other injuries as we think require special mention.

A majority of such accidents have been investigated by this office, and we exhibit by counties in the following table the names and occupations of persons injured, the cause and date of accident, extent of injury, the name of mine and county in which the accident occurred and the name of company owning the mine.

## TABLE OF SERIOUS ACCIDENTS.

## JANUARY.

DATE.	NAME.	OCCUPATION.	INJURY.	CAUSE.	MINE.	COMPANY.	COUNTY.
Jan. 3.	Wm. Jones.....	Miner.....	Face, hands, body burned.....	Blow out shot.....	Lucia.....	Mecca Coal Co.....	Parke.
Jan. 3.	Mike King.....	Miner.....	Face, hands, body burned.....	Blow out shot.....	Lucia.....	Mecca Coal Co.....	Parke.
Jan. 3.	James Haney.....	Miner.....	Face, hands, body burned.....	Blow out shot.....	Lucia.....	Mecca Coal Co.....	Parke.
Jan. 3.	George Baty.....	Miner.....	Face and body burned.....	Blow out shot.....	Lucia.....	Mecca Coal Co.....	Parke.
Jan. 23.	Robert Hooper.....	Trip rider.....	Foot crushed.....	Mine car.....	Black Creek.....	Mecca Coal Co.....	Parke.
Jan. 31.	Barney Bemach.....	Miner.....	Overcome by smoke.	Back on shot.....	Gifford No. 1.....	Black Creek Coal Co. Collins Coal Co.....	Greene. Clay.

## FEBRUARY.

Feb. 11.	James M. Keith...	Driver.....	Arm broken.....	Descending cage.....	Shirley Hill.....	Coal Bluff Mining Co.	Sullivan.
Feb. 17.	George Lang.....	Pumper.....	Hand crushed.....	Pump piston.....	Jackson Hill No. 2..	Jackson Hill Coal Co.	Sullivan.
Feb. 23.	Harlan Kays.....	Miner.....	Shoulder injured.....	Falling slate.....	Ayrshire.....	D. Ingle Coal Co.....	Pike.
Feb. 26.	Ed Murry.....	Engineer.....	Back injured.....	Fell off boiler.....	Klondike.....	Dering Coal Co.....	Vigo.

## MARCH.

Mar. 7.	James Gilmore....	Day laborer....	Back injured.....	Falling slate.....	Island Valley No. 5..	Island Valley Coal Co.	Greene.
Mar. 11.	Andrew Maxwell..	Miner.....	Back injured.....	Falling slate.....	Island No. 2.....	Island Coal Co.....	Greene.
Mar. 11.	Name not given....	Driver.....	Foot broken.....	Mine car.....	Ayrshire No. 4.....	D. Ingle Coal Co.....	Pike.
Mar. 16.	Henry Vanatte....	Miner.....	Back injured.....	Falling slate.....	Brazil Block No. 4..	Brazil Block Coal Co.	Clay.
Mar. 22.	John Neal.....	Boss driver....	Leg broken.....	Mine car.....	Shirley Hill.....	Coal Bluff Mining Co.	Sullivan.
Mar. 25.	Gregory Sanderson	Driver.....	Leg broken.....	Fell under mine car.	Lucia.....	Mecca Coal and Min- ing Co.....	Parke.

## APRIL.

Apr. 6..	Lenard Deliaud .....	Miner .....	Injured internally...	Falling slate.....	Brazil Block No. 8..	Brazil Block Coal Co.	Clay.
Apr. 11..	Marion Patton.....	Miner .....	Leg broken .....	Falling coal .....	Continental.....	Continental Clay and Mfg. Co.....	Clay.
Apr. 24..	Virgil Rife.....	Miner .....	Severely burned.....	Explosion of powder	Maple Valley.....	Maple Valley Coal Co.	Vermillion.
Apr. 29..	Bert Anderson.....	Driver.....	Leg broken .....	Caught by mine car.	Miami No. 1 .....	Miami Coal Co.....	Vigo.

## MAY.

May 5..	Samuel Antis.....	Machine run- ner.....	Fingers and nose broken .....	Delayed shot .....	Vivian No. 5.....	Vivian Coal Co.....	Clay.
May 6..	Henry Lawhead...	Trackman.....	Head injured.....	Falling slate.....	Burk .....	Ohio River Valley Coal Co.....	Warrick.
May 14..	Joseph Urbank...	Miner .....	Back injured .....	Falling slate.....	Wheatland .....	Washington Wheat- land Coal Co.....	Daviess.
May 16..	Jas. F. Andrews...	Miner .....	Shoulder and hips injured.....	Falling coal.....	Miami No. 1 .....	Miami Coal Co.....	Vigo.
May —	Joe Grugs.....	Miner .....	Leg broken .....	Mine car.....	Broadhurst .....	Home Coal Co.....	Vigo.
May —	George Snalenburg	Loader.....	Skull fractured .....	Delayed shot .....	Dering No. 14.....	Dering Coal Co.....	Vigo.
May 21..	Albert Welch.....	Miner .....	Face and body burned.....	Blow out shot.....	Phoenix No. 4.....	New Pittsburg Coal Co.	Sullivan.
May 21..	Comodore Irwin...	Miner .....	Face and body burned.....	Blow out shot.....	Phoenix No. 4.....	New Pittsburg Coal Co.	Sullivan.

## JUNE.

June 9..	Joseph Savant. ...	Miner .....	Leg broken .....	Premature shot.....	Superior No. 2.....	Zellar-McClellan Coal Co.....	Clay.
June 9..	William White .....	Fire boss .....	Severely burned.....	Explosion fire damp.	Reliance .....	Reliance Coal Co.....	Sullivan.
June 9..	Fred White .....	Timberman .....	Severely burned.....	Explosion fire damp.	Reliance .....	Reliance Coal Co.....	Sullivan.
June 9..	Henry White.....	Timberman .....	Severely burned.....	Explosion fire damp.	Reliance .....	Reliance Coal Co.....	Sullivan.
June 9..	Fred Jones.....	Trackman .....	Severely burned.....	Explosion fire damp.	Reliance .....	Reliance Coal Co.....	Sullivan.
June 9..	J. A. Garwood .....	Trackman .....	Severely burned.....	Explosion fire damp.	Reliance .....	Reliance Coal Co.....	Sullivan.
June 9..	William Phillips.	Loader.....	Severely burned.....	Explosion fire damp.	Reliance .....	Reliance Coal Co.....	Sullivan.
June 13..	Fred McCleary.....	Miner .....	Back broken .....	Falling slate.....	Indiana Block No. 1	Indiana Block Coal Co.	Clay.
June 27..	Harry Morris.....	Miner .....	Skull fractured .....	Falling slate.....	Rosebud No. 2 .....	Vigo County Coal Co.	Vigo.
June —	Tom Bucher .....	Driver .....	Spine injured.....	Falling slate.....	Hocking .....	Indiana Hocking Coal Co.....	Sullivan.

## TABLE OF SERIOUS ACCIDENTS—Continued.

JULY.

DATE.	NAME.	OCCUPATION.	INJURY.	CAUSE.	MINE.	COMPANY.	COUNTY.
July 1..	Oscar Blair.....	Miner.....	Arm fractured.....	Falling slate.....	Lower vein block....	Lower Vein Block Coal Co.....	Clay.
July 6..	Thomas Beecher...	Driver.....	Spine fractured.....	Falling slate.....	Hocking.....	Indiana Hocking Coal Co.....	Sullivan.
July 10..	Lincoln James....	Miner.....	Leg fractured.....	Falling slate.....	Victoria.....	L. T. Dickason Coal Co.....	Greene.
July —	Ransome Moore...	Driver.....	Leg broken.....	Mine car and prop...	Victoria.....	L. T. Dickason Coal Co.....	Greene.
July —	Dock Milton.....	Machine run- ner.....	Leg broken.....	Machine and mine car.....	Midland.....	Midland Coal Co.....	Greene.
July 12..	John Morris.....	Miner.....	Leg broken.....	Falling slate.....	Gilmour.....	Indiana Southern Coal Co.....	Greene.
July 15..	John Small.....	Loader.....	Back injured.....	Falling slate.....	Lattas Creek.....	Lattas Creek Coal Co.	Greene.
July 17..	Carl McAlister....	Driver.....	Finger cut off.....	Caught by tail chain.	Hocking.....	Indiana Hocking Coal Co.....	Sullivan.
July 24..	Charles Pingley....	Miner.....	Back injured.....	Falling slate.....	Black Hawk.....	Black Hawk Coal Co.	Sullivan.
July 25..	E. W. Rogers.....	Miner.....	Toes cut off.....	Falling slate.....	Hocking.....	Indiana Hocking Co.	Sullivan.



## AUGUST.

Aug. 7.	William Burns .....	Miner .....	Leg broken.....	Mine car.....	Lawrence No. 7.....	Zellar-McClelland Coal Co.....	Clay.
Aug. 4.	George Goodwin...	Miner .....	Ribs fractured.....	Falling slate.....	Gilmour.....	Indiana Southern Coal Co.....	Greene.
Aug. 5.	Gip Gott.....	Miner .....	Ribs fractured.....	Falling slate.....	Black Creek.....	Black Creek Coal Co.....	Greene.
Aug. 7.	Daniel Morris.....	Miner .....	Foot crushed.....	Falling slate.....	Kettle Creek.....	Kettle Creek Min. Co.....	Sullivan.
Aug. 8.	Ed Thomas.....	Miner .....	Back injured.....	Falling slate.....	Dering No. 12.....	Dering Coal Co.....	Sullivan.
Aug. 11.	William James.....	Lumberman .....	Back injured.....	Falling slate.....	Hocking.....	Indiana Southern Coal Co.....	Sullivan.
Aug. 16.	James Rose.....	Miner .....	Severely burned.....	Delaved shot.....	Little Giant.....	Coal Bluff Mining Co.....	Sullivan.
Aug. —	John Southard.....	Miner .....	Severely burned.....	D. layed shot.....	Little Giant.....	Coal Bluff Mining Co.....	Sullivan.
Aug. 22.	William Pentlin...	Miner .....	Foot broken.....	Falling slate.....	Gilmour.....	Indiana Southern Coal Co.....	Sullivan.
Aug. —	Fred Hatcher.....	Driver .....	Fingers cut off.....	Mine car.....	Green Valley.....	Green Valley Coal Co.....	Greene.
Aug. 8.	Arthur Gray.....	Miner .....	Back injured.....	Went back on shot.....	Black Creek.....	Black Creek Coal Co.....	Sullivan.
Aug. 8.	Richard Ladson.....	Mine boss.....	Fingers cut off.....	Mining machine.....	Lattas Creek.....	Lattas Creek Coal Co.....	Greene.
Aug. 8.	William Willie.....	Driver .....	Leg injured.....	Kicked by mule.....	Star City.....	Con. So. Ind. Coal Co.....	Sullivan.
Aug. 8.	William Highfield.	Driver .....	Leg injured.....	Kicked by mule.....	Ind. Con. No. 29.....	Ind. Con. So. Coal Co.....	Sullivan.

## SEPTEMBER.

Sept. 7.	Estil Matox.....	Miner .....	Face, hands burned.	Explosion fire damp.	Prospect Hill.....	Sugar Loaf Mining Co.....	Knox.
Sept. 10.	John Chenewyeth ..	Miner .....	Severely burned.....	Premature shot.....	Consolidated 34.....	Con. Indiana Coal Co.....	Sullivan.
Sept. 15.	Henry Heines.....	Cager.....	Foot crushed.....	Mine car.....	Forrest.....	Forrest Park Coal Co.....	Vigo.
Sept. 15.	Frank Wiloby.....	Miner .....	Leg broken.....	Falling slate.....	Shirley Hill.....	Coal Bluff Mining Co.....	Sullivan.
Sept. 18.	George Myers.....	Driver .....	Crushed abdomen.....	Mine car.....	Knox.....	Knox Coal Co.....	Knox.
Sept. 21.	John Howe.....	Miner .....	Severely burned.....	Explosion fire damp.	Hocking.....	Ind. So. Coal Co.....	Sullivan.

## OCTOBER.

Oct. 10.	Thomas Thompson ..	Miner .....	Skull fractured.....	Falling slate.....	St. Clair.....	Southern Ind. Coal Co.....	Sullivan.
Oct. 14.	John D. Davis.....	Miner .....	Hip dislocated.....	Falling slate.....	Crawford No. 4.....	Crawford Coal Co.....	Clay.
Oct. 23.	Robert Moss.....	Timberman .....	Spine injured.....	Falling slate.....	Forrest Park.....	Forrest Park Coal Co.....	Vigo.
Oct. 25.	Clyde Phillips.....	Driver .....	Leg injured.....	Mine car.....	Hocking.....	Ind. So. Coal Co.....	Sullivan.
Oct. —	Fay Howey.....	Driver .....	Internal injuries.....	Mine car.....	Parke No. 10.....	Parke County Coal Co.....	Parke.

TABLE OF SERIOUS ACCIDENTS—Continued.

NOVEMBER.

DATE.	NAME.	OCCUPATION.	INJURY.	CAUSE.	MINE.	COMPANY.	COUNTY.
Nov. 3.	George Thompson.	Miner	Arm fractured.	Falling slate.	Troy.	Bergenroth Coal Co.	Perry.
Nov. 14.	James Callaway.	Miner	Head, face injured.	Falling slate.	Vandalia No. 3.	Vandalia Coal Co.	Greene.
Nov. 16.	Elmer Wickham.	Driver	Leg fractured.	Mine car.	Semi-Block.	Southern Ind. Coal Co.	Sullivan.
Nov. —.	William Davidson.	Miner	Eye injured.	Mine pick.	Oak Hill.	Oak Hill Coal Co.	Vermillion.
Nov. 19.	John Lawton.	Timberman	Back injured.	Falling slate.	Mecca No. 3.	Mecca Coal & Mining Co.	Parke.
Nov. 22.	William Taylor.	Mine boss.	Skull fractured.	Coal falling down shaft.	Mammoth.	Southern Ind. Coal Co.	Sullivan.
Nov. 22.	Robert Miller.	Cager.	Hand crushed.	Mine car.	Mammoth.	Southern Ind. Coal Co.	Sullivan.
Nov. 23.	John W. Osborn.	Miner	Skull fractured.	Falling slate.	Vandalia No. 3.	Vandalia Coal Co.	Greene.
Nov. 24.	Ed Cramer.	Miner	Ankle broken.	Falling slate.	Superior No. 1.	Zellar-McClellan Coal Co.	Parke.
Nov. 24.	John Cardwell.	Miner	Leg broken.	Falling slate.	Lawton.	Coal Bluff Mining Co.	Vigo.
Nov. 25.	Addison Sneeks.	Carpenter.	Leg broken.	Descending cage.	Deep Vein.	Deep Vein Coal Co.	Vigo.
Nov. 28.	John Gott.	Miner	Arm broken.	Falling slate.	Superior No. 1.	Zellar-McClellan Coal Co.	Parke.
Nov. 28.	John Ragus.	Miner	Severely burned.	Explosion, blasting powder.	Superior No. 2.	Zellar-McClellan Coal Co.	Parke.
Nov. 29.	John Chambers.	Driver	Ribs fractured.	Mine car.	Island No. 4.	Vandalia Coal Co.	Sullivan.

DECEMBER.

Dec. 2.	Albert E. Timons.	Miner	Skull fractured.	Blown-out shot.	Fort Branch.	Fort Branch Coal Co.	Gibson.
Dec. 3.	Orley Frazier.	Night watch.	Severely burned.	Escaping steam.	Gifford No. 1.	Collins Coal Co.	Clay.
Dec. 6.	Wm. Gray.	Driver	Abdomen crushed.	Falling slate.	Mecca No. 3.	Mecca Coal & Mining Co.	Parke.
Dec. 6.	Peter May.	Mine boss.	Foot broken.	Mine car.	Kettle Creek.	Kettle Creek Coal Co.	Sullivan.
Dec. 7.	D. Morgan.	Driver	Arm injured.	Kicked by mule.	Dering No. 12.	Dering Coal Co.	Sullivan.
Dec. 16.	John Mills.	Driver	Collar broken.	Fell under mine car.	Knox.	Knox Coal Co.	Knox.
Dec. 20.	Lewis Roberts.	Trapper	Foot crushed.	Mine car.	Knox.	Knox Coal Co.	Knox.
Dec. 21.	Fred. Bunch.	Driver	Leg injured.	Mine car.	Hocking.	Ind. Southern Coal Co.	Sullivan.
Dec. 21.	James Pierce.	Loader	Back injured.	Falling slate.	Mildred.	Ind. Southern Coal Co.	Sullivan.
Dec. —.	D. C. Squires.	Driver	Back injured.	Mine car.	Island No. 4.	Vandalia Coal Co.	Sullivan.
Dec. 22.	John Galager.	Driver	Face injured.	Kicked by mule.	Dering No. 12.	Dering Coal Co.	Sullivan.
Dec. 22.	Thomas Ward.	Miner	Internal injury.	Delayed shot.	Sunnyside.	Sunnyside Coal Co.	Vanderburgh.
Dec. 24.	Earl Archer.	Miner	Head injured.	Falling slate.	Glenn No. 1.	Coal Bluff Mining Co.	Clay.
Dec. 24.	Charles Miller.	Miner	Finger cut off.	Mine car.	Superior No. 2.	Zellar-McClellan Coal Co.	Parke.

## ACCIDENTS TO MINE PROPERTY.

Six notable accidents to mine property, which we deem worthy of mention, have occurred during the past year, and have been investigated by this office. Four of these accidents occurred in the inside workings of the mines and four in the surface plants. We give herewith a brief description of each one that occurred.

## BUCKEYE MINE.

On the evening of January 4th a smoke explosion occurred in the Buckeye Mine, Vermillion County, resulting in the death of one of the shot firers and almost a total wreck of the mine. So great was the force of the explosion that both cages were wrecked, one of them being thrown up against the sheave wheel, buntins and guides were torn out, mine doors and brattices blown out, cross-bars and other timbers knocked down and fifteen mine cars totally demolished. I have not learned what the financial loss would be, but considering the time the mine was idle, added to the property destroyed, it will probably amount to several thousand dollars.

## HYMERA No. 4 MINE.

At about 3 o'clock p. m. of February 7th, a heavy explosion of fire damp occurred in the Hymera No. 4 Mine, which in effect was very much like that occurring at the Buckeye Mine. Both cages were wrecked and thrown to the surface, buntins and guides torn out, doors and brattices blown out, mine cars demolished and timbers of various kinds knocked down, causing heavy slate falls, etc. Fortunately there was no one in the mine at the time, otherwise the results would have been disastrous. It is presumed that the explosion was due to the coal at one of the working faces having been ignited from a shot fired on the evening previous and that a body of gas had accumulated, coming in contact with it.

## MECCA No. 1 MINE.

On the night of March 18th the entire surface plant of the Mecca No. 1 Mine, Parke County, was destroyed by fire. This was probably the most destructive mine accident during the year,

as the mine was well equipped with first-class machinery, all of which was rendered useless by the fire. The financial loss was estimated at about \$20,000.

#### SHELBURN MINE.

On the evening of March 20th, at firing time, the coal at the face of one of the rooms in the Shelburn Mine, Sullivan County, caught fire, igniting from a shot. The mine was idle the following day for the purpose of making repairs and the fire was not discovered until Sunday morning, six days later, when smoke was noticed coming out of the shaft. At that time it was not known whether the fire was in the No. V or lower seam, or in the upper abandoned No. VI seam. The superintendent being absent at the time no investigation was made, but the shaft was covered over with loose planks, the purpose being to exclude the air from the fire. On his return, three days later, Superintendent Thomas uncovered and descended the shaft to No. V for the purpose of locating the fire. He had not proceeded more than seventy-five yards from the shaft bottom, however, when he encountered a body of fire damp in such quantity as precluded his making further investigation and having by this time determined the fact that the fire was in the No. V seam and still burning, he hurried to the surface and recovered the shaft with boards and dirt. He had hardly completed his work when a violent explosion occurred, doing considerable damage at the surface and wrecking the interior of the mine. Fortunately no one was injured, although several had narrow escapes from flying debris. The top of the mine was sealed off air-tight again and left to remain so for about five weeks, the fire being extinguished by this time. The shaft was uncovered, necessary repairs made and operations resumed.

#### GOLD KNOB MINE.

At about 4 o'clock a. m. June 19th the fan house and fan at the Gold Knob Mine, Clay County, was destroyed by fire, entailing a loss of about \$600 and causing the mine to remain idle for several weeks.

LUCIA MINE.

During the night of May 9th water broke into and flooded this mine, which since that time has been abandoned. Numerous other accidents of minor character, such as floods, breaking of ropes, cages, etc., incident to mining, have occurred, but as a rule have entailed such small financial loss and an idleness of such short duration we will make no mention of them.

MINE DIRECTORY.

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

CLAY COUNTY.

COMPANY.	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. 7.
Brazil Block Coal Company .....	Brazil .....	Brazil Block No. 8.
Continental Clay & Mining Company .....	Brazil .....	Continental.
I. S. & R. McIntosh Coal Company .....	Brazil .....	Rebstock.
Vandalia Coal Company .....	Indianapolis .....	Vandalia No. 50.
Vandalia Coal Company .....	Indianapolis .....	Vandalia No. 60.
Vandalia Coal Company .....	Indianapolis .....	Vandalia No. 63.
Vandalia Coal Company .....	Indianapolis .....	Vandalia No. 64.
Vandalia Coal Company .....	Indianapolis .....	Vandalia No. 65.
Zellar, McClellan & Company .....	Brazil .....	Superior No. 4.
Zellar, McClellan & Company .....	Brazil .....	Superior No. 7.
Crawford Coal Company .....	Brazil .....	Crawford No. 4.
Crawford Coal Company .....	Brazil .....	Crawford No. 5.
Crawford Coal Company .....	Brazil .....	Crawford No. 6.
Crawford Coal Company .....	Brazil .....	Crawford No. 8.
Crawford Coal Company .....	Brazil .....	Crawford No. 9.
Star Union Coal Company .....	Indianapolis .....	Fortner.
Collins Coal Company .....	Brazil .....	Gifford No. 1.
Collins Coal Company .....	Brazil .....	Gifford No. 2.
Coal Bluff Mining Company .....	Terre Haute .....	Glenn No. 1.
Coal Bluff Mining Company .....	Terre Haute .....	Glenn No. 2.
American Clay Manufacturing Company .....	Brazil .....	Monarch.
Big Vein Coal Company .....	Terre Haute .....	Lewis.
Vivian Coal Company .....	Chicago .....	Vivian No. 4.
Vivian Coal Company .....	Chicago .....	Vivian No. 5.
Indiana Block Coal Company .....	Saline .....	Saline.
Jasonville Coal Company .....	Jasonville .....	Gold Knob.
Dan Davis Coal Company .....	Brazil .....	World's Fair No. 2.
United Fourth Vein Coal Company .....	Linton .....	Island Valley No. 4.
Lancaster Block Coal Company .....	Clay City .....	Lancaster Block.
Eureka Block Coal Company .....	Terre Haute .....	Eureka No. 5.
McLaughlin & Treager .....	Carbon .....	Treager.

## DAVIESS COUNTY.

COMPANY.	ADDRESS.	MINE.
Stucky & Osborn.....	Raglesville.....	Stucky.
Daviess County Coal Company .....	Montgomery .....	Montgomery No. 3.
Mutual Mining Company .....	Cannelburg .....	Mutual.
Mandabach Bros.....	Washington.....	Mandabach.
Winklepleck & Overton.....	Raglesville.....	Winklepeck.
Overton Coal Company.....	Raglesville.....	Overton.

## FOUNTAIN COUNTY.

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

## GREENE COUNTY.

United Fourth Vein Coal Company	Linton .....	Black Creek.
United Fourth Vein Coal Company	Linton .....	Island Valley No. 3.
United Fourth Vein Coal Company	Linton .....	Glenburn.
United Fourth Vein Coal Company	Linton .....	Antioch.
United Fourth Vein Coal Company	Linton .....	North Linton.
Vandalia Coal Company .....	Indianapolis.....	Vandalia No. 2.
Vandalia Coal Company .....	Indianapolis.....	Vandalia No. 3.
Vandalia Coal Company .....	Indianapolis.....	Vandalia No. 4.
Vandalia Coal Company .....	Indianapolis.....	Vandalia No. 5.
Vandalia Coal Company .....	Indianapolis.....	Vandalia No. 6.
Vandalia Coal Company .....	Indianapolis.....	Vandalia No. 8.
Vandalia Coal Company .....	Indianapolis.....	Vandalia No. 9.
Vandalia Coal Company .....	Indianapolis.....	Vandalia No. 21.
Indiana Southern Coal Company..	Chicago, Ill .....	Gilmour.
Southern Indiana Coal Company..	Chicago, Ill .....	Hoosier No. 1.
Southern Indiana Coal Company..	Chicago, Ill .....	Hoosier No. 2.
Southern Indiana Coal Company..	Chicago, Ill .....	Midland.
Southern Indiana Coal Company..	Chicago, Ill .....	Tower Hill.
Southern Indiana Coal Company..	Chicago, Ill .....	Lattas Creek.
Vulcan Coal Company .....	Indianapolis.....	Vulcan.
Summitt Coal Company .....	Bloomfield.....	Summitt No. 2.
Victoria Coal Company .....	Linton .....	Victoria.
Green Valley Coal Company.....	Jasonville.....	Green Valley.
Crouch Coal Company .....	Jasonville.....	Fry.
Letsinger Coal Company .....	Bloomfield.....	Letsinger.
Central Coal and Mining Company	Indianapolis.....	North West.
Coal Bluff Mining Company .....	Terre Haute.....	Twin No. 4.
Coal Bluff Mining Company .....	Terre Haute.....	Twin No. 5.
Pennsylvania and Indiana Coal Company.....	Linton .....	Pennsylvania.

## GIBSON COUNTY.

Princeton Coal and Mining Company.....	Princeton .....	Oswald.
Massey Coal Company .....	Oakland City .....	Massey.
Fort Branch Coal Company.....	Fort Branch .....	Fort Branch.

## KNOX COUNTY.

Bicknell Coal Company .....	Bicknell.....	Bicknell.
Knox Coal Company .....	Bicknell.....	Knox.
Lynn Coal Company.....	Bicknell.....	Lynn.
Sugar Loaf Coal and Mining Company.....	Vincennes .....	Prospect Hill.
Vandalia Coal Company .....	Indianapolis.....	Vandalia No. 4.
Washington-Wheatland Coal Company.....	Washington.....	Wheatland.
Chicago and Big Muddy Coal Company.....	Bicknell.....	Pine Knot.

PARKE COUNTY.

COMPANY.	ADDRESS.	MINES.
Brazil Block Coal Company.....	Brazil .....	Brazil Block No. 9.
Brazil Block Coal Company.....	Brazil .....	Brazil Block No. 12.
Mecca Coal and Mining Company ..	Mecca .....	Mecca No. 3.
Lincoln Coal and Mining Company ..	Chicago, Ill. ....	Lyford No. 1.
Otter Creek Coal Company.....	Chicago, Ill. ....	Mary.
Zellar, McClellan & Company .....	Brazil .....	Superior No. 1.
Zellar, McClellan & Company .....	Brazil .....	Superior No. 2.
Zellar, McClellan & Company .....	Brazil .....	Superior No. 3.
Vandalia Coal Company .....	Indianapolis.....	Vandalia No. 316.
Vandalia Coal Company .....	Indianapolis.....	Vandalia No. 317.
Plymouth Block Coal Company ..	Terra Haute .....	Pan American.
Parke County Coal Company .....	Rosedale .....	Parke No. 1.
Parke County Coal Company .....	Rosedale .....	Parke No. 12.
W. P. Harrison .....	Rockville .....	Harrison.
C. B. Harrison .....	Rockville .....	Harrison.
Clay County Coal Company.....	Carbon .....	Clay County.

PERRY COUNTY.

Bergenroth Bros. ....	Troy .....	Troy.
-----------------------	------------	-------

PIKE COUNTY.

Ayrshire Carbon Coal Company ...	St. Louis, Mo. ....	Aberdeen.
Ayrshire Carbon Coal Company ...	St. Louis, Mo. ....	Carbon.
D. Ingle Coal Company .....	Oakland City .....	Ayrshire No. 3.
D. Ingle Coal Company .....	Oakland City .....	Ayrshire No. 4.
D. Ingle Coal Company .....	Oakland City .....	Ayrshire No. 5.
S. W. Little Coal Company.....	Evansville .....	Rogers.
S. W. Little Coal Company.....	Evansville .....	Blackburn.
S. W. Little Coal Company.....	Evansville .....	Littles.
Patoka Valley Coal Company .....	Huntingburg .....	Hartwell.
Muncie Coal and Mining Company ..	Muncie .....	Petersburg.
Winslow Gas Coal Company .....	Winslow .....	Winslow No. 4.
Winslow Gas Coal Company .....	Winslow .....	Winslow No. 5.

SULLIVAN COUNTY.

Indiana Southern Coal Company..	Chicago, Ill. ....	Bunker Hill.
Indiana Southern Coal Company..	Chicago, Ill. ....	Caladonia.
Indiana Southern Coal Company..	Chicago, Ill. ....	Phoenix No. 4.
Indiana Southern Coal Company..	Chicago, Ill. ....	Cummins.
Indiana Southern Coal Company..	Chicago, Ill. ....	Hooking.
Indiana Southern Coal Company..	Chicago, Ill. ....	Citizens.
Sunflower Coal Company .....	Dugger .....	Sunflower.
Consolidated Indiana Coal Com- pany .....	Chicago .....	Consolidated No. 25.
Consolidated Indiana Coal Com- pany .....	Chicago .....	Consolidated No. 26.
Consolidated Indiana Coal Com- pany .....	Chicago .....	Consolidated No. 28.
Consolidated Indiana Coal Com- pany .....	Chicago .....	Consolidated No. 29.
Consolidated Indiana Coal Com- pany .....	Chicago .....	Consolidated No. 30.
Consolidated Indiana Coal Com- pany .....	Chicago .....	Consolidated No. 31.
Consolidated Indiana Coal Com- pany .....	Chicago .....	Consolidated No. 32.
Consolidated Indiana Coal Com- pany .....	Chicago .....	Consolidated No. 33.
Consolidated Indiana Coal Com- pany .....	Chicago .....	Consolidated No. 34.
Vandalia Coal Company .....	Indianapolis .....	Vandalia No. 10.
Vandalia Coal Company .....	Indianapolis .....	Vandalia No. 30.
New Linton Coal Company .....	Indianapolis .....	West Linton.
Jackson Hill Coal and Mining Company .....	Terre Haute .....	Jackson Hill No. 2.
Jackson Hill Coal and Mining Company .....	Terre Haute .....	Jackson Hill No. 4.

## SULLIVAN COUNTY—Continued.

COMPANY.	ADDRESS.	MINE.
Keystone Coal Company .....	Chicago, Ill. ....	Shelburn.
Sullivan County Coal Company ..	Dugger .....	Freeman.
Dering Coal Company .....	Chicago, Ill. ....	Dering No. 12.
Dering Coal Company .....	Chicago, Ill. ....	Dering No. 13.
Dering Coal Company .....	Chicago, Ill. ....	Dering No. 14.
Southern Indiana Coal Company ..	Chicago, Ill. ....	Semi-Block.
Southern Indiana Coal Company ..	Chicago, Ill. ....	Mammoth Vein.
Shirley Hill Coal Company .....	Terre Haute .....	Shirley Hill No. 1.
Coal Bluff Mining Company .....	Terre Haute .....	Little Giant.
Coal Bluff Mining Company .....	Terre Haute .....	Shirley Hill No. 2.
Superior Coal Company .....	Terre Haute .....	Superior.
Kettle Creek Coal Company .....	Terre Haute .....	Kettle Creek.
Peabody Coal Company .....	Chicago, Ill. ....	Reliance.
Linton Bituminous Coal Company ..	Linton .....	Hamilton.
United Fourth Vein Coal Company ..	Linton .....	Black Hawk.
Clover Leaf Coal Company .....	Dugger .....	Clover Leaf.

## VANDERBURGH COUNTY.

Diamond Coal Company .....	Evansville .....	Diamond.
Thomas Coal Company .....	Evansville .....	First Avenue.
D. Ingle Coal Company .....	Evansville .....	Inglefield.
Sunnyside Coal Company .....	Evansville .....	Sunnyside.
Evansville Coal and Mining Com- pany .....	Evansville .....	Union.
Crescent Coal and Mining Company ..	Evansville .....	Unity.

## VERMILLION COUNTY.

Dering Coal Company .....	Chicago, Ill. ....	Dering No. 5.
Dering Coal Company .....	Chicago, Ill. ....	Dering No. 6.
Dering Coal Company .....	Chicago, Ill. ....	Dering No. 7.
Dering Coal Company .....	Chicago, Ill. ....	Dering No. 8.
Dering Coal Company .....	Chicago, Ill. ....	Dering No. 15.
Cayuga Press Brick Company .....	Cayuga .....	Crown Hill No. 1.
Crown Hill Coal Company .....	Clinton .....	Crown Hill No. 2.
Shirkie Bros. ....	Clinton .....	Oak Hill.
Shirkie Bros. ....	Clinton .....	Maple Valley No. 1.
Shirkie Bros. ....	Clinton .....	Buckeye No. 2.
Keller Coal Company .....	Clinton .....	Prince.

## VIGO COUNTY.

Charles F. Keeler Coal Co. ....	Chicago, Ill. ....	Atherton.
M. D. West .....	Cloverland .....	Chicago No. 6.
Coal Bluff Mining Co. ....	Terre Haute .....	Diamond.
Coal Bluff Mining Co. ....	Terre Haute .....	Peerless.
Coal Bluff Mining Co. ....	Terre Haute .....	Lawton.
J. Ehrlich Coal Co. ....	Seeleyville .....	Seeleyville.
Grant Coal & Mining Co. ....	Burnett .....	Grant No. 2.
Dering Coal Co. ....	Chicago, Ill. ....	Dering No. 9.
Dering Coal Co. ....	Chicago, Ill. ....	Dering No. 10.
Vandalia Coal Co. ....	Indianapolis .....	Vandalia No. 66.
Vandalia Coal Co. ....	Indianapolis .....	Vandalia No. 67.
Vandalia Coal Co. ....	Indianapolis .....	Vandalia No. 68.
Vandalia Coal Co. ....	Indianapolis .....	Vandalia No. 69.
Vandalia Coal Co. ....	Indianapolis .....	Vandalia No. 80.
Vandalia Coal Co. ....	Indianapolis .....	Vandalia No. 81.
Vandalia Coal Co. ....	Indianapolis .....	Vandalia No. 82.
Miami Coal Co. ....	Brazil .....	Miami No. 1.
Miami Coal Co. ....	Brazil .....	Miami No. 2.
Miami Coal Co. ....	Brazil .....	Miami No. 3.
Parke County Coal Co. ....	Rosedale .....	Parke No. 10.
Fauvre Coal Co. ....	Indianapolis .....	Redbird.
West Terre Haute Coal Co. ....	West Terre Haute .....	Larimer.
Deep Vein Coal Co. ....	Terre Haute .....	Deep Vein.
Vigo County Coal Co. ....	Seeleyville .....	Ray No. 2.
Indiana Southern Coal Co. ....	Chicago, Ill. ....	Forrest.
Domestic Block Coal Co. ....	Kokomo .....	Domestic Block No. 1.



WARRICK COUNTY.

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

