

## REPORT OF THE STATE INSPECTOR OF MINES FOR THE YEAR 1906.

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OFFICE OF INSPECTOR OF MINES,  
INDIANAPOLIS, IND., February 26, 1907.

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

Dear Sir: I have the honor to submit to you herewith my eighth annual report as Inspector of Mines, covering the calendar year of 1906, and being the Twenty-eighth Annual Report of this Department and the sixteenth made to the Department of Geology and Natural Resources.

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

JAMES EPPERSON,  
*Inspector of Mines.*

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## TWENTY-EIGHTH ANNUAL REPORT OF THE INSPECTOR OF MINES FOR THE STATE OF INDIANA.

This report includes the following general subjects, viz:

General Review of the Coal Industry for 1906.

Recommended Legislation.

Labor.

Mine Accidents and Statistics.

These subjects are arranged under different heads and treated in a manner such as we think will cover all information that is desirable and of public interest. In the review of coal industry we treat as fully as possible all of the conditions governing the trade during the year, including market demands and railroad service.

Under recommended legislation we advise certain changes in the present mining laws, also such new laws as we think should be enacted. Under the head of labor we include strikes, Terre Haute and Brazil Agreement and all other conditions relating to labor. Under statistics, tables are given showing the number of tons of various grades of coal produced, the block and bituminous coal each shown separately, tons shipped outside the State and tons consumed in the State, wages paid, number of mine employes, days worked, number of kegs of powder used, number of mules, average wage tables, comparative tables of production of wages, table of new and abandoned mines. Under the head of mine accidents we exhibit in various tables the number of fatal, serious and minor accidents, the causes thereof, age and occupation of persons killed and the number of dependents left at each death, a table showing the number of tons of coal produced for each death as compared with former years and accidents to mine property. There are included in this report the following additional tables, viz.: tables treating on mine explosions, table showing the geological number of coal seam mined at each mine in the State and a table showing the name of the different coal carrying railroads, tonnage transported. It is with profound regret we record the death of Assistant Inspector Andrew Dodds, occurring December 25th, after a protracted illness extending from early in April. He

was appointed Assistant Inspector of Mines March 11, 1901, which position he filled until the time of his death. His inspection work, statistical and other reports were eminently satisfactory, not only to this office but to all parties concerned. Mr. Dodds entered the mines in Scotland when but a boy and emigrated to America while yet a young man. He was sixty-five years of age and had spent more than half a century in the mines of this country and Scotland; he had served in all of the various capacities in and about mines and his knowledge acquired during all these years of experience rendered him a valuable assistant to this department. Mr. Robert M. Irving of Cayuga, Vermillion County, was appointed Mr. Dodds' successor December 26. His work in connection with the office has been entirely satisfactory.

The following summary contains most of the important totals for the year:

#### SUMMARY.

Number of coal seams operated in the State.....	6
Number of coal producing counties.....	18
Number of counties having shipping mines.....	14
Number of coal carrying railroads (see foot note).....	14
Number of traffic connections the coal roads have with other railroads .....	151
Number of new coal companies organized.....	7
Number of block coal mines.....	35
Number of bituminous mines.....	175
Number of new block coal mines opened.....	3
Number of new bituminous mines opened.....	10
Number of mines changing hands.....	10
Number of bituminous mines abandoned.....	8
Number of abandoned mines in block coal field.....	3
Number of electric chain machine mines.....	57
Number of compressed air punching machine mines.....	13
Total number of machine mines.....	70
Number of hand mines.....	140
Total number of mines employing more than ten men.....	210
Number of pick miners employed.....	9,343
Number of machine runners and helpers employed.....	879
Number of loaders employed.....	3,610
Number of inside day and monthly men employed.....	1,830
Total number of mine employes.....	19,562
Number of mules used.....	1,467
Number of kegs of powder used.....	427,025
Total number of days the mines have been operated.....	28,632
Number of tons of hand-mined block coal (screenings).....	113,241
Number of tons of hand-mined block coal (run-of-mine).....	26,890
Total number of hand-mined block coal.....	641,727



Number of tons machine-mined block coal (lump).....	89,716
Number of tons machine-mined block coal (screenings).....	15,227
Total tons machine-mined block coal.....	104,943
Total tons of all kinds of block coal.....	746,670
Number of tons hand-mined bituminous coal (lump).....	1,997,135
Number of tons hand-mined bituminous coal (screenings).....	1,246,808
Number of tons hand-mined run-of-mine bituminous coal.....	3,333,896
Total number of tons hand-mined bituminous coal.....	6,577,839
Number of tons machine-mined bituminous coal (lump).....	1,495,729
Number of tons machine-mined bituminous coal (screenings) ..	839,649
Number of tons machine-mined run-of-mine bituminous coal...	1,762,140
Total number of tons machine-mined bituminous coal.....	4,097,518
Total number of bituminous coal.....	10,675,357
Total tons of all kinds of coal produced.....	11,422,027
Number of tons of coal shipped outside the State.....	5,335,426
Number of tons coal consumed at home markets.....	6,086,601
Total wages paid to block coal miners.....	\$634,148.44
Total wages paid to inside day and monthly men at block coal mines .....	\$111,488.78
Total wages paid to outside day and monthly men at block coal mines .....	\$228,912.49
Total wages paid to block coal employes.....	\$974,549.71
Total wages paid to bituminous miners.....	\$6,134,671.23
Total wages paid to inside day and monthly men at bituminous mines .....	\$1,987,693.57
Total wages paid to outside day and monthly men at bitumin- ous mines .....	\$876,126.87
Total wages paid to bituminous mine employes.....	\$8,998,491.67
Grand total wages paid to mine employes.....	\$9,973,041.38
Total amount of money expended on improvements.....	\$125,345.09
Number of fatal accidents.....	31
Number of serious accidents.....	104
Number of minor accidents.....	98
Total number of accidents to mine employes.....	233
Total number of serious accidents to mine property.....	5

Note.—The coal carrying railroads refer only to those traversing coal producing counties and having mines situated along their lines.

TABLE

*Exhibiting by Counties the Geological Number of Coal Seams Operated in the Bituminous Coal Fields of Indiana, and the Number of Tons Produced from Each Seam in 1906.*

COUNTY.	Geological Number of Coal Seams and Tons Mined.					
	II.	III.	IV.	V.	VI.	VII.
Clay.....		135,289	114,177	137,483	347,890	
Daviess.....		22,555		41,056		
Fountain.....		78,135				
Gibson.....				93,853		
Greene.....		253,277	1,861,089	75,897		
Knox.....				87,200	138,741	87,040
Parke.....		222,403	3,870		336,340	
Perry.....	7,644					
Pike.....				465,287		
Sullivan.....		119,316	178,681	275,436	1,632,762	119,898
Vanderburgh.....				304,080		
Vermillion.....					259,806	1,373,180
Vigo.....				75,151	1,507,665	4,540
Warrick.....				315,616		
Total.....	7,644	830,955	2,157,817	1,871,059	4,223,204	1,584,658

TABLE

*Showing by Months and by Counties the Number of Tons Mined and Wages Paid to Employes for the Year 1906 at Mines Employing More Than Ten Men.*

MONTHS.	CLAY COUNTY.		DAVISS COUNTY.	
	Tonnage.	Wages.	Tonnage.	Wages.
January.....	108,707	\$106,178 77	7,974	\$9,161 00
February.....	118,463	112,948 47	8,710	9,116 93
March.....	176,937	137,079 74	8,798	9,502 33
April.....	18,309	16,909 01		
May.....	9,060	10,012 73		
June.....	67,121	68,238 53	727	1,449 40
July.....	88,355	98,824 75	1,985	2,363 54
August.....	105,082	112,597 64	4,387	4,324 60
September.....	97,193	108,933 07	6,771	8,379 75
October.....	130,970	143,845 42	7,556	3,628 50
November.....	119,109	126,606 98	8,464	13,178 36
December.....	134,374	137,493 84	8,239	9,956 75
Total.....	1,173,680	\$1,179,668 95	63,611	\$71,061 16

Table Showing by Months and by Counties the Number of Tons Mined, etc.—Con.

MONTHS.	FOUNTAIN COUNTY.		GIBSON COUNTY.	
	Tonnage.	Wages.	Tonnage.	Wages.
January.....	7,989	\$7,650 51	10,066	\$11,167 83
February.....	5,936	5,863 37	14,887	12,317 30
March.....	7,633	6,604 87	14,360	13,260 55
April.....	5,162	5,084 22		
May.....	6,163	6,020 58		
June.....	7,088	7,103 75	1,350	2,648 09
July.....	6,605	6,476 97	4,898	4,670 04
August.....	6,698	6,812 25	7,114	6,510 35
September.....	5,331	5,723 06	7,800	7,073 13
October.....	7,632	6,089 68	11,408	9,557 27
November.....	6,022	6,075 57	10,500	9,050 00
December.....	5,876	5,725 83	11,470	9,452 61
Total.....	78,135	\$75,230 66	93,853	\$85,707 17

MONTHS.	GREENE COUNTY.		KNOX COUNTY.	
	Tonnage.	Wages.	Tonnage.	Wages.
January.....	226,162	\$204,768 24	26,411	\$27,379 49
February.....	265,057	218,851 98	31,529	26,989 68
March.....	343,060	256,703 38	51,025	34,868 74
April.....	12,380	11,569 35	5,212	5,833 19
May.....	16,289	22,550 11	13,750	12,578 34
June.....	119,386	116,427 77	17,613	16,651 24
July.....	158,321	137,187 18	16,443	17,842 73
August.....	173,558	162,032 73	17,849	16,874 60
September.....	159,459	141,881 70	20,423	19,816 51
October.....	213,025	175,708 84	31,053	28,344 13
November.....	241,995	191,121 33	36,644	31,081 60
December.....	261,571	202,185 53	45,029	34,361 09
Total.....	2,190,263	\$1,840,988 14	312,981	\$272,621 34

MONTHS.	PARKE COUNTY.		PERRY COUNTY.	
	Tonnage.	Wages.	Tonnage.	Wages.
January.....	82,611	\$76,708 96	504	\$510 42
February.....	94,774	87,438 31	555	670 78
March.....	114,188	102,427 43	583	555 33
April.....	22,576	16,866 03	779	705 95
May.....	23,278	18,480 65	778	875 37
June.....	46,079	47,666 21	718	744 54
July.....	57,310	56,355 03	499	608 07
August.....	64,011	66,544 65	717	794 40
September.....	65,446	69,330 54	600	683 13
October.....	92,331	89,125 75	535	656 34
November.....	83,243	99,051 41	750	715 00
December.....	80,776	81,348 52	626	664 33
Total.....	826,623	\$811,343 49	7,644	\$8,183 66

Table Showing by Months and by Counties the Number of Tons Mined, etc.—Con.

MONTHS.	PIKE COUNTY.		SULLIVAN COUNTY.	
	Tonnage.	Wages.	Tonnage.	Wages.
January.....	46,661	\$38,393 01	267,658	\$218,371 61
February.....	57,610	44,553 18	277,318	220,168 55
March.....	68,867	50,930 43	355,777	257,805 53
April.....			5,821	6,278 23
May.....			12,428	12,327 97
June.....	18,715	18,149 39	113,287	123,865 45
July.....	31,403	28,038 21	129,992	136,466 82
August.....	36,521	31,885 89	175,897	167,140 11
September.....	36,374	36,394 67	198,080	182,010 04
October.....	59,239	47,393 21	275,305	219,938 63
November.....	55,730	42,983 73	264,090	224,468 06
December.....	54,167	45,822 64	279,573	242,985 35
Total.....	465,287	\$384,544 86	2,355,226	\$2,011,826 35

  

MONTHS.	VANDERBURGH COUNTY.		VERMILLION COUNTY.	
	Tonnage.	Wages.	Tonnage.	Wages.
January.....	28,811	\$26,588 37	183,702	\$142,138 35
February.....	27,721	25,112 16	188,542	142,173 44
March.....	46,048	27,779 75	241,790	174,458 72
April.....	10,856	12,278 12		
May.....	22,058	20,509 42		1,756 66
June.....	20,774	20,280 09	82,543	78,760 17
July.....	14,104	15,959 14	112,850	84,057 84
August.....	19,655	20,444 41	139,144	112,769 02
September.....	23,004	21,230 61	141,629	129,312 66
October.....	37,162	35,115 89	182,898	145,559 40
November.....	36,082	33,809 42	171,808	139,587 34
December.....	33,036	31,790 46	188,080	149,064 67
Total.....	319,311	\$290,897 84	1,632,986	\$1,299,638 27

  

MONTHS.	VIGO COUNTY.		WARRICK COUNTY.	
	Tonnage.	Wages.	Tonnage.	Wages.
January.....	198,427	\$179,393 63	36,120	\$21,635 25
February.....	205,962	174,318 30	35,322	21,219 26
March.....	239,433	189,227 98	53,679	32,946 78
April.....	17,834	14,633 96		
May.....	32,114	25,730 06		
June.....	95,268	91,033 86	12,691	9,131 87
July.....	83,984	77,976 78	16,098	11,070 40
August.....	109,345	102,342 18	16,486	10,872 32
September.....	136,972	123,737 60	27,753	16,035 03
October.....	157,706	139,643 45	36,361	21,649 55
November.....	174,644	157,797 76	34,071	38,371 12
December.....	178,478	157,713 89	47,035	24,848 46
Total.....	1,631,175	\$1,433,549 45	315,616	\$207,780 04

## REVIEW FOR 1906.

The fact that Indiana coal is still prominent in the home trade, forging ahead in adjoining states and adding new territory in the face of a strong competitive battle for markets is evidenced by a comparison of the output for 1906 with that of 1905. A heavy increase in the total production is noticed notwithstanding the prolonged strike of last spring, involving more than three-fourths of the largest producing mines in the State and extending over a period of about two and one-half months, the severe market congestion, the unusual car shortage, the numerous embargoes laid on coal from the Southern Indiana Railroad and the refusal of the Big Four to accept transfers from the Southern Railroad to Terre Haute. This latter condition resulted in considerable loss to operators along the Southern Indiana, and the matter on appeal from the shippers was finally referred to the State Railroad Commission for adjustment. The total production for 1906 was 11,422,027 tons, an increase of 426,055 tons, or a fraction over 3.8 per cent. over 1905; 6,086,601 tons of this production was consumed in Indiana and 5,335,426 tons were shipped to other states. Prices were more irregular in range than for years past, touching the extreme minimum of 80 cents and a maximum of \$3.00 per ton mine run f. o. b. cars at the mine for bituminous coal. Of the total production, 746,670 tons was block coal, an increase of 87,935 tons over 1905. The price of block coal ranged from \$2.00 to \$2.75 per ton screened coal f. o. b. at the mine, \$2.35 being about a general average for the year. The maximum price referred to above grew out of the abnormal demand caused by the failure of the miners and operators to reach an agreement as to scale of prices and other mining conditions at their joint convention held in the latter part of January and the almost certain probability of a strike at the end of the scale year April 1st. From the time of the disagreement until April 1st all mines were operated to full capacity in anticipation of the pending strike, stocking up the market at prices ranging from one dollar and a half to three dollars per ton. The miners as predicted went out on April 1st, but resumed work in June when a still glutted market with no demand, owing to the previous heavy stocking, tumbled prices to the 80-cent level, from which they ranged to as much as \$1.10 during the summer months. With the commencement of the fall and winter trade, however, prices grew stronger, reaching \$1.45 per ton for run-of-mine during the winter months. Taking the year as a whole \$1.10 per ton for run-of-mine would probably be a fair average.

Considering the extraordinary high prices in February and March, the medium prices during the fall and winter months and the increased production, the operators have had a fairly prosperous year. The total wages paid in 1906 was \$9,973,041.38, an increase of \$561,233.67, or a fraction over 6.5 per cent. over 1905, while the total number of employes was 19,562, an increase of 953 or a fraction over 5.1 per cent. in employes over that of 1905. The aggregate wages paid show an average of \$510.75 per each person employed in the mines. From the above showing it is evident that the mine employes have also had a prosperous year.

A careful review of the mining industry in its many phases, i. e.: total production, wages paid, number of persons employed and other information given in descriptive tables, will prove beyond doubt that 1906 was the banner year in the history of mining in Indiana.



TABLE

*Showing by Counties the Name of Mine, Number of Tons Screened, Slack, 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. . . .	15,245	2,860	.....	18,105	2,079	415	.....	2,494	12,911	7,688	\$14,895 95	\$13,501 90	\$6,777 95	\$35,175 80
Total. . . . .	15,245	2,860	.....	18,105	2,079	415	.....	2,494	12,911	7,688	\$14,895 95	\$13,501 90	\$6,777 95	\$35,175 80

## PARKE COUNTY.

Mary. . . . .	43,689	7,770	.....	51,459	.....	.....	.....	.....	.....	51,459	\$31,578 82	\$18,548 09	\$5,875 96	\$56,002 87
Total. . . . .	43,689	7,770	.....	51,459	.....	.....	.....	.....	.....	51,459	\$31,578 82	\$18,548 09	\$5,875 96	\$56,002 87

BLOCK HAND OR PICK 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 No. 4.....					35,306	7,070		42,376	5,445	36,931	\$38,964 33	\$10,765 03	\$7,101 81	\$56,831 17
Brazil No. 7.....					26,160	5,243		31,403	16,152	15,251	28,525 47	7,691 81	6,024 19	42,241 47
Brazil No. 8.....					12,977	2,690		15,667	1,415	14,252	15,070 60	6,224 65	4,392 67	25,687 92
Continental No. 1.....					2,171	370		2,541	370	2,171	2,062 83	566 42	418 21	3,047 46
Rebstock.....					27,137	6,590		33,727	12,158	21,569	26,885 81	9,783 61	3,317 63	39,987 05
Superior No. 4.....					30,462	7,400	466	38,328	38,328		36,788 21	12,672 17	5,954 14	55,414 52
Superior No. 7.....					4,256	950	49	5,255	5,255		4,146 25	2,212 08	1,105 85	7,464 18
Crawford No. 4.....					9,411	1,680		11,091	5,603	5,488	9,556 84	4,964 20	2,383 82	16,904 86
Crawford No. 2.....					5,745	1,260		7,005	2,686	4,319	8,234 81	2,645 45	1,525 11	12,405 37
Crawford No. 6.....					47,729	12,146	67	59,942	16,266	43,676	51,046 21	12,440 50	4,970 42	68,457 13
Crawford No. 8.....					4,814	1,300		6,114	4,069	2,045	5,779 01	3,015 19	1,750 70	10,544 90
Crawford No. 9.....					28,849	6,580		35,429	16,314	19,115	32,065 75	12,038 77	5,040 13	49,144 65
Glenn No. 1.....					14,255	3,138	1,330	18,723		18,723	15,183 65	7,013 10	3,506 50	25,703 25
Plymouth No. 2.....					15,153	3,370	1,692	20,215		20,215	16,298 90	3,611 00	1,749 50	21,659 40
Monarch.....							7,333	7,333	7,333		4,900 00	10,886 18	1,204 94	16,991 12
Indiana Block.....					4,593	903		5,496	1,585	3,911	5,588 10	3,821 37	1,881 62	11,291 09
Worlds Fair No. 2.....					3,584	779		4,363	4,363		4,932 96	2,080 01	1,617 22	8,630 19
Eureka No. 5.....					28,072	6,455	204	34,731	22,109	12,622	29,582 75	6,601 10	4,596 80	40,780 65
Treager.....					15,900	1,832	4,623	22,355	22,355		6,824 15	1,836 35	939 25	9,599 75
Stunkard.....							9,156	9,156	9,156		7,772 93	2,632 70	1,179 50	11,585 13
Lower Vein No. 1.....					8,732	2,202		10,934	4,427	6,507	8,607 53	3,326 10	1,762 97	13,696 60
Total.....					325,306	71,958	24,920	422,184	195,389	226,795	\$358,817 09	\$126,827 79	\$62,422 98	\$548,067 86

## PARKE COUNTY.

Pan American.....					7,225	600		7,825	1,780	6,045	\$6,897 60	\$1,829 35	\$1,527 40	\$10,254 35
Brazil Block No. 9.....					37,616	7,535		45,151	15,810	29,341	40,847 33	13,650 34	6,130 24	60,627 91
Brazil Block No. 12.....					16,926	3,385		20,311	2,347	17,964	18,878 61	9,309 48	4,839 23	33,027 32
Superior No. 1.....					39,737	9,950	300	49,987	49,987		41,500 99	14,022 56	7,011 13	62,534 68
Superior No. 2.....					29,191	7,250	1,553	37,994	37,994		32,632 27	10,000 60	5,000 15	47,633 02
Superior No. 3.....					34,684	8,650		43,334	43,334		39,210 50	8,769 12	4,384 49	52,364 11
Superior No. 5.....					4,065	950		5,015	5,015		9,480 80	2,937 47	1,326 14	13,744 41
Total.....					169,444	38,320	1,853	209,617	156,267	53,350	\$189,448 10	\$60,518 92	\$30,218 78	\$280,185 80

## VIGO COUNTY.

Domestic Block.....	30,782	4,597		35,379	4,767	2,548	117	7,432	18,127	24,684	\$39,408 48	\$9,515 79	\$6,193 11	\$55,117 38
Total.....	30,782	4,597		35,379	4,767	2,548	117	7,432	18,127	24,684	\$39,408 48	\$9,515 79	\$6,193 11	\$55,117 38

## RECAPITULATION.

Total pick mined block coal.....					494,750	110,278	26,773	631,801	351,656	280,145	\$548,265 19	\$187,346 71	\$92,641 76	\$828,253 66
Total machine mined block coal.....	89,716	15,227		104,943	6,846	2,963	117	9,926	31,038	83,831	85,883 25	41,565 78	18,847 02	146,296 05
Total block coal....	89,716	15,227		104,943	501,596	113,241	26,890	641,727	382,694	363,976	\$634,148 44	\$228,912 49	\$111,488 78	\$974,549 71

## BITUMINOUS MACHINE MINES.

## CLAY COUNTY.

Gifford No. 1.....	9,225	2,825		12,050	3,720			3,720	12,702	3,068	\$9,647 98	\$5,981 85	\$1,714 17	\$17,344 00
Gifford No. 2.....	34,834	13,811		48,645	17,103	790		17,893		66,538	37,873 38	19,597 91	5,453 26	62,924 55
Lewis.....	47,102	37,945	38,314	123,361					90,695	32,666	62,343 92	12,387 20	10,575 25	85,306 37
Vivian No. 2.....	5,372	6,026	41,890	53,288					44,274	9,014	25,237 11	9,965 86	4,910 31	40,113 38
Gold Knob.....	9,264	3,423	2,531	15,218	16,682	6,721	6,366	29,769	20,804	24,183	24,603 66	9,844 02	7,777 97	42,225 65
Island Valley No. 4....	19,588	11,567	29,734	60,889					39,024	21,865	25,485 16	9,002 27	4,839 55	39,326 98
Total.....	125,385	75,597	112,469	313,451	37,505	7,511	6,366	51,382	207,499	157,334	\$185,191 21	\$66,779 11	\$35,270 51	\$287,240 83

## BITUMINOUS MACHINE MINES—Continued.

## GREENE 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.
Black Creek.....	31,400	15,556	7,117	54,073	19,886	10,468	5,770	36,124	60,180	30,017	\$47,381 17	\$17,910 40	\$8,010 61	\$73,302 18
Glenburn.....	9,704	6,365	5,084	21,153	26,515	14,014	15,364	55,893	51,158	25,888	45,860 57	15,303 41	8,624 20	69,788 18
Vandalia No. 2.....			40,609	40,609			91,072	91,072	130,535	1,146	69,671 24	29,292 78	7,994 17	106,958 19
Vandalia No. 5.....	44,861	20,666	11,258	76,785	33,691	16,425	10,020	60,136	129,372	7,549	79,030 73	30,284 05	12,564 00	121,878 78
Vandalia No. 8.....	38,790	17,546	50,577	106,913	3,736	2,192	4,259	10,187	109,963	7,137	58,821 98	30,687 84	8,992 90	98,502 72
Vandalia No. 9.....	12,169	8,654	41,180	62,003	5,019	2,586	8,617	16,222	76,969	1,256	41,184 35	15,463 46	6,484 60	63,132 41
Vandalia No. 21.....	26,871	16,757	12,883	56,511					51,362	5,149	25,955 73	6,549 75	5,253 70	37,759 18
Gilmour.....			87,026	87,026					37,827	49,199	61,436 00	17,721 00	5,730 00	84,887 00
Hoosier No. 1.....	8,656	5,382	6,853	20,891	1,046		1,102	2,148		23,039	12,414 92	7,091 19	4,112 00	23,618 11
Midland.....	14,414	6,410	7,645	28,469						28,469	14,572 84	4,734 16	2,819 71	22,126 71
Lattas Creek.....	79,832	78,463	30,852	189,147	7,237		957	8,194		197,341	112,621 21	41,197 85	13,999 46	167,818 52
Summitt No. 2.....	38,564	21,509	78,142	138,215					100,155	38,060	65,908 60	32,250 53	12,803 09	110,962 22
Green Valley.....	32,943	19,387	37,113	89,443					56,707	32,736	42,884 25	15,132 83	7,346 71	65,363 79
North West.....	29,814	16,314	18,617	64,745	16,335	8,687	9,478	34,500	62,081	37,164	55,304 56	21,118 67	7,674 53	84,097 76
Twin No. 5.....	61,029	22,722	61,044	144,795					143,020	1,775	83,020 45	20,193 55	11,059 41	114,273 41
Total.....	429,047	255,731	496,000	1,180,778	113,465	54,372	146,639	314,476	1,009,329	485,925	\$816,068 60	\$304,931 47	\$123,469 09	\$1,244,469 16

## KNOX COUNTY.

Knox.....	565	381	4,987	5,933	2,211	2,202	13,222	17,635	16,673	6,895	\$11,016 91	\$5,750 83	\$3,720 52	\$20,488 26
Lynn.....	5,043	3,420	24,593	33,056	1,921	1,288	5,999	9,208	30,797	11,467	18,526 41	8,120 55	6,282 43	32,929 39
Pine Knot.....	8,261	37,760	7,553	53,574					38,359	15,215	30,487 40	19,506 10	6,358 40	56,351 90
Freeman.....	6,179	3,085	12,104	21,368					18,211	3,157	6,652 10	3,104 55	4,090 08	13,846 73
Total.....	20,048	44,646	49,237	113,931	4,132	3,490	19,221	26,843	104,040	36,734	\$66,682 82	\$36,482 03	\$20,451 43	\$123,616 28

## PARKE COUNTY.

Mecca No. 3.....	14,523	7,667	6,521	28,711	35,554	16,230	17,399	69,183	56,726	41,168	\$61,404 95	\$21,362 46	\$6,364 04	\$89,131 45
Parke No. 10.....			59,035	59,035			89,117	89,117	111,213	36,939	75,784 45	26,810 63	11,977 13	114,572 21
Parke No. 11.....			124,309	124,309			22,172	22,172	119,068	27,413	76,319 04	24,806 31	8,682 67	109,808 02
Total.....	14,523	7,667	189,865	212,055	35,554	16,230	128,688	180,472	287,007	105,520	\$213,508 44	\$72,979 40	\$27,023 84	\$313,511 68

## SULLIVAN COUNTY.

Rainbow.....			38,675	38,675					12,875	25,800	\$28,054 00	\$6,502 00	\$4,354 00	\$38,910 00
Phoenix No. 4.....			60,515	60,515					22,884	37,681	41,612 00	11,560 00	6,256 00	59,428 00
Hooking.....	15,739	10,277	68,968	94,984					19,117	75,867	56,823 55	19,940 84	8,704 34	85,468 73
Citizens.....			28,257	28,257					17,177	11,080	19,172 00	5,614 00	3,914 00	28,700 00
Sun Flower.....	101,474	32,040	2,050	135,564					1,313	134,251	70,646 64	8,950 96	15,298 70	94,896 30
Consolidated No. 25.....	18,506	8,538		32,605					6,067	26,538	17,774 15	9,914 83	4,876 83	32,565 81
Consolidated No. 26.....	43,771	23,047		66,818					6,266	60,552	32,532 44	19,567 48	10,350 00	62,449 92
Consolidated No. 29.....	27,265	8,054		35,319					3,209	32,110	19,826 36	8,258 58	5,417 31	33,502 25
Consolidated No. 30.....	30,109	14,320	2,092	46,521					6,647	39,877	28,954 86	8,812 80	8,063 44	45,831 10
Consolidated No. 32.....	8,763	1,673	17,165	27,601					4,751	22,850	13,294 31	5,849 28	3,122 91	22,366 50
Consolidated No. 34.....	5,626	10,044	61,095	76,765					63,668	13,097	39,621 18	16,138 83	9,454 22	65,214 23
Jackson Hill No. 2.....	92,304	33,582	41,692	167,578					80,000	87,578	81,812 91	25,843 61	9,790 42	117,446 94
Jackson Hill No. 4.....	66,455	34,166	3,270	103,891					50,000	53,891	53,468 44	16,301 05	8,613 26	78,382 75
Keystone.....	5,366	4,065	1,543	10,974	16,970	6,570	3,139	26,679	9,820	27,833	24,523 85	10,932 60	6,813 45	42,269 90
Dering No. 13.....	39,647	19,758	35,809	95,214	475	223	2,805	3,503	5,642	93,075	46,184 45	23,597 35	7,810 75	77,592 55
Dering No. 14.....	88,005	71,775	757	160,537	350			350	10,269	150,618	82,396 81	32,618 64	16,320 77	131,336 22
Mammoth Vein.....	47,829	32,292	22,862	102,983					50,000	52,983	55,537 67	18,560 50	11,626 96	85,725 13
Little Giant.....	17,914	7,569	73,268	98,751	7,779	3,867	44,381	56,027	154,778		77,451 49	33,254 04	11,683 46	122,338 99
Shirley Hill No. 2.....	4,217	3,867	10,430	18,514	634	546	1,341	2,521	21,035		19,321 61	10,239 98	7,294 69	36,856 98
Pearl.....	27,505	14,033	18,952	60,490	3,123	1,009	994	5,126	47,080	18,536	33,145 42	15,676 60	9,463 96	58,285 28
Reliance.....	28,959	26,607	3,069	58,635	337		38	375	628	58,382	30,710 78	21,048 75	7,981 47	59,741 00
Black Hawk.....	2,672	1,061	1,390	5,123	6,178	3,259	8,427	17,864	14,172	8,815	14,030 57	4,310 82	2,840 81	21,182 20
Clover Leaf.....	18,384	5,637	13,505	37,526	626	202	1,180	2,008		29,534	23,881 98	6,736 79	13,474 61	44,093 38
Washington.....			23,090	23,090					9,654	13,436	16,710 00	4,190 00	2,110 00	23,010 00
Shirley Hill No. 1.....	13,834	5,750	48,474	68,058	5,487	3,025	19,244	27,756	93,725	2,089	60,826 09	22,025 68	9,016 85	91,868 62
Hamilton.....	4,069	2,375	5,504	11,948	2,522	1,558	3,536	7,616	10,591	8,973	9,735 24	9,402 17	8,878 97	24,016 38
Consolidated No. 28.....	11,730	5,399	737	17,866					1,576	16,290	8,898 16	8,208 66	3,684 78	20,791 60
Consolidated No. 33.....	133,426	49,544	11,114	194,084					13,892	180,192	102,944 47	30,756 46	9,341 43	143,042 36
Total.....	853,569	425,473	599,844	1,878,886	44,481	20,259	85,085	149,825	736,723	1,291,988	\$1,109,991 43	\$414,813 30	\$222,508 39	\$1,747,313 12

## BITUMINOUS MACHINE MIENS—Continued.

## VIGO 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.
Atherton.....	34,830	18,968	4,666	58,464	1,358	812	166	2,336	6,104	54,696	\$29,662 88	\$15,485 15	\$6,795 47	\$51,943 50
Vandalia No. 82.....	2,516	1,403	44	3,963	10,106	6,812	163	17,081	17,470	3,574	10,855 13	5,840 09	1,634 70	18,329 92
Ray No. 2.....	1,705	1,149	4,294	7,148	43,420	23,391	114,971	181,782	104,381	84,549	115,557 65	30,310 46	8,844 87	154,712 98
Forrest.....	.....	.....	57,733	57,733	.....	.....	.....	.....	36,500	21,233	39,010 00	7,610 00	4,556 00	51,176 00
Total.....	39,051	21,520	66,737	127,308	54,884	31,015	115,300	201,199	164,455	164,052	\$195,085 66	\$59,245 70	\$21,831 04	\$276,162 40

## WARRICK COUNTY.

Big Four.....	11,846	7,895	56,531	76,272	.....	.....	.....	.....	58,488	17,784	\$33,156 43	\$9,153 11	\$5,408 08	\$47,717 62
Big Vein No. 3.....	.....	.....	42,104	42,104	.....	.....	11,110	11,110	53,214	.....	25,244 55	6,312 20	4,056 90	35,613 65
De Forrest.....	2,260	1,120	6,588	9,968	1,820	1,017	2,182	5,019	13,002	1,985	7,159 05	1,386 07	1,040 74	9,585 86
Electric.....	.....	.....	108,586	108,586	.....	.....	.....	.....	56,647	51,939	44,130 92	19,726 74	5,515 86	69,373 52
Dawson.....	.....	.....	2,428	2,428	.....	.....	.....	.....	.....	2,428	1,037 67	386 19	282 24	1,706 10
Erie Canal.....	.....	.....	18,744	18,744	.....	.....	.....	.....	9,427	9,317	7,559 15	2,980 53	1,929 24	12,468 92
Castle Garden.....	.....	.....	13,007	13,007	.....	.....	13,683	13,683	12,666	14,024	13,921 72	3,041 29	1,388 10	18,351 11
Total.....	14,106	9,015	247,988	271,109	1,820	1,017	26,975	29,812	203,444	97,477	\$132,209 49	\$42,986 13	\$19,621 16	\$194,816 78



## BITUMINOUS HAND OR PICK MINES,

## CLAY COUNTY.

NAME OF MINE.	PICK MINED.				DISTRIBUTION.		WAGES PAID.			
	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. 50.....	13,641	5,048	.....	18,689	13,291	5,398	\$16,151 00	\$7,239 23	\$2,975 55	\$26,365 78
Vandalia No. 60.....	43,792	27,623	5,413	76,828	71,234	5,594	46,099 31	12,604 41	5,832 22	64,535 94
Vandalia No. 63.....	26,601	17,523	2,114	46,238	40,519	5,719	27,510 37	15,735 72	4,926 70	48,172 79
Vandalia No. 64.....	7,210	3,787	107	11,104	9,829	1,275	6,184 51	1,363 42	1,064 42	8,612 35
Vandalia No. 65.....	85,961	49,180	12,067	147,208	136,351	10,857	86,867 96	17,192 07	7,166 42	111,226 45
Fortner.....	10,407	3,715	.....	14,122	.....	14,122	9,963 92	2,024 97	2,056 78	14,045 67
Vivian No. 1.....	4,049	3,945	.....	7,994	.....	6,752	5,625 65	1,005 16	3,103 53	9,734 34
Klondyke No. 2.....	27,991	19,832	.....	47,823	47,236	587	28,328 74	8,042 39	3,816 61	40,187 74
Total.....	219,652	130,653	19,701	370,006	325,212	44,794	\$226,731 46	\$65,207 37	\$30,942 23	\$322,881 06

## DAVISS COUNTY.

Stucky.....	.....	.....	2,471	2,471	2,471	.....	\$1,644 72	\$290 40	\$311 33	\$2,246 45
Montgomery No. 3.....	12,668	1,100	20,835	34,603	34,603	.....	22,715 07	8,375 73	5,151 40	36,242 20
Mutual.....	9,505	1,850	11,200	22,555	15,205	7,350	21,766 30	5,016 50	2,547 60	29,330 40
Mandabach.....	570	192	3,220	3,982	3,982	.....	2,343 21	434 60	464 30	3,242 11
Total.....	22,743	3,142	37,726	63,611	56,261	7,350	\$48,469 30	\$14,117 23	\$8,474 63	\$71,061 16

## FOUNTAIN COUNTY.

Indio.....	34,843	15,905	8,335	59,083	59,083	.....	\$39,109 75	\$10,627 74	\$5,118 50	\$54,855 99
Silverwood.....	369	216	18,467	19,052	19,052	.....	12,415 18	4,890 97	3,068 52	20,374 67
Total.....	35,212	16,121	26,802	78,135	78,135	.....	\$51,524 93	\$15,518 71	\$8,187 02	\$75,230 66

## BITUMINOUS HAND OR PICK MINES—Continued,

## GIBSON COUNTY.

NAME OF MINE.	PICK MINED.				DISTRIBUTION.		WAGES PAID.			
	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.
Fort Branch.....			3,482	3,482	3,482		\$2,103 47	\$631 77	\$526 33	\$3,261 57
Oswald.....	22,872	24,528	27,520	74,920	74,920		45,734 42	13,496 31	8,045 06	67,275 78
Massey.....	2,272	2,399	10,780	15,451	11,271	4,180	10,662 08	2,681 92	1,825 82	15,169 82
Total.....	25,144	26,927	41,782	93,853	89,673	4,180	\$58,499 97	\$16,810 00	\$10,397 20	\$85,707 17

## GREENE COUNTY.

Midvale.....	13,261	6,591	12,150	32,002	8,933	23,069	\$21,782 77	\$4,582 93	\$2,085 94	\$28,451 64
Sponsler.....	8,745	4,060	34,297	47,102	31,330	15,772	29,825 95	7,830 83	4,768 98	42,425 76
Antioch.....	6,530	3,164	39,901	49,595	31,193	18,402	30,980 46	12,581 21	6,188 69	49,750 36
North Linton.....	21,146	12,331	12,510	45,937	28,076	17,911	29,559 65	9,318 62	5,372 58	44,250 85
Vandalia No. 3.....	46,271	21,636	48,528	116,435	114,211	2,224	69,913 55	18,773 50	6,172 38	94,859 43
Vandalia No. 4.....	5,518	2,973	42,799	51,290	50,301	989	28,759 37	7,962 93	3,157 34	39,879 64
Vandalia No. 6.....			10,481	10,481	10,481		5,185 54	2,496 09	922 91	8,604 54
Letsinger.....	15,278		36,587	51,865	17,039	34,826	38,118 77	6,810 43	4,824 35	49,753 55
Tower Hill.....	23,070	10,363	84,392	117,825		117,825	73,370 63	14,333 10	8,798 95	96,502 68
Vulcan.....	6,033	2,850	10,503	19,386	5,689	13,697	11,996 99	1,836 18	2,331 70	16,164 87
Victoria.....	45,930	39,907	44,088	129,925	120,801	9,124	76,914 92	17,996 18	8,200 70	103,111 80
Queen.....	3,393	3,027	16,696	23,116	21,175	1,941	15,507 36	4,443 80	2,812 70	22,763 86
Total.....	195,175	106,902	392,932	695,009	439,229	255,780	\$431,915 96	\$108,965 80	\$55,637 22	\$596,518 98

## KNOX COUNTY.

Bicknell.....	15,073	12,898	34,526	62,497	48,354	14,143	\$39,866 78	\$8,927 40	\$6,738 48	\$55,532 66
Prospect Hill.....			17,334	17,334	17,334		11,800 99	5,054 21	3,002 48	19,837 68
Vandalia No. 40.....	5,907	8,223	8,540	22,670	21,536	1,134	13,427 48	6,154 24	3,036 01	22,617 73
Wheatland.....			69,706	69,706	69,706		37,929 73	8,366 57	4,700 69	50,996 99
Total.....	20,980	21,121	130,106	172,207	156,930	15,277	\$103,024 98	\$28,502 42	\$17,477 66	\$149,005 06

## PARKE COUNTY.

Lyford No. 1.....	6,361	4,025	31,321	41,707	41,707	41,707	\$26,368 74	\$8,290 08	\$5,910 20	\$40,569 02
Vandalia No. 316.....	38,636	18,702	2,578	59,916	40,169	19,747	\$39,927 25	13,652 06	4,153 94	57,733 25
Vandalia No. 317.....	44,362	19,841	390	64,593	43,739	20,854	43,610 90	12,351 88	4,463 03	60,425 81
Harrison.....			3,870	3,870	3,870		2,212 62	504 44	198 00	2,915 06
Total.....	89,359	42,568	38,159	170,086	87,778	82,308	\$112,119 51	\$34,798 46	\$14,725 17	\$161,643 14

## PERRY COUNTY.

Troy.....			7,644	7,644	7,644		\$5,106 68	\$1,753 63	\$1,323 35	\$8,183 66
Total.....			7,644	7,644	7,644		\$5,106 68	\$1,753 63	\$1,323 35	\$8,183 66

## PIKE COUNTY.

Aberdeen (Idle).....										
Carbon (Idle).....										
Ayrshire No. 3.....	32,585	18,583	14,310	65,478	38,215	27,263	\$35,432 38	\$11,161 77	\$5,030 06	\$51,624 21
Ayrshire No. 4.....	65,392	46,541	37,351	149,284	58,251	91,033	88,400 97	27,337 50	10,367 21	126,105 68
Ayrshire No. 5.....	306	252	13,124	13,682	7,948	5,734	7,978 56	2,822 69	2,335 91	13,137 16
Rogers.....			5,100	5,100	5,100		2,749 08	474 54	297 42	3,521 04
Blackburn.....			29,741	29,741	26,177	3,564	16,134 02	4,643 78	3,516 51	24,294 31
Littles.....	44,589	58,201	13,294	116,084	69,382	46,702	64,162 79	15,238 60	5,626 95	85,028 34
Hartwell No. 1.....	17,040	8,515	51,033	76,588	50,845	25,743	48,694 81	17,647 94	6,128 64	72,471 39
Petersburg (Idle).....										
Winslow No. 4 (Idle).....										
Winslow No. 5 (Idle).....										
Hartwell No. 2.....			9,330	9,330	9,330		6,660 20	1,190 49	512 04	8,362 73
Total.....	159,912	132,092	173,283	465,287	265,248	200,039	\$270,212 81	\$80,517 31	\$33,814 74	\$384,544 86

## BITUMINOUS HAND OR PICK MINES—Continued.

## SULLIVAN COUNTY.

NAME OF MINE.	PICK MINED.				DISTRIBUTION.		WAGES PAID.			
	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.
Cummins.....	.....	.....	3,208	3,208	1,208	2,000	\$2,670 00	\$905 00	\$525 00	\$4,100 00
Consolidated No. 31.....	2,664	2,017	11,417	16,098	3,343	12,755	8,675 84	2,056 87	1,033 00	11,765 71
Vandalia No. 10.....	40,896	22,118	55,098	118,112	116,421	1,691	71,718 52	17,230 46	7,079 52	96,028 50
West Linton (Idle).....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Freeman.....	.....	.....	43,274	43,274	.....	43,274	24,850 35	9,540 00	5,301 00	39,691 35
Dering No. 12.....	18,995	11,967	546	31,508	.....	31,508	18,092 00	9,721 25	3,006 10	30,819 35
Superior.....	28,013	21,531	35,638	85,182	56,559	28,623	55,115 93	21,061 87	5,930 52	82,108 32
Semi Block (Idle).....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total.....	90,568	57,633	149,181	297,382	177,531	119,851	\$181,122 64	\$60,515 45	\$22,875 14	\$264,513 23

## VANDERBURGH COUNTY.

Union (Idle).....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Unity.....	35,826	29,881	76,471	142,178	142,178	.....	\$87,618 65	\$23,023 80	\$10,287 38	\$120,929 83
First Avenue.....	16,236	10,283	11,633	38,152	38,152	.....	25,639 36	6,498 43	5,368 50	37,506 29
Sunnyside.....	20,471	11,692	9,708	41,871	26,506	15,362	31,684 92	14,351 14	9,883 72	55,919 78
Diamond.....	22,550	14,342	8,750	45,642	45,642	.....	26,205 03	8,610 72	5,477 28	40,293 03
Ingleside.....	3,807	.....	32,430	36,237	36,237	.....	24,236 35	5,759 96	6,252 60	36,248 91
Total.....	98,890	66,198	138,992	304,080	288,718	15,362	\$195,384 31	\$58,244 05	\$37,269 48	\$290,897 84

VERMILLION COUNTY

Dering No. 5.....	27,376	20,689	105,480	153,545	.....	153,545	\$81,555 23	\$31,463 27	\$6,280 42	\$119,298 92
Dering No. 6.....	5,878	3,704	187,213	196,795	.....	196,795	105,457 30	36,987 31	7,239 10	149,683 71
Dering No. 7.....	.....	.....	170,708	170,708	170,708	.....	90,881 34	31,835 75	7,758 34	130,475 43
Dering No. 8.....	.....	.....	89,052	155,364	.....	155,364	84,376 86	37,536 83	7,657 79	129,571 48
Dering No. 15.....	38,837	27,475	71,023	71,023	.....	71,023	38,550 10	16,096 35	5,273 51	59,919 96
Eureka No. 1.....	.....	.....	18,075	18,075	18,075	.....	10,844 72	3,760 58	3,445 98	18,051 28
Crown Hill No. 1.....	18,180	6,051	56,055	80,286	15,150	65,136	61,622 35	13,641 98	3,711 74	78,976 07
Dering No. 50.....	17,078	14,500	116,767	148,345	.....	148,345	85,619 01	17,346 55	9,383 00	112,348 56
Dering No. 23.....	1,836	1,510	154,625	157,971	.....	157,971	94,304 88	18,439 17	8,020 15	120,764 20
Dering No. 20.....	18,395	15,275	159,390	193,060	.....	193,060	112,474 94	18,958 60	8,343 40	139,776 94
Prince.....	8,098	9,650	105,780	123,528	.....	123,528	74,014 98	18,098 41	5,538 22	97,651 61
Crown Hill No. 2.....	44,670	14,869	104,747	164,286	26,863	137,423	116,063 75	21,983 08	5,073 28	143,120 11
Total.....	180,348	113,723	1,338,915	1,632,986	230,796	1,402,190	\$955,765 46	\$266,147 88	\$77,724 93	\$1,299,638 27

VIGO COUNTY.

Chicago No. 6 (Idle).....										
Diamond.....	13,058	5,107	9,050	27,215	27,215	\$16,358 30	\$4,977 80	\$3,575 05	\$24,911 15	
Victor.....	12,268	6,797	9,143	28,208	16,297	11,911	19,053 65	4,893 50	3,375 25	
Lawton.....	102,212	57,454	17,500	177,166	177,166	115,466 30	28,761 95	8,787 45	153,015 70	
Grant No. 2.....	11,417	9,866	64,393	85,676	76,975	8,701	50,118 26	23,725 83	8,355 69	
Vandalia No. 67.....	88,503	44,671	27,250	160,424	148,697	11,727	99,056 20	29,251 28	7,081 39	
Vandalia No. 68.....	21,152	11,928	999	34,079	31,493	2,586	21,176 05	11,881 83	4,804 52	
Vandalia No. 69.....	20,124	16,269	1,079	37,472	33,007	4,465	21,563 75	12,974 54	4,234 05	
Vandalia No. 80.....	8,401	6,112	640	15,153	10,583	4,570	7,464 41	5,282 03	1,074 28	
Vandalia No. 81.....	21,358	19,055	12,509	52,922	37,370	15,552	29,570 67	8,956 20	4,759 64	
Miami No. 1.....	64,409	73,028		137,437		137,437	84,167 38	23,453 91	6,388 58	
Miami No. 2.....	41,509	42,179	40,575	124,263		124,263	78,009 14	16,639 99	6,486 35	
Miami No. 3.....	56,739	30,275	31,520	118,534		118,534	72,532 29	13,545 13	4,679 41	
Fauvre No. 1.....	18,894	14,202	7,227	40,323	40,323	20,704 95	11,688 59	2,838 63	35,232 17	
Larimer.....		4,540	4,540	4,540		2,593 80	1,054 66	434 00	4,082 46	
Deep Vein.....	41,772	28,377	30,391	100,540	60,375	40,165	64,675 92	12,694 90	9,099 99	
Fauvre No. 2.....	1,253	768	433	2,454	2,454	1,370 56	1,836 17	1,050 59	4,257 32	
Sugar Valley.....			1,185	1,185	1,185	616 20	103 40	200 00	919 60	
Dering No. 10.....			30,186	30,186	30,186	15,666 30	6,746 35	2,443 35	24,856 00	
Vandalia No. 66.....	44,242	29,746	7,084	81,072	75,694	5,378	46,977 12	17,413 33	5,882 21	
Total.....	567,311	395,834	295,704	1,258,849	773,560	485,289	\$767,141 25	\$235,881 39	\$85,550 43	\$1,088,573 07

## BITUMINOUS HAND OR PICK MINES—Continued.

## WARRICK COUNTY.

NAME OF MINE.	PICK MINED.				DISTRIBUTION.		WAGES PAID.			
	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.
Air Line (Idle).....										
Chandler.....			5,907	5,907	5,907		\$3,810 90	\$1,102 05	\$819 35	\$5,732 30
Star No. 1.....			8,788	8,788	8,788		5,103 42	1,394 68	732 86	7,230 96
Burke (Idle).....										
Total.....			14,695	14,695	14,695		\$8,914 32	\$2,496 73	\$1,552 21	\$12,963 26



# RECAPITULATION.

*Showing Total Production and Wages of Indiana Mines for 1906.*

## 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.....	89,716	15,227	.....	104,943	6,846	2,963	117	9,926	31,038	83,831	\$85,883 25	\$41,565 78	\$18,847 02	\$146,296 05
Total pick mined block coal.....	.....	.....	.....	.....	494,750	110,278	26,773	631,801	351,656	280,145	548,265 19	187,346 71	92,641 76	828,253 66
Total block coal..	89,716	15,227	.....	104,943	501,596	113,241	26,890	641,727	382,694	363,976	\$634,148 44	\$228,912 49	\$111,488 78	\$974,549 71

## TOTAL PRODUCTION OF BITUMINOUS COAL.

Total bituminous machine mined coal...	1,495,729	839,649	1,762,140	4,097,518	291,841	133,894	528,274	954,009	2,712,497	2,339,030	\$2,718,737 65	\$998,217 14	\$470,175 46	\$4,187,130 25
Total bituminous pick mined coal.....	.....	.....	.....	.....	1,705,294	1,112,914	2,805,622	5,623,830	2,991,410	2,632,420	3,415,933 58	989,476 43	405,951 41	4,811,361 42
Total bituminous coal	1,495,729	839,649	1,762,140	4,097,518	1,997,135	1,246,808	3,333,896	6,577,839	5,703,907	4,971,450	6,134,671 23	1,987,693 57	876,126 87	8,998,491 67
Total machine mined coal.....	1,585,445	854,876	1,762,140	4,202,461	298,687	136,857	528,391	963,935	2,743,535	2,422,861	2,804,620 90	1,039,782 92	489,022 48	4,333,426 30
Total pick mined coal.....	.....	.....	.....	.....	2,200,044	1,223,192	2,832,395	6,255,631	3,343,066	2,912,565	3,964,198 77	1,176,823 14	498,593 17	5,639,615 08
Grand Total....	4,084,176	2,214,925	5,122,926	11,422,027	.....	.....	.....	.....	6,086,601	5,335,426	\$6,768,819 67	\$2,216,606 06	\$987,615 65	\$9,973,041 38

## LABOR.

JOINT CONFERENCES COAL MINERS AND OPERATORS OF WESTERN  
PENNSYLVANIA, OHIO, INDIANA AND ILLINOIS.

Indianapolis, Ind., January 25 to February 2, and March 20 to 29, 1906.

The following is a brief history of the proceedings of the National Convention of miners and operators of Western Pennsylvania, Ohio, Indiana and Illinois and the strike resulting therefrom April 1, 1906. The National Convention of miners and operators met in Tomlinson Hall January 25th for the purpose of arranging prices and conditions to govern the scale year beginning April 1, 1906.

## FIRST CONFERENCE—JANUARY 25, 1906.

The joint convention of miners and operators was called to order at 2 o'clock, p. m., with Mr. John Mitchell, National President of the United Mine Workers, acting as temporary chairman. The convention was organized by electing Mr. G. W. Traer (operator) of Illinois permanent chairman, W. B. Wilson (National Secretary to the Miners' Organization) as permanent Secretary and C. L. Scroggs (miner) of Illinois Assistant Secretary. The remainder of the day was consumed in the selection of various committees and other routine work incident to governing the convention.

## January 26.

The joint convention was called to order at 4:15 p. m., with Mr. G. W. Traer in the chair. The first order of business transacted was the selection of the members of the scale committee and alternates. When the roll call of States was made Chairman Traer announced the Convention ready to proceed with its business.

Immediately following this announcement, Mr. Mitchell on the part of the miners made the following motion, to wit: That there be a general advance of  $12\frac{1}{2}$  per cent. over the present scale of wages, that the advance be on the run-of-mine basis, with a proper run-of-mine price for all of the states covered by the proposition; and that the differential between pick and machine mining be 7 cents per ton. After some little discussion on the proposition the convention adjourned until 9 o'clock, a. m., the following day.

January 27.

The convention was called to order at 9:30 o'clock by Chairman Traer. The forenoon of the session was taken up in a discussion of the uniform scale, the 7 cents differential between pick and machine mining and the shot firers' bill in Illinois, but with little headway. A vote was taken (on Mr. Mitchell's motion made the previous day) which lost, the miners voting in the affirmative and the operators in the negative. Just before the hour for adjournment Mr. Robins moved the matter of scale be referred to the joint scale committee (seconded by Mr. Mitchell), the miners and operators both voting in the affirmative. The joint convention was adjourned to wait the call of the committee.

#### JOINT SCALE COMMITTEE.

The Joint Scale Committee met and organized by electing Mr. W. D. Ryan (Secretary and Treasurer of the Miners' Organization of Illinois) as permanent chairman, C. L. Scroggs Secretary, W. D. Wilson and T. S. Brooks assistant secretaries, and adjourned to meet at 1:30 o'clock, p. m., in the palm room of the Claypool Hotel.

The first regular session of the Joint Scale Committee was called to order at 1:30 o'clock p. m., in the palm room of the Claypool Hotel, and after adopting rules, etc., to govern the deliberations of the committee, adjourned to meet at 10 o'clock a. m., Monday, the 29th.

January 29.

The Joint Scale Committee was called to order at 10 o'clock, a. m. Mr. Mitchell presented the miners' proposed scale in full, which read as follows:

#### PROPOSED SCALE.

We demand:

1st. A general advance of  $12\frac{1}{2}$  per cent. over the present scale of wages.

2d. To be paid on a run-of-mine basis with a proper relative run-of-mine price for all States covered by the contract.

3d. That the differential between machine and pick mining shall be 7 cents per ton.

4th. That a uniform outside day wage scale be established.

5th. That all yardage and dead work be advanced  $12\frac{1}{2}$  per cent.

6th. That no boy under 16 years of age be employed in or around the mines.

7th. That our contract become effective April 1, 1906, and expire March 31, 1907.

8th. That eight hours from bank to bank shall constitute a day's work.

9th. That when the men go into the mine in the morning they shall be entitled to two hours' pay whether or not the mine works the full two hours, that the men shall be paid for every hour thereafter by the hour for each hour or fractional part thereof. If, for any reason, the regular routine work can not be furnished the inside labor for a portion of the first two hours, the operators may furnish other than regular labor for the unexpired time.

10th. That the check-off for the collection of dues, initiation fees, fines and assessments levied by the United Mine Workers of America become a part of the Interstate Joint Agreement.

11th. That internal differences in any of the States or districts, both as to prices and conditions, shall be referred to the States or districts affected for adjustment.

When the scale had been read Mr. Mitchell moved its adoption (seconded by Mr. H. C. Perry, miner).

A motion was then made by Mr. Robins that the scale be taken up by sections. No objection being made Mr. Robins' motion was accepted, and the committee proceeded to discuss the scale in sections one by one. Several paragraphs of the proposed scale were debated during the two following days, Messrs. Penna, Mitchell, Robins, Winder, Wilson and Taylor taking the more prominent parts in the discussion. Little of interest transpired until the afternoon session of the 31st.

#### January 31.

The Joint Scale Committee was called to order at 4 o'clock, p. m., W. D. Ryan in the chair.

Mr. Taylor on the part of the operators offered the following, to wit: That the present interstate agreement be continued for one year from April 1, 1906; that the mining price at Danville, the basing point for Illinois, be 52 cents per ton for mine run coal loaded on the cars at the face, including the inspecting and shooting of shots, the timbering and care of working places and in machine mines the proper snubbing of the coal. This proposition on being put to a vote lost, the operators of the four states voting in the affirmative, the miners voting in the negative. Mr. Robins then moved to adjourn until 9 o'clock a. m. the following day. Mr. Wilson amended the motion to adjourn to meet the joint convention but withdrew the amendment and the committee adjourned to meet at 9 o'clock, February 1st.

## February 1.

The Committee was called to order at 9 a. m., and Mr. Robins moved the scale adopted two years prior be adopted by this convention, covering the scale years from April 1, 1906, to March 31, 1907. Motion amended by Mr. Taylor that at Danville, the basing point of Illinois, the price per ton mine run loaded on the cars at the face be 52 cents, including the inspecting and shooting of shots and timbering and care of the working places and the proper snubbing of the coal. The amendment and motion on being put to a vote (separately) lost, the miners voting in the negative and the operators in the affirmative. A motion was then made and carried that the joint scale committee adjourn to meet the joint convention at 2 p. m.

## JOINT CONVENTION.

## Report of Joint Scale Committee.

The Joint Convention was called to order at 2 p. m. Secretary Scroggs read the report of the Joint Scale Committee. The report included the various paragraphs acted on, nearly all of which lost; also the motion and amendment made by Messrs. Robins and Taylor and the action taken thereon. After some further debate on part of Mr. Mitchell and Mr. Robins the convention adjourned to meet at 9 o'clock a. m., February 2d, the miners remaining for a separate session.

## February 2.

The Joint Convention was called together at 9 o'clock, a. m., with Colonel Randolph Smith in the chair.

Mr. Mitchell: Yesterday afternoon our own convention endorsed the action of our scale committee in refusing to accept a settlement on a basis of the present settlement.

Mr. Robins, in order to have the records of this convention right, offered the same motion as made by him the day previous.

Mr. Taylor also made the same amendment as offered the day previous. On roll call of the States the amendment lost, the miners voting in the negative and the operators in the affirmative.

After considerable discussion Mr. Robins' motion was put to a vote. The roll call of the four States was as follows: The operators of Illinois did not vote, operators of Ohio, Indiana and Western Pennsylvania voted in the affirmative. The miners of Illinois, Indiana and Ohio voted in the negative. Mr. Dolan voted in the affirmative for Western Pennsylvania, the other delegates from that



District voted in the negative. Mr. Robins then moved to adjourn *sine die*, which carried, the convention adjourning without an agreement having been made.

#### INTERSTATE CONVENTION 1906.

Second Conference—March 20th to 29th.

Pursuant to the suggestion of President Roosevelt in a letter addressed (each) to National President John Mitchell and Francis L. Robins a second joint convention was called. This convention was called to order in Tomlinson Hall at 2 o'clock p. m., March 20, 1906, and organized by electing Mr. G. W. Traer of Illinois Chairman, W. B. Wilson Secretary and Messrs. T. S. Brooks and C. L. Scroggs Assistant Secretaries.

After the various committees (including scale committee) had been selected and other routine work accomplished President Mitchell on behalf of the miners offered the same scale of wages, conditions of labor, etc., as offered at the former conference and moved its adoption, which was seconded by Mr. Wilson. The motion was immediately voted on and lost, the miners voting in the affirmative and the operators in the negative. After other preliminary work had been gone through Mr. Robins offered a motion that the matter of scale be referred to the Joint Scale Committee and that the Joint Scale Committee meet the following morning at 9 o'clock in the Claypool Hotel, and that the convention adjourn (seconded by Mr. Mitchell). All operators and miners voting in the affirmative, the motion was declared carried and the convention adjourned to wait the call of the committee.

#### JOINT SCALE COMMITTEE.

March 21.

The Joint Scale Committee was called to order at 9 o'clock a. m. in the palm room of the Claypool Hotel and organized by electing W. D. Ryan, Chairman; C. L. Scroggs, Secretary, and T. S. Brooks and W. B. Wilson, Assistant Secretaries. Immediately after the committee was organized Mr. Mitchell moved the adoption of the scale proposed in the joint convention (seconded.) The remainder of this date was consumed in a discussion of the shot firers' bill in Illinois, the operators claiming the bill was unjust and that they had not been treated fairly by the miners insisting on its enforcement, the miners' position being opposite that of the operators.



## March 22.

The Joint Scale Committee was called to order at 9 o'clock, W. D. Ryan in the chair. The first business transacted on this date was a vote on the motion, regarding the scale, made by Mr. Mitchell the previous day. The miners voting in the affirmative and the operators in the negative, the motion was declared lost. Mr. Mitchell then moved that the subject of formulating a scale of wages be referred to a sub-committee composed of two representatives of the miners and two operators from each of the states affected (seconded). All the miners and the Pennsylvania operators voted in the affirmative and the operators from the other three states in the negative (motion lost). The shot firers' bill was again brought up for discussion, Mr. Taylor of Illinois offering the following motion, i. e.: That it be the sense of this meeting that the shot firers' bill affecting Danville, the basing point for Illinois, is an interstate matter. The motion on being put to a vote lost, all the operators voting in the affirmative and the miners in the negative. After some debate on the question of a sub-committee and other matters, Mr. Winder moved the adoption of the scale, agreed to two years previous, and which expired April 1, 1906. The miners at that time did their own shot firing.) This motion lost, the miners voting nay and the operators aye. A few minutes before adjournment Mr. Robins offered the following motion: That the scale of 1903, the same prices and conditions, be renewed for two years from April 1, 1906 (seconded). On roll call all of the miners of the four States and the operators of Pennsylvania voted in the affirmative and the operators of Ohio, Indiana and Illinois voted in the negative. The motion was declared lost. The committee then adjourned to meet at 9 a. m., Friday, March 23d. Little business of importance was transacted on the 23d and 24th.

## March 27.

The Joint Scale Committee was called to order at 9 o'clock a. m., W. D. Ryan in the chair. Immediately after the meeting was opened Mr. Mitchell moved that the Joint Scale Committee adjourn to report a disagreement to the joint convention at 2 o'clock, p. m. (Seconded by Mr. Winder.) The roll call of States was made and the motion carried.

## JOINT CONVENTION.

March 27.

The joint convention was called to order at 2 p. m., with G. W. Traer in the chair. The report of the Joint Scale Committee was read and on motion was adopted and made a part of the records of the convention. Mr. Winder then offered the following motion, to wit: That the scale adopted two years previous, expiring April 1, 1906, with all of the conditions existing at the time of its adoption, be re-affirmed, and that the mining price at Danville, the basing point in Illinois, include the mining, shooting and loading coal, the proper care and timbering of the working places and the inspection of shots. (Seconded.) This motion was voted on during the afternoon session of the 28th and lost. Mr. Mitchell then moved that as a basis of settlement there be a restoration of the 1903 mining scale, day wage and dead work scale. Amended by Mr. Robins that the agreement take effect April 1, 1906, and continue until March 31, 1908, subject to approval of the miners' convention. (Mr. Mitchell seconded the amendment.) Mr. Mitchell stated that before the miners could vote on the motion it would be necessary to hold a separate session and moved to adjourn until 2 o'clock, p. m., of the 29th. (Motion prevailed.)

March 29.

The convention was called to order at 2 o'clock in the German House, G. W. Traer in the chair.

Mr. Mitchell's motion, amended by Mr. Robins, after being debated on at considerable length, was put to a vote and lost, the operators of Ohio, Indiana and Illinois voting no, Mr. Robins, for Western Pennsylvania, and the miners of that district voting aye. A motion to adjourn *sine die* was made by Mr. Winder (seconded by Col. Randolph Smith of Illinois), the miners and operators both voting in the affirmative and the National Convention was again adjourned *sine die* without an agreement having been effected, thus precipitating a general strike which extended over a period of more than two months. The strike, while general in Indiana, affecting all the coal producing counties, did not include all mines in the State; a number of operators outside the large combines, representing probably one-tenth of the total production of the State, granted the miners' demands, signed the scale and continued to operate their mines. Owing to the heavy stocking prior to April 1st, there was very little demand and the tonnage produced during that month

was comparatively small. In May, however, both prices and demand grew stronger and the independent operators one by one began signing the scale, and by the time a final settlement was made there were 54 mines in operation.

Note.—During the time of the first convention in January it was rumored that a motion had been passed at one of the miners' separate conferences providing that no State or District be permitted to sign an agreement until all States and Districts covered by the contract were ready to sign. A rumor was also current that at the second conference held in March action was taken permitting any operator, State or District, to sign the agreement and continue work. We have no record of either of the above motions and merely mention them as a connection between the adjournment of the second conference and occurrences that took place later. The above motion was repeatedly referred to during the conference as the Ryan resolution.

#### TERRE HAUTE CONVENTION.

Early in June a joint convention of miners and operators of District 11, covering the bituminous field in Indiana, was held in Terre Haute and after a conference of several days an agreement was finally made and signed on the 8th, inst., a copy of which we will give later. The block coal field covered by district No. 8, effected a settlement some time later. So ended the greatest history making struggle between miners and operators to the knowledge of the writer on record. A great many of the operators were ready to resume work at once; some had considerable cleaning up and repairs to make and it was probably the 15th of the month before all the mines had resumed operation.

#### STRIKE AT SUMMIT NO. 2 MINE.

A strike covering some four weeks occurred at the above mine shortly after the resumption of work in June, resulting from the miners' refusal to clean a certain amount of falling slate without pay, the operator claiming that the recent Terre Haute Agreement required them to do so, the miners contending they were entitled to pay. After the mine had been idle the time above mentioned the matter was finally adjusted in favor of the miners.

## STRIKE AT THE VANDALIA NOS. 8 AND 9 MINES.

A strike of several days' duration occurred at these two mines during the summer, which at one time threatened to involve all the mines owned by the Vandalia Coal Company. This trouble grew out of the discharge of three miners at Vandalia No. 8 Mine for violation of the State law governing shot firing in coal mines. The mine committees and officers of the miners' organization demanded reinstatement of the men discharged. On the company's refusal to reinstate them the miners in all of the Vandalia mines were ordered out by the State officials of the miners' organization. The company, however, conceded the demands of the miners on the morning this order was to take effect and work was continued at the other mines without interruption.

## STRIKE AT THE ROSEBUD MINE.

A strike at this mine, owned by the Vandalia Coal Company, occurred during the fall arising over the question of payment for top coal required to be left up for the protection of the roof. (This matter included a greater number of the mines in the Seelyville District.) After several days' idleness the question was finally settled in favor of the company.

There were numerous other local strikes at the mines during the year, but usually extended over a few days' time, hence no mention of them will be made.

We submit herewith the agreement of the miners and operators of the 11th District entered into in June; also the Brazil Agreement which was made a short time later:

## TERRE HAUTE AGREEMENT.

Arranged and adopted by and between the United Mine Workers of District 11 and the Indiana Bituminous Coal Operators' Association, effective during the Scale Years from June 8th, 1906, to April 1st, 1908.

It is hereby agreed:

## SECTION I.

That the bituminous coal district of Indiana shall pay fifty-five cents (55 cents) per ton for all mine-run coal loaded and shipped as such. All other coal mined in that district shall be passed over regulation screen, and be paid for at the rate of ninety cents (90 cents) per ton of two thousand (2,000) pounds for screened lump.

The standard height of coal in Indiana shall be 3 feet 3 inches in mines opened prior to April 1, 1901, and in mines opened since April 1, 1901, the standard height shall be 3 feet 6 inches. All coal less than 3 feet 3

inches in thickness and over 2 feet 9 inches, the price shall be 98 cents per ton for screened lump coal, and 64 cents per ton for mine-run coal. All coal less than 2 feet 9 inches and down to 2 feet 6 inches, the price shall be \$1.06 per ton for screened lump coal and 65 cents per ton for mine run coal.

## SECTION II.

That the screen hereby adopted for the bituminous district of Indiana shall be uniform in size, six (6) feet wide by twelve (12) feet long, built of flat or Akron-shaped bar, of not less than five-eighths ( $\frac{5}{8}$ ) of an inch surface, with one and one-fourth ( $1\frac{1}{4}$ ) inches between bars, free from obstructions, and that such screen shall rest upon a sufficient number of bearings to hold the bars in proper position.

## MACHINE MINING.

## SECTION III.

## PRICE PER TON FOR MACHINE MINING FOR PUNCHING MACHINE.

Vandalia Track and North thereof:

Screened Lump—Runner,  $11\frac{1}{2}$  cents; helper,  $10\frac{1}{2}$  cents; loading, shooting and timbering, 50 cents. Total, 72 cents.

Run-of-Mine—Runner,  $7\frac{1}{2}$  cents; helper, 7 cents; loading, shooting and timbering,  $30\frac{1}{2}$  cents. Total, 45 cents.

South of Vandalia Track:

Screened Lump—Runner,  $10\frac{1}{2}$  cents; helper, 9 3-10 cents; loading, shooting and timbering, 52 2-10 cents. Total, 72 cents.

Run-of-Mine—Runner, 6 6-10 cents; helper, 6 1-10 cents; loading, shooting and timbering, 32 3-10 cents. Total, 45 cents.

## FOR CHAIN MACHINE.

Screened Lump—Runner,  $6\frac{1}{4}$  cents; helper,  $6\frac{1}{4}$  cents; loading, shooting and timbering, 56 cents. Total,  $68\frac{1}{2}$  cents.

Run-of-Mine—Runner, 4 cents; helper, 4 cents; loading, shooting and timbering,  $34\frac{1}{2}$  cents. Total,  $42\frac{1}{2}$  cents.

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

## DAY WORK FOR PUNCHING MACHINES.

Machine work, when paid for by the day, shall be for machine runner. \$3 17  
Helper ..... 2 56

## DAY WORK, CHAIN OR CUTTER BAR MACHINE.

When paid for by the day, shall be for machine runner. .... \$3 01  
Helper ..... 3 01

Day work by machines shall apply only to opening new mines and defective work, such as horse backs, etc.

## YARDAGE AND ROOM TURNING.

## SECTION IV.

## PICK MINING YARDAGE.

Narrow entries, 7 to 9 feet wide, \$1.86¾ per yard.

Wide entries, 12 feet wide, \$1.16½ per yard.

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

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

## MACHINE MINING YARDAGE.

In entries 7 to 9 feet wide.....\$1 34

In entries 12 feet wide, ¾ of price of narrow entries, or..... 83¼

Narrow work after punching machines shall be sheared when demanded by the operator. Narrow work after the chain machine must be done in a workmanlike manner.

## BREAK THROUGHS—PICK MINES.

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

## BREAK THROUGHS—MACHINE MINES.

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

## ROOM TURNING—PICK MINES.

Room turning .....\$4 50

Room necks to be driven 12 feet in and widened at an angle of 45 degrees when so desired by the operator. Any distance in excess of above shall be paid for proportionately, but no room neck shall exceed 15 feet. When room necks are driven 12 feet wide, the price shall be ¾ of regular price, of \$2.81¼.

## ROOM TURNING—MACHINE MINES.

Room turning .....\$3.37½

Room necks to be driven 12 feet in and widened at an angle of 45 degrees when so desired by operators. Any distance in excess of above shall be paid for proportionately, but no room neck shall exceed 15 feet. When room necks are driven 12 feet wide, price shall be ¾ of regular price, or \$2.10.

Yardage in machine mines shall be divided as follows:

In narrow entries and narrow break throughs between entries in chain machine mines, the loader shall receive \$1.18 per yard and the machine runner and helper each 8 cents per yard, and in wide entries the same pro-



portion. In entries and break throughs between entries in punching machine mines the loaders shall receive \$1.14 per yard and the runner and helper each 10 cents per yard, except where coal is sheared, in which case runner and helper shall receive all the yardage.

Where machines are worked by the day the loaders shall receive all the yardage.

The price for mining herein agreed to for pick and machine work shall include all labor necessary to cut the coal, drill and blast the same, load it on the miner's car and properly care for and timber the miner's working place, and no division of the scale shall carry any exception to this rule. In case a miner fails to properly timber, shoot and care for his working place so that any of the company's property is injured, the miner whose fault has occasioned such damage shall repair the same without compensation. Provided, however, that where shot-firers are employed and partially paid by the company the condition shall continue during the life of this agreement.

#### BLACKSMITHING.

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

The blacksmith's wages shall be \$2.94 per day of nine hours at all mines north of the B. & O. S. W. R. R.

In addition to his ordinary duties he shall do any other labor required of him by the mine management. Provided, however, that he shall receive his regular wages therefor.

#### DAY LABOR.

##### SECTION V.

The wages of inside day labor shall be \$2.56 per day of eight hours where and when men are employed, except as herein provided.

The wages of spike team driver shall be \$2.80 per day. The drivers shall take their mules to and from the stables, and the time required in so doing shall not include any part of the day's labor, their work beginning when they reach the change at which they receive empty cars, but in no case shall a driver's time be docked while he is waiting for such cars at the point named.

The wages of motor men shall be \$3.01 per day, and trappers \$1.13 per day.

All day laborers working at the mines, excepting weighmasters, head flat-trimmer, dumper, fire-bosses and boss drivers who shall be regarded strictly as company men, shall be recognized as members of the U. M. W. of A. In emergencies or in the absence of any regular employee the right of the operator to employ men not members of the U. M. W. of A. for outside day labor shall not be questioned. Any and all flat-trimmers shall dock for dirty coal.

The wages of outside men except as herein provided shall be \$2.02 $\frac{1}{2}$  per day of eight hours on and north of the B. & O. S. W. R. R.

South of the B. & O. S. W. R. R. the wages shall be 20 $\frac{1}{4}$  cents per hour.

The present wages of all outside day labor south of the B. & O. S. W. not herein specifically stated shall be advanced 5 87-100 per cent.

All day men shall at all times do and perform any and all kinds of labor required of them by the mine management. Provided, however, that on idle days men shall have an equal division of the work they usually perform when the mine hoists, and where men are employed as drivers, cagers and motor men they shall have an equal share of all extra work, such as cleaning roads, getting in rails, timber or any other work required of them, when the same does not interfere with the work of other men.

In the absence of any driver, any miner who can drive shall be expected to do so when requested. Any miner leaving his place to drive shall be permitted to load one car for that day. Provided, however, that no miner shall be permitted to make up more than one car in any one week.

## DEAD WORK.

### SECTION VI.

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

The question of slate in or over the coal shall be and is regarded a local question to be taken up and adjusted by the methods provided in the annual Terre Haute agreement for the settlement of disputes. Provided, however, that established usages and prevailing conditions shall not be changed except in new mines where they have not been considered and adjusted.

Where bottom coal is excessively hard to take up, the operator shall have the option. If he demands that it be taken up he shall pay extra therefor. Provided, that where coal so left shall exceed 4 inches in thickness it shall be taken up by the loaders and paid for by the machine men, but this shall not apply when caused by sulphur boulders, rock or any unusual condition. And whenever there shall arise a dispute between any loader and boss, or committee and boss, as to whether the bottom coal in any room is "excessively hard," the company interested shall select a man who shall take up one-third of such bottom coal, and if by such test it requires more than forty minutes to take up all the bottom coal in such room, then the loader shall be paid at the rate of 32 cents per hour for such time so required in excess of forty minutes. This is to apply to the No. 4 vein of Linton coal.

In mines where it is necessary to remove top or bottom in working places, commonly known as brushing, the following scale shall be paid:

When necessary to shoot top or bottom in entries 9 inches in thickness, 45 cents per yard, and 5 cents per inch per yard for any additional thickness. In rooms, where necessary to shoot 9 inches in thickness, 36 cents per yard, and for each additional inch 4 cents.

When brushing is necessary and can be done without shooting the price

in entries shall be 4 cents per inch per yard, and in rooms 3 cents per inch per yard.

No brushing shall be done nor paid for without ordered and amount specified by the mine boss. The miner doing the brushing in entries shall load or "gob" the same, as directed by the mine boss. In rooms the miner shall "gob" the refuse. Brushing shall be six feet wide in entries and five feet wide in rooms.

## ENGINEERS' WAGES AND THEIR DUTIES.

### SECTION VII.

The engineers' wages shall be:

First engineer .....	\$84 37
Second engineer .....	73 13
Third engineer .....	67 50

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

In case of either local or general suspension of mining, either at the expiration of this contract, or otherwise, the engineers shall not suspend work, but shall, when mining is suspended, fully protect all of the company's property under their care, and operate fans and pumps, and lower and hoist such men, mules or supplies as may be required, and any and all coal required to keep up steam at the company's coal plants, but it is understood and agreed that the operators will not ask them to hoist any coal produced for sale on the market, and there shall be no change in engineers' wages during the suspension.

All hoisting engineers at pick mines shall do the firing where the production does not exceed 300 tons of coal per day, and at machine mines in process of development until the production shall have reached 200 tons per day. Engineers shall do the firing on idle days at the option of operator, except when dynamos or compressors are being run to furnish power to operate mining machines to cut coal, but the services of the fireman shall not be dispensed with where a mine ceases hoisting coal in the midst of a shift.

The wages of firemen shall be: Per day of 10 hours, \$2.45; per month, \$65.00; per night of 12 hours, \$2.35; per month, \$63.50. The day firemen shall do and perform any service required of them by the mine management, and shall be entitled to an equal division of labor with other outside day men on idle days at such labor as they are competent to perform.

The night fireman, or watchman, in addition to his other duties, shall be responsible for the pumps within a distance of 250 feet from the main shaft bottom, and shall go into the mine when necessary to start them.

## GENERAL.

## SECTION VIII.

When the coal is paid for mine-run it shall be mined in as good condition as when paid for on a screened lump basis, and when loaded on the miner's car, it shall as nearly as possible be free from slate, bone coal, or other impurities, and if any miner shall load impurities in such quantities as to indicate knowledge and intent he shall be discharged. In case of dispute the impurities shall be kept until the case has been disposed of.

Wages shall be paid semi-monthly on or before the 10th and 25th of each month.

Day work shall be done on idle days, and in cases of emergency on overtime.

The time of beginning work in the morning and the length of intermission at noon shall be considered a local question which must be so arranged as to secure eight hours' work per day.

The duties of the mine committee shall be confined to the adjustment of disputes between the mine boss or superintendent and any of the members of the United Mine Workers of America working in and around the mines. The mine committee shall have no other authority, nor exercise any other control, nor in any way interfere with the operation of the mine, and for violation of this agreement the committee or any member thereof shall be discharged.

It is agreed that if any differences arise between an employer or employee in or about the mines, an attempt shall be made to adjust the same by the person, or persons, affected with the company's representative in immediate charge. If they fail to agree the question shall be referred to the mine boss and mine committee. If they fail to agree it shall be referred to the mine superintendent and mine committee. If they fail to agree it shall be referred to the district officers of the U. M. W. of A. and officers of the Indiana Bituminous Coal Operators' Association. If they fail to agree it shall be referred to the executive committees of the two associations. Provided, that nothing in this clause shall prevent the district officers from taking up for adjustment any dispute with the officers of the company affected.

That pending negotiations the miners shall not cease work because of any dispute, and an agreement reached at any stage of the proceedings shall be binding on both parties thereto, and not subject to review or revision of any other party or branch of either association.

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

No restriction shall be placed on the amount of coal which machines may mine, nor upon the number of places in which machines may cut, nor upon the number of loaders that may work after one machine, nor upon the amount of narrow work that any machine runner may be required to do, nor upon the number of cars that any miner may load in any specified time.

The operators shall have the privilege of working a night shift for cutting coal with machines. All men so employed shall be paid 28 cents

extra for each eight hours' work at night, in addition to the scale price per ton.

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

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

All local rules in violation of this contract shall be null and void, and no local union nor group of local unions shall pass any rules in violation, neither shall any company enforce any rule in violation of this contract.

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

Any miner knowing his place to be unsafe, shall protect same without delay and shall go into the mine for that purpose outside of regular hours and on idle days.

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

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

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

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

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

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

At all mines where coal companies deliver powder in the miner's working place such delivery shall be regarded only as an accommodation, and the company shall not be responsible for same after it leaves the magazine, but in the event of kegs being broken or powder being caked powder shall be replaced.

All local rules regarding the number of cars required above the tippie south of the Vandalla are hereby abolished, and in lieu of which it is agreed that the operators shall blow the whistle at eight o'clock in the evening when intending to work the following day, and again at five o'clock in the morning if cars are there or promised by the railroad company to be there by seven o'clock, or starting time.

If the company blows the whistle at five o'clock a. m. without the promise of cars and the miners report for work at 7 a. m. or starting time, and there are no cars the company shall pay to the local union a fine of \$25.00

The U. M. W. of A. shall have no jurisdiction nor exercise any control over construction work, such as the erection of tipples or mine buildings, scales, machinery, or screening apparatus necessary to hoist and prepare coal.

Where dirt must be removed to prepare pillars the miner shall be paid as agreed upon by miner and mine boss, or company, to remove same.

Any employe absenting himself from work for three days without a reasonable excuse, or having notified the mine manager and obtained his consent, may be discharged.

All miners shall put down their points and last pair of rails in their working places, and shall nail one end of same, but are not expected to tie and permanently lay their road.

The chief electrician shall be exempted from control of mine committee or local union, but in case of any dispute between him and the company the district officers shall adjust the same with officers of company involved.

Where any company operate more than one mine on the same line of road and in the same vein of coal, the work between the respective mines shall be as nearly as business conditions will permit equally divided.

All machine men shall work on idle days at operators' option to make up time lost on previous working day.

Every miner shall be given an opportunity to load an equal turn with every other miner doing the same class of mining. Where pick and machine miners are working in the same mine the turn shall be in proportion to the ratio between pick mining prices and machine loading prices.

The check-weighman shall furnish the boss-driver or mine-boss from day to day a turn sheet, and he shall cause the turn to be regulated. Provided, further, that no run or entry in machine mines shall be permitted to get more than five cars in advance of another run or entry, and in pick mines not more than two cars, except in case of accident.

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

It is agreed that when miners come out or stay out of the mine for the purpose of redressing a grievance, real or supposed, thus entirely or partially shutting down mine or mines contrary to agreement, each employe so ceasing or refraining from work shall be fined in the sum of one dollar per day during such shut-down. The fine thus assessed shall be deducted from each person so offending through the pay roll, and this agreement is the company's authority for making such deduction.

All money collected as fines shall be divided equally between District No. 11, U. M. W. of A., and the Indiana Bituminous Coal Operators' Association.

It is agreed that in the event of an inside employe being wrongfully discharged, and it is so discovered by methods herein provided, and by the same methods is reinstated, he shall be paid for time lost at the rate per day prevailing for inside day labor; provided, however, that the company shall have the option of permitting the accused to continue at work pending



the investigation, and the same shall apply to outside day laborers, except the outside day labor scale shall be paid.

Except in case of fatal accidents in the mine the mine shall in no case be thrown idle because of any death or funeral; in the event of a fatal accident in the mine, the employees may discontinue work for the remainder of the day, but work at the option of the operator shall be resumed the day following and continue thereafter. Nothing herein shall be construed to prevent an employe from absenting himself from work to attend the funeral of a fellow employe or member of his family.

In consideration of the observance of the above rule, and the enforcement of same, it is agreed that the following schedule of death benefits shall be paid to all parties entitled to receive the same: For a man, \$50.00; for an employe's wife, \$50.00; for any member of the family over the age of fourteen years, excepting married children, \$35.00; the company to pay one-half of the above amounts and the local union the remainder. Provided, however, that in the event of the mine being thrown idle on the day of any funeral by reason of an insufficient number of men reporting for work, then the company shall not be expected to pay any part of the amounts herein named.

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

Signed this 8th day of June, 1906:

In behalf of the Indiana Bituminous Coal Operators' Association:

J. C. KOLSEM, President.

P. H. PENNA, Secretary.

In behalf of Miners:

WELLINGTON O'CONNOR, President District 11, U. M. W. of A.

J. H. KENNEDY, Sec.-Treas. District 11, U. M. W. of A.

Attest:

W. B. WILSON, International Sec.-Treas. U. M. W. of A.

H. M. WOFERS.

## CONTRACT.

PICK MINING SCALE FROM JUNE 11, 1906, TO APRIL 1, 1908.

## BRAZIL BLOCK AGREEMENT.

1. Entered into this 11th day of June, 1906, between the operators' scale committee of the Brazil Block Coal District and the Executive Board of the United Mine Workers of America representing District No. 8.

## PICK SCALE AND YARDAGE.

2. The price for mining screened block coal in the Block Coal District of Indiana shall be \$1 per ton of two thousand pounds, it being understood also that the price for digging unscreened coal shall be an equivalent of the price paid for screened coal.

3. Further details in the scale price for pick mining in the Block Coal District shall be as follows:

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

5. For all coal two feet ten inches and under three feet one inch, \$1.05 per ton.

6. For all coal under two feet ten inches, \$1.10 per ton.

7. The price of yardage shall be as follows:

Single yardage for coal three feet one inch and over.....	\$1 00
Double yardage for coal three feet one inch and over.....	2 00
Gob entries in coal three feet one inch and over.....	1 50
Gob entries in coal three feet one inch and over, without brushing.	50
Single yardage for coal two feet ten inches and under three feet one inch .....	1 05
Double yardage for coal two feet ten inches and under three feet one inch .....	2 10
Gob entries in coal two feet ten inches and under three feet one inch .....	1 57½
Gob entries in coal two feet ten inches and under three feet one inch, without brushing .....	52½
Single yardage in coal below two feet ten inches.....	1 10
Double yardage in coal below two feet ten inches.....	2 20
Gob entries in coal below two feet ten inches.....	1 65
Gob entries in coal below two feet ten inches, without brushing....	55

All entries to be driven when required by the operator 5½ in the clear in height, and the miners agree to gob the dirt when they are not required to take it more than the distance of six rooms back from the last break-through, and when the dirt is hauled by a mule, then the miners agree to unload the same at a distance of not more than eight rooms back from the last break-through from the face of the entry. This agreement shall apply to all the Block Coal Mines in the Block Coal District, with the exception of the present No. 1 and No. 2 Superior Mines of the Zellar-McClellan Company, and in these two mines the same conditions shall continue as were in force during the years just ended, viz.: The miners shall continue to gob the break-throughs. Twenty-five cents per yard shall be paid extra for all double yardage

when the same is worked double shift, and 12½ cents per yard for all single yardage when the same is worked double shift. Work on driving entries and drawing pillars may be by double shift at the option of the operator.

## DAY MEN'S SCALE.

## 8. Inside day scale:

Track layers .....	\$2 56
Trappers .....	1 13
Bottom cagers .....	2 56
Drivers .....	2 56
Trip riders .....	2 56
Water haulers .....	2 56
Timbermen, where such are employed.....	2 56
Pipe men for compressed air plants.....	2 50
All other inside day labor .....	2 56
Blacksmiths .....	2 85
All other outside day labor.....	2 02½

9. The fireman and night pumpers shall be paid at the rate of 25 3-10 cents per hour for their labor. The above wage is based on an eight-hour work day, but in the event the operator desires it, the firemen and night pumpers are to work overtime to the extent of not more than two hours in any one day or shift. However, it is understood that in the event of any emergency the firemen and night pumpers will not limit their time, but continue working until such emergency is passed.

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

11. When the miner is working a deficient place and is being paid by the day, his pay shall be \$2.56 per day, and if he uses his own tools during such time he shall be paid ten cents per day for the use of the same. The operator shall have the option of furnishing the tools for such work.

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

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

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

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

## HOURS OF WORK.

16. The hours of beginning work in the morning shall be 7 a. m., with thirty minutes' stop for dinner, and begin shooting at 3:30 p. m., from April 1, 1906, to October 1, 1906, and from October 1, 1906, to April 1, 1907, the mines shall start at 7:30 a. m., with thirty minutes'

stop for dinner, and begin shooting at 4 p. m., and no shooting shall be done at any other time except by mutual consent between the bank boss and bank committee, and in the event that the mine is to work half day only it shall be the duty of the mine boss to notify the bank committee of the fact. The Officers' and Miners' Board of District No. 8 hereby agree and pledge themselves to see that the men in the mines carry out the contract by working eight hours per day, and that they will put in effect and maintain rules which will compel the men to be at their working places on time and remain at work until the expiration of eight hours.

17. Eight hours a day means eight hours in the mine at the usual working places for all classes of inside men. This shall be exclusive of the time required in reaching such working places in the morning and departing from the same at night.

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

#### SETTING LONG PROPS.

19. The miners working at Zellar-McClellan's No. 4 mine and the Indiana Block Coal Company's mine at Saline, shall set all the props in their rooms and shall set all the props along the roadway. When bottom is blasted for the road and long props are made necessary along the roadway the miners agree to set them. And the operators agree to pay therefor 3 cents each for all long props so set by them. The companies above named shall provide the props of required length.

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

21. The operators agree to give each miner as near as possible an equal turn of cars for coal, and not to allow any day hands to load coal on idle days, but in no case shall a turn apply to the handling of dirt, but the operators agree to put in the mines a sufficient number of mules to remove all the coal and dirt therefrom. It is agreed that nothing herein shall conflict with the gobbing of dirt as hereinbefore provided. The operators will give an equal turn of work to all inside day men as near as practicable, who are competent, excepting track layers and timbermen, adjustment of turns to be semi-monthly.

22. No miner shall be discharged or discriminated against because of his refusal to do work by the day when called upon by the pit boss. If by the absence or refusal to work of any day men work is likely to be interfered with, the mine committee, when called upon, shall assist the mine boss to furnish competent men in case he fails to secure them at the scale rate, so that the mines shall continue work.

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

24. Should the mine boss or superintendent at any mine discharge a miner or mine laborer, and upon investigation by the mine committee they believe there were not good and sufficient causes for so doing, they shall at once notify such boss or superintendent of their decision, and pending the matter being decided upon by the final board as provided in such cases the management may at their option retain in their employ such persons so discharged, pending the final decision. If said board finds that the man was discharged without sufficient cause he shall be reinstated and shall be paid his regular wages for all time lost by such discharge, but in days in which the mine was not in operation during this period shall not be reckoned as lost.

#### SETTLEMENT OF DIFFERENCES.

25. It is further agreed that if any differences arise between the operator or miners at any pit, settlement shall be arrived at without any stopping of work. If the parties immediately affected can not reach an adjustment between themselves the question shall be referred to the Executive Board of the United Mine Workers of America representing District No. 8 and an equal number of operators, whose action shall be final, but no operator or miner interested in the difference shall be a member of said committee. The Officers' and Miners' Board of District No. 8, United Mine Workers of America, hereby agree and pledge themselves to put in effect at the different locals of the district certain rules and regulations requiring men to be fined one dollar per day for the violation of the above clause, said fine to be checked off by the operators and turned over to District No. 8. On failure of said officers and board to accomplish their agreement to see that this part of the contract is observed, the following clause shall become effective, from that time on it shall be binding and have full force and be a part of this contract, viz.: It is understood and agreed that when any of the workmen in and about a mine stops the same for the purpose of redressing a grievance, real or supposed, thus shutting the mine down, contrary to this agreement, each employe shall pay to the owner of said mine the sum of \$1 per day during such shut down. The payment shall be deducted from each person through the pay-roll, and this agreement is authority for making such deduction. It is further agreed that no coal company, because of any grievance with an employe, real or supposed, shall stop the mine, and any company so shutting down its mine shall pay to each workman in and about the mine \$1 per day during such shut down.

26. The duties of the mine committee shall be confined to the adjustment of disputes between the mine boss or superintendent and any of the members of the United Mine Workers of America working in and around the mines, excepting the engineer working at such mine. In no case shall the mine committee have power to send day men home when needed by the operator, but the mine committee may bring any grievance before the joint board through their district officials.

## DRIVERS' RULES.

## 27. Regarding drivers:

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

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

29. The Block Coal District of Indiana may continue the use of the diamond bar screen, the screen to be 72 feet superficial area, of uniform size,  $1\frac{1}{4}$  inches between the bars, free from obstructions, and that such screen shall rest upon a sufficient number of bearings to hold the bars in proper position.

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

31. In case of emergency work the mine boss shall consult with the mine committee, and if they approve of the work being done on overtime the men engaged thereon shall not be required to lay off until their time is equalized with the others working in such mine.

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

33. The wages of the blacksmith shall be \$2.85 per day at all the mines, and in addition to his ordinary duties he shall do any other labor, and shall work at any mine owned by the company when required of him by the mine management, providing that he shall receive his regular wages therefor.

34. All local rules regarding the number of cars required above the tippie to be abolished.

35. In the event of death by accident in the mine the miners shall have the privilege of discontinuing work for the remainder of that day, but at the option of the operators work shall be resumed the following day.

36. The miners shall not stop work on the day of a funeral, where death is the result of an accident in the mine or otherwise, but instead men may absent themselves from work for the purpose of attending the funeral, and except in case of fatal accidents as above the mine shall not in any case be thrown idle because of any death or funeral.



## FUNERAL BENEFITS.

37. In consideration of the enforcement of this agreement referring to funerals of employes only, of any particular mine, and not otherwise, the operators agree to pay to the family of the deceased, or legal representative thereof, the sum of twenty-five cents per man for all men employed at the mine, but in no case shall the operators pay more than \$25. The miners also agree to give to said family twenty-five cents per man.

## HOISTING ENGINEERS' SCALE.

38. On and after June 11, 1906, until April 1, 1908, the scale of hoisting engineers throughout the Block Coal District, or District No. 8, shall be as follows: Where one engineer is employed the compensation shall be eighty-four dollars and thirty-seven cents (\$84.37) per month, and where two engineers are required the first engineer shall receive eighty-four dollars and thirty-seven cents (\$84.37) per month, the second seventy-three dollars and twelve cents (\$73.12) per month, and when they change week about, seventy-eight dollars and seventy-five cents (\$78.75) per month.

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

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

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

But it is understood that the operators will not ask them during this period to hoist any coal produced by non-union labor for sale on the market.

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

43. It is also agreed that in case of sickness or unexpected absence

of the engineer, any other engineer or engineers shall perform his duty; and if desired by them his wages for time so absent shall revert to the engineer performing such duty.

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

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

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

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

JAS. H. McCLELLAND.  
W. M. ZELLAR.  
W. W. RISHER.  
W. E. EPPERT.  
JOHN CHESTERFIELD, JR.  
E. F. McGRANAHAN.  
H. W. JENKINS.  
HUGH MASON.

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

WILLIAM WILSON.  
PATRICK GOLDEN.  
HUGH KIRKLAND.  
JAMES SHIEL.  
JOHN FOGG.

### CONTRACT.

MACHINE MINING SCALE FROM JUNE 11, 1906, TO APRIL 1, 1908,

#### MACHINE MINING SCALE.

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

Entered into this 11th day of June, 1906, and continuing until April 1, 1908, between the Operators of Machine Mines of the Block Coal District and the Executive Board of the United Mine Workers of America, representing District No. 8.

The price for loading, shooting, timbering, taking care of all draw slate that is four (4) inches and under in thickness, in rooms and entries, shall be fifty-three and one-half (53½) cents per ton.

Price for entry driving 6 to 9 feet wide, fifty-three and one-half (53½) cents per yard.

Price for entry driving, 9 to 12 feet wide, thirty-two and one-half (32½) cents per yard.

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

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

Machine runners and helpers to be paid twenty-five (25) cents per ton, and when working by the day, machine runners to be paid \$3.03½ per day. Helpers, \$2.70 per day. Motormen, \$3.03½.

Entry driving, 6 to 9 feet wide, machine runner to be paid 25 cents per yard.

Entry driving, 9 to 12 feet wide, machine runner to be paid 16 cents per yard.

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

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

There shall be no discrimination against any employees.

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

1. That one man shall have the right to two places where he can take care of the same.

2. That two men shall have the right to three places where they can take care of the same.

3. All others one place.

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

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

This agreement to become a part of the agreement entered into the 11th day of June, 1906, between the Operators' Scale Committee of the Block Coal District and the Executive Board of the United Mine Workers of America, representing District No. 8.

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

JAS. H. McCLELLAND.

JOHN CHESTERFIELD.

E. F. McGRANAHAN.

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

WILLIAM WILSON.

PATRICK GOLDEN.

HUGH KIRKLAND.

JAMES SHIEL.

JOHN FOGG.

TABLE

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

## CLAY COUNTY.

NAME OF MINE.	Pick Miners.	Machine Runners and Helpers.	Loaders.	Inside Day and Monthly Men.	Outside Day Men.	Total Employees.	Days Worked.	Mules Used.	Powder.
Brazil Block No. 1.....	4	7	17	20	6	54	185	10	203
Brazil Block No. 4.....	98			20	10	128	178	6	2,843
Brazil Block No. 7.....	52			8	6	66	182	3	968
Brazil Block No. 8.....	24			9	3	36	168	3	655
Rebstock.....	47			11	5	63	164	2	1,181
Vandalia No. 50.....	41			11	5	57	148	4	1,664
Vandalia No. 60.....	94			22	10	126	70	6	2,394
Vandalia No. 63.....	55			17	7	79	132	6	1,287
Vandalia No. 64.....	26			6	6	38	68	3	282
Vandalia No. 65.....	161			30	15	206	160	11	5,146
Superior No. 4.....	65			18	6	89	216	5	2,654
Superior No. 7.....	21			11	3	35	55	4	227
Crawford No. 4.....	24			9	4	37	113	3	460
Crawford No. 2.....	25			10	5	40	86	2	530
Crawford No. 6.....	97			20	7	124	180	9	4,639
Crawford No. 8.....	27			5	4	36	125	2	658
Crawford No. 9.....	68			13	6	87	223	5	3,045
Fortner.....	18			5	3	26	153	3	550
Gifford No. 1.....	7	4	16	8	5	40	70	3	517
Gifford No. 2.....	29	8	34	29	9	109	191	8	1,885
Glenn No. 1.....	34			10	5	49	170	4	1,206
Plymouth No. 2.....	32			4	5	41	184	2	1,623
Monarch.....	12			10	2	24	296	3	908
Lewis.....	22	20	63	20	10	135	154	8	1,759
Vivian No. 1.....	14			5	12	31	125	2	741
Vivian No. 2.....		16	55	30	12	113	104	7	661
Lower Vein No. 1.....	22			9	4	35	103	2	396
Gold Knob.....	33	12	16	12	11	84	137	4	1,666
Worlds Fair No. 2.....	25			6	4	35	199	2	280
Island Valley No. 4.....		14	70	14	10	108	83	8	573
Harrison No. 4 (Idle).....									
Eureka No. 5.....	63			14	7	84	191	4	2,904
Treager.....	12			2	1	15	238	1	760
Stunkard.....	14			4	2	20	241	2	794
Klondyke No. 2.....	50			11	5	66	210	4	2,335
Crawford No. 2 (Idle).....									
Progressive (Idle).....									
Total.....	1,316	81	271	433	215	2,316	5,522	154	49,021

## DAVISS COUNTY.

Stucky.....	8			1	2	11	121		
Montgomery No. 3.....	47			12	9	68	216	8	1,896
Mutual.....	64			16	9	89	134	8	1,220
Mandabach.....	10			1	2	13	121	1	106
Winklepeck (Idle).....									
Overton (Idle).....									
Total.....	129			30	22	181	592	17	3,222

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

## 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.	Powder.
Indio.....	70	.....	.....	16	8	76	264	6	2,988
Silverwood.....	19	.....	.....	8	6	29	273	2	1,322
Total.....	89	.....	.....	24	14	127	537	8	4,310

## GREENE COUNTY.

Black Creek.....	55	10	37	28	10	140	129	14	1,886
Sponsler.....	75	.....	.....	14	6	95	111	10	1,952
Glenburn.....	70	6	22	35	9	142	129	12	2,392
Antioch.....	52	.....	.....	22	8	82	160	12	3,032
Vandalia No. 2.....	75	10	50	35	15	185	129	14	3,931
North Linton.....	42	.....	.....	13	5	60	150	7	2,594
Vandalia No. 3.....	132	.....	.....	19	8	159	165	15	4,190
Vandalia No. 4.....	80	.....	.....	21	8	109	120	7	2,166
Vandalia No. 5.....	78	16	33	52	12	191	167	20	2,779
Vandalia No. 6.....	33	.....	.....	10	5	48	61	6	411
Vandalia No. 8.....	16	18	100	35	10	179	169	13	1,424
Vandalia No. 9.....	14	8	44	18	7	91	192	10	1,480
Vandalia No. 21.....	.....	22	53	11	10	96	128	4	631
Gilmour.....	20	16	83	55	17	191	122	25	1,749
Hoosier No. 1.....	14	8	25	17	8	72	67	3	640
Hoosier No. 2 (Idle).....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Midland.....	.....	12	52	27	11	102	18	9	336
Tower Hill.....	120	.....	.....	29	13	162	174	10	4,838
Lattas Creek.....	45	20	103	83	20	271	187	26	2,784
Vulcan.....	35	.....	.....	5	8	48	75	4	698
Summit No. 2.....	24	18	80	45	12	179	171	21	1,729
Victoria.....	80	.....	.....	24	9	113	224	12	4,282
Green Valley.....	.....	16	84	30	11	141	106	12	1,002
Queen.....	30	.....	.....	8	3	41	240	4	1,298
Letsinger.....	45	.....	.....	10	8	63	150	4	2,462
North West.....	47	10	49	39	12	157	219	12	2,046
Twin No. 4.....	.....	8	31	17	7	63	127	5	367
Twin No. 5.....	5	22	81	22	10	140	147	10	1,372
Midvale.....	57	.....	.....	11	7	75	131	5	1,851
Total.....	1,244	220	927	735	269	3,395	3,968	306	56,382

## GIBSON COUNTY.

Oswald.....	70	.....	.....	23	10	75	214	9	2,787
Massey (Not reported).....	.....	.....	.....	.....	.....	.....	.....	.....	1,016
Fort Branch.....	19	.....	.....	5	6	29	40	10	156
Total.....	89	.....	.....	28	16	104	254	19	3,959

## KNOX COUNTY.

Bicknell.....	55	.....	.....	14	9	78	121	9	4,153
Knox.....	56	4	14	12	8	94	112	6	1,330
Lynn.....	8	4	17	7	9	43	194	5	962
Prospect Hill.....	18	.....	.....	7	6	31	268	3	979
Vandalia No. 40.....	36	.....	.....	16	6	58	120	4	1,344
Wheatland.....	71	.....	.....	13	8	92	198	7	3,555
Pine Knot.....	50	12	28	15	11	116	157	6	1,042
Freeman.....	.....	6	20	12	8	46	93	2	371
Total.....	294	26	79	104	65	563	1,263	42	13,766

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

## PARKE 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.	Powder.
Brazil Block No. 9.....	93			33	7	133	160	12	2,746
Brazil Block No. 12.....	49			14	4	67	168	6	1,454
Mecca No. 3.....	70	4	28	35	9	146	173	17	3,129
Lyford No. 1.....	53			11	8	72	144	3	2,514
Mary.....	8	16	45	37	11	117	230	10	426
Superior No. 1.....	81			22	6	109	227	10	2,121
Superior No. 2.....	61			19	7	87	202	10	2,230
Superior No. 3.....	71			13	5	89	195	6	3,316
Vandalia No. 316.....	67			35	14	116	134	14	2,289
Vandalia No. 317.....	70			21	8	99	197	8	2,618
Pan American.....	48			7	8	63	58	4	298
Parke No. 11.....	15	30	60	32	12	149	259	10	2,281
Harrison (Not reported).....									
Superior No. 5.....	36			10	3	49	72	3	784
Clay County (Not reported).....									
Bridgeton No. 1 (Not reported).....									
Parke No. 10.....	93	20	23	47	16	199	210	15	3,996
Total.....	815	70	156	336	118	1,495	2,429	128	30,202

## PERRY COUNTY.

Troy.....	10			3	2	15	287	2	242
Total.....	10			3	2	15	287	2	242

## PIKE COUNTY.

Aberdeen (Idle).....									
Carbon.....	33			14	6	53	298	6	154
Ayrshire No. 3 (Not reported).....									2,424
Ayrshire No. 4 (Not reported).....									7,267
Ayrshire No. 5 (Not reported).....									658
Rogers (Not reported).....									200
Blackburn.....	39			7	6	52	178	5	1,493
Littles.....	142			31	13	186	144	14	4,867
Hartwell.....	108			26	12	146	119	12	4,196
Petersburg (Idle).....									
Winslow No. 4 (Idle).....									
Winslow No. 5 (Idle).....									
Hartwell No. 2.....	50			6	3	59	90		434
Total.....	372			84	40	496	829	37	21,693



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

## 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.	Powder.
Caladonia.....		12	53	15	10	90	127	6	937
Phoenix No. 4.....		14	73	29	19	135	122	9	1,500
Cummins.....	25			9	5	39	38	3	40
Hocking.....	5	18	85	48	20	176	115	16	1,595
Citizens.....		19	41	21	13	94	142	7	1,006
Sun Flower.....		16	90	29	13	148	141	13	1,181
Consolidated No. 25.....	4	10	37	18	10	79	90	5	394
Consolidated No. 26.....		12	60	27	16	115	131	8	881
Consolidated No. 28.....		8	30	24	10	72	70	5	223
Consolidated No. 29.....		14	77	42	18	151	70	12	347
Consolidated No. 30.....		10	46	55	9	120	129	5	683
Consolidated No. 31.....	40			12	4	56	45	6	519
Consolidated No. 32.....	5	22	114	41	10	192	80	11	303
Consolidated No. 33.....	5	20	102	37	15	179	150	10	2,752
Consolidated No. 34.....		14	74	23	13	124	130	7	1,090
Vandala No. 10.....	96			22	14	132	136	8	4,789
Vandala No. 30 (Idle)									
West Linton (Idle)									
Jackson Hill No. 2.....		18	108	35	16	177	175	15	1,354
Jackson Hill No. 4.....		16	87	24	13	140	179	9	1,018
Keystone.....	5	8	12	4	7	36	139	11	1,223
Freeman.....	43			10	7	60	193	5	2,000
Dering No. 12.....	68			31	11	110	86	10	1,881
Dering No. 13.....	5	14	66	28	12	125	192	10	1,367
Dering No. 14.....	2	16	100	54	29	201	193	20	1,555
Semi Block (Idle)									
Mammoth Vein.....	2	15	81	35	16	149	160	10	1,123
Shirley Hill No. 1.....	30	12	40	22	10	114	136	9	2,870
Little Giant.....	70	18	90	81	17	276	135	12	3,669
Shirley Hill No. 2.....	4	10	26	20	9	69	145	3	547
Superior.....	130			33	10	173	160	11	4,640
Pearl.....	16	8	50	20	10	104	169	6	944
Reliance.....	4	8	48	34	12	106	206	7	593
Hamilton.....	10	14	18	15	9	66	90	3	508
Black Hawk.....	28	6	14	6	4	58	95	3	777
Clover Leaf.....		8	44	28	9	89	100	6	760
Washington.....	24	8	43	30	11	116	70	10	551
Total.....	621	368	1,709	962	411	4,071	4,339	291	45,620

## VANDERBURGH COUNTY.

Diamond.....	66			15	14	95	241	6	1,738
Ingle-side.....	52			12	11	75	258	6	1,908
Sunyside.....	68			13	11	92	254	10	2,358
Union (Idle).....									
Unity.....	130			35	15	180	209	17	7,365
First Avenue.....	50			10	10	70	297	4	1,862
Total.....	366			85	61	512	1,349	43	15,231

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

## VERMILLION 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.	Powder.
Dering No. 5.....	140			46	12	198	202	12	9,105
Dering No. 6.....	227			50	15	292	214	16	12,332
Dering No. 7.....	205			46	15	266	212	21	11,329
Dering No. 8.....	200			45	16	261	208	9	8,667
Dering No. 15.....	125			30	12	167	170	9	4,838
Eureka No. 1.....	20			6	3	29	220	5	828
Crown Hill No. 1.....	200			45	12	257	160	17	7,768
Oak Hill.....	145			40	11	196	180	12	10,600
Maple Valley No. 1.....	150			45	11	206	160	12	10,531
Buckeye No. 2.....	215			38	10	263	200	14	12,866
Prince.....	135			43	10	188	180	12	7,840
Crown Hill No. 3 (Idle).....									
Crown Hill No. 2.....	150			36	8	194	185	9	12,967
Total.....	1,912			470	135	2,517	2,301	148	108,671

## VIGO COUNTY.

Atherton.....	4	10	62	30	8	106	190	7	933
Chicago No. 6 (Idle).....									
Diamond.....	86			34	12	132	70	14	1,009
Victor.....	73			9	8	90	155	5	1,255
Lawton.....	216			35	15	266	250	22	7,344
Grant No. 2.....	110			47	12	169	200	18	4,370
Dering No. 2 (Idle).....									
Dering No. 10 (Idle).....									
Vandalia No. 66.....	100			30	15	145	200	10	3,752
Vandalia No. 67.....	220			40	11	271	230	18	5,602
Vandalia No. 68.....	56			12	5	73	150	5	1,981
Vandalia No. 69.....	23			9	6	38	200	2	1,984
Vandalia No. 80.....	59			25	6	90	70	6	762
Vandalia No. 81.....	72			14	12	98		8	2,987
Vandalia No. 82.....	30	12	12	10	6	71	70	4	789
Miami No. 1.....	140			28	10	178	220	18	5,162
Miami No. 2.....	123			21	8	152	170	13	4,712
Miami No. 3.....	165			45	9	219	105	12	4,093
Fauvre No. 1.....	56			12	4	72	200	8	1,293
Larimer.....	10			3	2	15	60	2	365
Deep Vein.....	130			27	10	167	250	12	5,021
Ray No. 2.....	235	10	15	40	10	310	200	14	7,093
Forrest.....	20	16	52	24	13	146	170	15	1,959
Domestic Block No. 1.....	22	10	47	32	18	129	160	6	1,062
Sugar Valley (Idle).....									
Fauvre No. 2.....	10			4	5	19	60	1	93
Lower Vein.....	37			10	6	53	220	3	137
Total.....	1,997	58	188	541	211	3,009	3,810	238	69,154

## WARRICK COUNTY

Air Line (Idle).....									
Big Four.....		12	40	16	10	78	200	9	940
Big Vein No. 3.....	8	10	26	10	8	62	220	6	893
Castle Garden.....	15			4	4	28	85	5	241
DeForrest.....	19	4	14	4	2	43	180	2	357
Star No. 1.....	10			2	2	19	65		505
Electric.....		12	40	16	10	78	175		
Burke (Idle).....									
Dawson.....		6	11	5	2	24	37	3	82
Erie Canal.....		6	28	14	7	55	100	4	316
Chandler.....	37	6	22	14	6	85	90	5	641
Total.....	89	56	181	85	51	462	1,152	34	3,975

TABLE

Showing by Counties the Number of Miners, the Number of Inside Day and Monthly Men, Number of Outside Day and Monthly Men, Wages Earned by Same and the Average Wages Per Employee in the Block and Bituminous Coal Mines, Each Exhibited Separately, as are the Hand and Machine Mines.

## BLOCK COAL MACHINE MINES.

COUNTY.	Number of Miners.	Total Wages.	Average Wages.	Number Inside Employees.	Total Wages.	Average Wages.	Number Outside Employees.	Total Wages.	Average Wages.
Clay .....	28	\$14,895 95	\$514 14	20	\$13,501 90	675 10	6	\$6,777 95	\$1,129 66
Parke.....	69	31,578 82	457 66	37	18,548 09	501 30	11	5,875 96	531 45
Vigo.....	79	39,408 48	498 84	32	9,515 79	297 37	18	6,193 11	344 06
Total General average.....	176	\$85,883 25	\$487 97	89	\$41,565 78	\$467 03	35	\$18,847 02	\$538 49

## BLOCK COAL PICK MINES.

Clay .....	762	\$350,209 56	\$455 05	193	\$123,501 69	\$636 52	89	\$60,660 01	\$690 45
Parke.....	439	189,448 10	571 18	118	60,518 92	512 87	40	30,218 78	755 44
Vigo.....	37	8,607 53	232 64	10	3,326 10	332 61	6	1,762 97	293 83
General Average.....	1,238	\$548,265 19	\$484 85	321	\$187,346 71	\$440 54	135	\$92,641 76	\$674 45
Total General average Block Employees.....	1,414	\$634,148 44	\$484 17	410	\$228,912 49	\$445 13	170	\$111,488 78	\$646 46

## BITUMINOUS COAL MACHINE MINES.

Clay .....	419	\$185,191 21	\$441 98	113	\$66,779 11	\$590 97	57	\$35,270 51	\$618 78
Greene.....	1,610	816,068 60	506 87	549	304,931 47	555 43	181	123,469 09	682 15
Knox.....	219	66,682 82	304 49	49	36,482 03	744 53	36	20,451 43	568 10
Parke.....	392	213,508 44	544 66	114	72,979 40	640 17	37	27,023 84	730 37
Sullivan.....	2,296	1,109,991 43	483 45	845	414,813 30	479 07	360	222,508 39	618 07
Vigo.....	478	195,085 66	408 12	104	59,245 70	569 67	37	21,831 04	590 03
Warwick.....	301	132,209 49	439 23	79	42,986 13	544 13	45	19,621 16	436 02
General average.....	5,715	\$2,718,737 65	\$475 72	1,853	\$998,217 14	\$538 70	753	\$470,175 46	\$624 40

## BITUMINOUS COAL PICK MINES.

COUNTY.	Number of Miners.	Total Wages.	Average Wages.	Number Inside Employees.	Total Wages.	Average Wages.	Number Outside Employees.	Total Wages.	Average Wages.
Clay.....	459	\$226,731 46	\$493 96	107	\$65,207 37	\$609 41	63	\$30,942 23	\$491 14
Daviess.....	129	48,469 30	375 73	30	14,117 23	470 57	22	8,474 63	385 21
Fountain.....	89	51,524 93	578 93	24	15,518 71	646 61	14	8,187 02	584 79
Gibson.....	89	58,499 97	537 50	28	16,810 00	600 36	16	10,397 20	649 85
Greene.....	781	431,915 96	553 03	186	108,965 80	585 84	88	55,637 22	632 24
Knox.....	180	103,024 98	572 36	50	28,502 42	570 05	29	17,477 66	602 67
Parke.....	190	112,119 51	590 10	67	34,798 46	519 38	30	14,725 17	490 84
Perry.....	10	5,106 68	510 67	3	1,753 63	584 54	2	1,323 35	661 68
Pike.....	372	270,212 81	365 65	84	80,517 31	466 61	40	33,814 74	402 04
Sullivan.....	402	181,122 64	450 55	117	60,515 45	517 23	51	22,875 14	448 53
Vanderburgh.....	366	195,384 31	533 83	85	58,244 05	685 34	61	37,269 48	610 97
Vermillion.....	1,912	955,765 46	499 87	470	266,147 88	566 27	135	77,724 93	575 74
Vigo.....	1,884	767,141 25	407 18	395	235,881 39	597 16	150	85,550 43	570 33
Warrick.....	25	8,914 32	356 57	6	2,496 73	416 12	6	1,552 21	258 70
General average bituminous pick employees.....	6,888	\$3,415,933 58	\$495 92	1,652	\$989,476 43	\$598 96	707	\$405,951 41	\$574 18
General average bituminous machine and pick employees combined.....	12,603	\$6,134,671 23	\$486 76	3,505	\$1,987,693 57	\$567 10	1,460	\$876,126 87	\$600 09
General average bituminous and block employees combined.....	14,017	\$6,768,819 67	\$482 90	3,915	\$2,216,606 06	\$566 18	1,630	\$282,078 28	\$605 90
Grand total average of all employees.	19,562	\$9,973,041 38	\$509 82						

TABLE

*Exhibiting a Comparative Statement of Total Tons of Coal Produced, Total Number of Employes, Total Wages Paid and Per Cent. Gain or Loss in Number of Employes, Tons of Coal Produced and Wages Paid in the Block Coal Mines for Each Year from 1901 to 1906, inclusive.*

YEAR.	Em- ployes.	Per Cent. Gain.	Per Cent. Loss.	Tons Produced.	Per Cent. Gain.	Per Cent. Loss.	Wages Paid.	Per Cent. Gain.	Per Cent. Loss.
1901 and 1900	2,742	34		1,090,522		27.8	\$1,228,372 72		.035
1902	2,452		10.5	1,162,764	7		1,356,098 45	10.4	
1903	2,293		.06	1,025,940		11.7	1,402,935 99	.034	
1904	2,128		.071	727,062		29.1	1,085,056 33		29—
1905	1,966		.076	658,735		.095	917,501 22		18.2
1906	1,994	.014		746,670	13.3		974,549 71	.062	
Loss, 1906, under 1901			27.2			31—			20.6

TABLE

*Showing a Comparative Statement of Total Number of Employes, Total Tons Coal Produced, Total Wages Paid, Per Cent. Gain or Loss in Number of Employes in the Bituminous Mines of the State from 1901 to 1906, Inclusive.*

YEAR.	Em- ployes.	Per Cent. Gain.	Per Cent. Loss.	Tons Produced.	Per Cent. Gain.	Per Cent. Loss.	Wages Paid.	Per Cent. Gain.	Per Cent. Loss.
1901	9,354	19		5,928,681	24		\$4,452,167 14	.35	
1902	10,687	14.8		7,600,433	18		5,722,814 67	.29	
1903	12,835	.20		8,966,613	17—		7,746,636 13	.37	
1904	15,710	22—		9,145,332	.02		8,080,348 05	.43	
1905	16,643	.59		10,337,237	.13		8,436,393 43	.044	
1906	17,568	.055		10,675,357	.032—		8,998,491 67	.066	
1906 over 1901		87—			80—			.102	

TABLE

*Showing by Counties the Number of Tons of Coal Mined, the Number Kegs of Powder Used, the Average Number of Tons Produced Per Keg in the Block Coal Mines of the State, both Pick and Machine Exhibited Separately. Also a General Average of Tons Produced Per Keg in Both Pick and Machine Mines Combined.*

## BLOCK COAL MACHINE MINES.

COUNTY.	Tons Produced.	Kegs of Powder.	Tons per Keg.
Clay.....	20,599	203	101.4
Parke.....	51,459	426	120.8
Vigo.....	32,885	1,062	31
General average.....	114,869	1,691	67--

## BLOCK COAL PICK MINES.

Clay.....	418,242	27,599	15.2
Parke.....	212,551	12,949	16.4
Vigo.....	10,934	637	17.2
General average.....	631,801	41,185	15.3
Total average for all block mines.....	746,670	42,876	17.4

TABLE

*Showing by Counties the Number of Tons of Coal Mined, the Number of Kegs of Powder Used, the Average Number of Tons Produced Per Keg in the Bituminous Pick Mines of the State, and a General Average of Tons Produced Per Keg in All of the Bituminous Pick Mines Combined.*

## BITUMINOUS PICK MINES.

COUNTY.	Tons Produced.	Kegs of Powder.	Tons per Keg.
Clay.....	370,006	13,608	27.2
Daveiss.....	63,611	3,222	19.7
Fountain.....	78,135	4,310	18.1
Gibson.....	93,853	3,959	23.7
Greene.....	695,009	29,774	23.3
Knox.....	172,207	10,061	17.1
Parke.....	170,086	7,635	22.3
Perry.....	7,644	242	31.6
Pike.....	465,287	21,694	21.4
Sullivan.....	297,382	13,569	21.9
Vanderburgh.....	304,080	15,231	19.9
Vermillion.....	1,632,986	108,671	15
Vigo.....	1,258,849	54,197	23.2
Warrick.....	14,695	746	19.7
General average.....	5,623,830	286,919	19.6

TABLE

*Showing by Counties the Number of Tons of Coal Mined, the Number of Kegs of Powder Used, the Average Number of Tons Produced Per Keg in the Bituminous Machine Mines, and a General Average of Tons Produced Per Keg in all of the Bituminous Mines in the State. Also a Total General Average of Tons Produced Per Keg in the Bituminous Pick and Machine Mines Combined, and a Total General Average of Tons Produced Per Keg in all of the Block and Bituminous Mines Taken as a Whole.*

## BITUMINOUS MACHINE MINES.

COUNTY.	Tons Produced.	Kegs of Powder.	Tons per Keg.
Clay.....	364,833	7,061	51.6
Greene.....	1,495,254	26,548	56.8
Knox.....	140,774	3,705	38
Parke.....	392,527	9,406	41.7
Sullivan.....	2,028,711	32,051	63.3
Vigo.....	328,507	13,737	23.9
Warrick.....	300,921	4,722	63.7
General average.....	5,051,527	97,230	51.9
Total general average bituminous pick and machine.....	10,675,357	384,149	27.9
Total general average of entire State production.....	11,422,027	427,025	26.8

TABLE

*Showing by Counties the Number of Kegs of Powder Per Miner Used in the Mines of Indiana During the Year 1906.*

COUNTY.	Number of Mines.	Total Kegs of Powder.	Kegs Per Employee.
Clay.....	1,587	48,471	30.5—
Daviess.....	129	3,222	25.4
Fountain.....	89	4,310	44—
Greene.....	2,171	56,322	26—
Knox.....	373	13,766	36.9
Parke.....	971	30,416	31.3
Perry.....	10	242	24.2
Pike.....	372	21,694	58.3
Sullivan.....	2,330	45,620	19.5
Vanderburgh.....	366	15,231	41.3
Vermillion.....	1,912	108,671	52—
Vigo.....	2,185	69,633	32—
Warrick.....	270	5,468	20.2
Total.....	12,854	427,025	33.2

NOTE.—Pick Miners and Loaders are the only employees who use powder in mining coal and are both included in the above table.



## NEW MINES.

Thirteen new mines, three of which are block coal and ten bituminous, were opened and developed during the year 1906, distributed in the different counties as follows:

Clay County, one block coal hand mine; Knox County, one bituminous electric machine mine; Parke County, one block and one bituminous hand mine; Pike County, one bituminous hand mine; Vigo County, one block and four bituminous, all of which are hand mines; Warrick County, three bituminous mines, two of which are electric machine and one a hand mine. The bituminous mines above noted, with two exceptions, are each exceptionally well equipped with the latest up-to-date machinery and will be capable of producing a large output of coal.

We exhibit in the following table the names of these new mines and the names of the companies owning them, geological number of coal seam mined, thickness of seam in feet and inches, depth and size of hoisting shaft, character of coal, i. e.: whether block or bituminous, whether hand or machine mined, date of first shipment of coal, location of mine as to county and nearest town or city and the railroad on which the mine is located.

# TABLE OF NEW MINES. CLAY COUNTY.

NAME OF COMPANY.	MINE.								Location of Mine.	Railroad.
Chicago Ind. Block Coal Co. ....	Harrison No. 4.	III	4'9"	Block..	60	8x16	Pick. ....	9- 1-06	Three miles east of Clay City.....	E. & I.

## KNOX COUNTY.

Knox Coal Company.....	Knox.....	V	7'	Bitum..	.....	.....	Pick. ....	9- 1-06	$\frac{1}{2}$ mile West of Bicknell .....	I. V. br. Vandalia.
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## PARKE COUNTY.

Bridgeton Mining Co. ....	Bridgeton No. 1.	IV	2'6"	Bitum..	.....	Slope..	Pick. ....	12- 1-06	One mile No. Bridgeton .....	C. & I.
Zellar-McClellan Co. ....	Superior No. 5..	III	3'6"	Block..	145	8x21	Pick. ....	9-21-06	Two miles N. E. Diamond.....	C. & E. I.

## PIKE COUNTY.

Patoka Valley Coal Co.....	Hartwell No. 2..	V	5'	Bitum..	Slope	.....	Pick. ....	7- 1-06	Hartwell.....	Branch Southern.
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## VIGO COUNTY.

Coal Bluff Mining Co. ....	Plymouth No. 1.	III	3'10"	Block..	215	8'6"x20	Pick. ....	6- 1-06	$\frac{1}{2}$ mile East Fontanet.....	C. C. C. & St. L.
Coal Bluff Mining Co. ....	Victor.....	VI	6'6"	Bitum..	50	8'6"x19	Pick. ....	9- 4-06	$\frac{1}{2}$ mile West Coal Bluff.....	C. C. C. & St. L.
Coal Bluff Mining Co. ....	Wabash.....	IV	5'6"	Bitum..	300	8x18	Pick. ....	None shipped	2 $\frac{1}{2}$ miles N. W. Terre Haute.....	C. C. C. & St. L.
Fauvre Coal Co. ....	Fauvre No. 2....	V	4'6"	Bitum..	228	9x16	Pick. ....	10- 1-06	West Terre Haute.....	Vandalia.
Sugar Valley Coal Co.....	Sugar Valley....	V	4'6"	Bitum..	185	7x14	Pick. ....	1- 1-06	One mile West of W. Terre Haute.	Vandalia.

## WARRICK COUNTY.

Erie Canal Coal Company.....	Erie Canal.....	V	5'	Bitum..	130	.....	Machine..	8- 1-06	$\frac{1}{2}$ mile West of Chandler.....	Southern.
Chandler Coal Company.....	Chandler.....	V	.....	Bitum..	.....	.....	Machine..	9- -06	$\frac{1}{2}$ mile West of Chandler.....	Southern.
Castle Garden Coal Co.....	Castle Garden..	V	4'	Bitum..	96	8'6"x18	Pick. ....	9- 1-06	2 miles West of Chandler .....	Evansville br. Southern

## IMPROVEMENTS.

The following sums of money were reported to this office during the year 1906 as having been expended in improvements of different kinds of mines in the counties throughout the State as follows:

Clay County \$6,167.00. Daviess County \$840.00. Fountain County \$120.00. Greene County \$15,331.19. Knox County \$21,629.78. Parke County \$3,339.18. Pike County \$2,457.00. Sullivan County \$41,218.00. Vanderburg County \$4,886.00. Vermillion County \$16,345.00. Vigo County \$11,982.99. Warrick County \$1,253.00, making a total of \$125,569.14.

We give herewith some of the more important improvements made during the year. The Big Vein Coal Company of Terre Haute have installed new boilers, pumps, etc., at a cost of \$2,935.00 at their Lewis Mine in Clay County. The Jasonville Coal Company, Clay County, expended \$2,769.77 on numerous improvements in their Gold Knob Mine. The Southern Indiana Coal Company reports an expenditure of \$3,346.00 on improvements at their Midland Mine in Greene County. They do not report the nature of improvements made and as the mine has been idle since April 1, no inspections have been made and we have been unable to ascertain just what improvements were made. The Queen Coal Company, Greene County, sunk and equipped with a stairway the manway or escape shaft at their Fry Mine during the summer, the cost of which was \$2,402.00. The Midvale Coal Company, Greene County, have expended \$3,500 in sinking and equipping a second outlet at their Pennsylvania Mine. The Indiana Fairmont Coal Company, Greene County, have expended \$980.00 improving their haulage roads and numerous other small improvements. The Knox Coal Company have sunk a second outlet, installed an electric plant and overhauled their tippie, making it almost entirely new at a cost of \$20,000.00. This mine was sunk to the lower seam No. V. during the summer months and within a short time will rank among the largest producers in the State. The Big Muddy Coal Company expended \$839.00 completing their manway and various other improvements in their Pine Knot Mine. The Patoka Valley Coal Company, Pike County, have extended their motor haulage road, installed new pumping machinery and made other important changes in their Hartwell Mine at a cost of \$2,457.00, thereby increasing the capacity of the mine.

The Consolidated Indiana Coal Company report \$14,186 having

been expended on improvements in their Sullivan County Mines as follows: No. 25, \$1,693.00; No. 26, \$1,734.00; No. 28, \$2,246.00; No. 29, \$255.00; No. 32, \$2,543.00; No. 33, \$1,746.00; No. 34, \$3,419.00. In reporting the above amounts no statement was made as to the nature of improvements.

The Peabody-Alwart Coal Company of Chicago, Illinois, during the strike in April and May expended \$2,378.00 improving the roadways, timbering, etc., in their Reliance Mine, Sullivan County.

The Diamond Coal and Mining Company, Chicago, Illinois, completed the manway and made other extensive improvements at their Hamilton Mine, Sullivan County, expending \$7,669.00

The D. Ingle Coal Company, Vanderburgh County, remodeled the head frame and tippie at their Ingle Mine in Evansville during the summer at a cost of \$1,851.32.

The Diamond Coal Company, also of Evansville, report \$3,035.00 as having been spent on improvements in their Diamond Mine but do not report the nature of improvements.

The Dering Coal Company report an expenditure of \$5,415.00 as having been spent on improvements in their Vermillion County mines Nos. 5, 6, 7, 8, 9 and 15.

The Clinton Coal Company have installed a box car loader and one new boiler at their Crown Hill No. 1 Mine at a cost of \$1,130.50. They have also made extensive improvements at their No. 2 Mine amounting to \$2,340.00.

The Charles F. Keeler Coal Company of Chicago, Illinois, have installed new boilers and made other improvements in their Ather-ton Mine in Vigo County at a cost of \$1,615.00.

The Deep Vein Coal Company, Vigo County, have completed the sinking of the manway at their Deep Vein Mine, also made other improvements, expending \$2,807.00.

The Domestic Block Coal Company, Vigo County, extended their mine switch and completed the manway at their Domestic Block No. 1 Mine at a cost of \$1,000.00.

The Big Four Coal Company, Warrick County, report improvements in their Big Four Mine amounting to \$1,068.00.

The balance of the money was spent on mine buildings, new cages, cars, mining machines and the improvements of the mines in general.

Note 1. The Southern Indiana Coal Company installed a traction motor haulage system in their Lattas Creek Mine, using two ten-ton motors. They have also installed small gathering motors in their Hoosier No. 1 Mine. We have been unable, however, to learn

the cost of installation at either mine and have had no report as to what success has been met with since the motors have been installed.

Note 2. The Sullivan County Coal Company installed a rope haulage 900 feet in length in their Freeman Mine, Sullivan County, but this department has been unable to learn the cost of same.

### CHANGES IN OWNERSHIP.

Several changes in the ownership and operation of mining properties were made during the past year and noted as follows:

The Fox Den Mine, Clay County, formerly owned by the Star Union Coal and Oil Company, was transferred to the Ideal Block Coal Company, who now own and operate it. The present owners have renamed the mine. It is now called the Fortner.

The Continental Clay & Mining Company went into the hands of a receiver early in the spring, under whose administration their Continental No. 1 Mine has since been operated.

The Pennsylvania & Indiana Coal Company suspended operations in the latter part of September on account of financial difficulties and the mine lay idle through October and part of November, when a receiver was appointed and the mine leased to the Midvale Coal Company, who have been operating it since that time.

The Shirley Hill Coal Company was organized in the spring and purchased the Victoria Mine formerly owned by the Victoria Coal Company, assuming control in June. This mine is nearly worked out and will hardly last through the winter. The ownership and control of the Shirley Hill No. 1 and No. 2 Mines, Sullivan County, owned by the Coal Bluff Mining Company, was also assumed at the time the company was organized.

The Letsinger Mine, Greene County, owned by the Letsinger Coal Company, was leased in May by the Indiana Fairmont Coal Company.

The Oswald mine, Gibson County, owned by the Princeton Coal & Mining Company, changed hands in August and is now the property of a Mr. Grover and Mr. Oliphant of Vincennes, but is operated under the name of the original company.

The Superior Mine, Sullivan County, owned by the Superior Coal Company of Terre Haute, was bought in August by the Hudson Coal Company of Chicago, who have made extensive repairs and increased the capacity of the mine to about 600 tons per day.

The Shelburn Mine, Sullivan County, formerly the property of the Keystone Coal Company, was purchased in the fall by the A. H. Whitsett Coal Company and the mine is known as the Keystone.

The First Avenue Mine in Evansville, owned by the C. Thomas Coal Co., was purchased by Charles Schimel, Henry Koff, Frank Gunther and Fred Jourden, who have organized and operate the mine under the name of the Banner Coal Co.

The Maple Valley No. 1 Mine, owned by the Maple Valley Coal Company, and the Prince mine, owned by the Keller Coal Company, were purchased by the Oak Hill Coal Company, who assumed control of the former in May and the latter October 15.

The above transfers, while not nearly so large as in 1905, will represent an aggregate of several hundred thousand dollars.

### ABANDONED MINES.

The number of mines abandoned during the year 1906 was less by two than that of the new mines opened for the same period. Eleven mines in all were abandoned during the year, three of which were block coal mines, two in Clay County and one in Parke County; eight bituminous mines, one in Clay County, two in Sullivan, four in Vigo and one in Warrick County. The greater number of the bituminous mines abandoned have been known as among the largest producers of the State. In the following table will be found the names of the mines abandoned, the names of the companies owning them, date of abandonment, county in which they were operated and the railroad on which they were located.

TABLE

*Abandoned Mines.*

NAME OF MINE.	Name of Company.	Date.	County.	Railroad.
Crawford No. 4.	Crawford Coal Company.	Sept. 15, 1906	Clay.	Vandalia.
Vandalia No. 64.	Vandalia Coal Co.	March 31, 1906	Clay.	Vandalia.
Superior No. 7.	Zellar-McClellan & Co.	March 31, 1906	Clay.	E. & I.
Pan-American.	Plymouth Block Coal Co.	March 31, 1906	Parke.	C. & C. & St. L.
Consolidated No. 29.	Consolidated Indiana Coal Co.	May 1, 1906	Sullivan.	E. & T. H.
Vandalia No. 80.	Vandalia Coal Co.	March 31, 1906	Vigo.	Vandalia.
Vandalia No. 82.	Vandalia Coal Co.	March 31, 1906	Vigo.	Vandalia.
Peerless.	Coal Bluff Mining Co.	June 29, 1906	Vigo.	C. & E. I.
Diamond.	Coal Bluff Mining Co.	March 31, 1906	Vigo.	C. C. & St. L.
Dering No. 9.	Dering Coal Co.	March 31, 1906	Vigo.	C. & I. C.
Dering No. 10.	Dering Coal Co.	March 31, 1906	Vigo.	C. & I. C.
Star No. 1.	John Archibald Coal Co.	March 31, 1906	Warrick.	Interurban.

NOTE.—The Knox Coal Company abandoned the Upper Seam No. 6, which they formerly mined and sunk to No. 5 during the year.

TABLE

*Exhibiting the Names of Coal Companies, Names of Mines Operated by Them, the Geological Number of the Different Coal Seams Mined, the Thickness of Each Seam, the Depth from Surface to Each Seam, Pick or Machines Mines, and whether the Coal Seams are Gaseous or Non-Gaseous.*

## BLOCK COAL MINES.

## CLAY COUNTY.

NAME OF COMPANY.	Name of Mine.	Railroad.	Geological number of Coal Seam.	Thickness of Coal Seam.	Depth from surface to Coal Seam.	Pick or Machine Mine.	Fire Damp.
Brazil Block Coal Co. ....	Brazil No. 1. ....	C. & E. I. ....	IV	3'6"	101	Machine....	No.
Brazil Block Coal Co. ....	Brazil No. 4. ....	C. & E. I. ....	III	3'9"	160	Pick. ....	No.
Brazil Block Coal Co. ....	Brazil No. 7. ....	Vandalia. ....	III	3'6"	75	Pick. ....	No.
Brazil Block Coal Co. ....	Brazil No. 8. ....	C. & E. I. ....	III	3'6"	89	Pick. ....	No.
Superior Block Coal Co. ....	Continental. ....	Vandalia. ....	IV	4'6"	65	Pick. ....	No.
Superior Block Coal Co. ....	Rebstock. ....	C. & E. I. ....	IV	4'6"	85	Pick. ....	No.
Zellar-McClellan Coal Co. ....	Superior No. 4. ....	Vandalia. ....	IV	3'9"	80	Pick. ....	No.
Zellar-McClellan Coal Co. ....	Superior No. 7. ....	Vandalia. ....	IV	3'9"	75	Pick. ....	No.
Chicago-Indiana Block Coal Co. ....	Harrison No. 4. ....	E. & I. ....	IV	4'9"	60	Pick. ....	No.
Crawford Coal Co. ....	Crawford No. 4. ....	Vandalia. ....	IV	4'	60	Pick. ....	No.
Crawford Coal Co. ....	Crawford No. 2. ....	Vandalia. ....	IV	3'6"	68	Pick. ....	No.
Crawford Coal Co. ....	Crawford No. 6. ....	Vandalia. ....	III	3'6"	116	Pick. ....	No.
Crawford Coal Co. ....	Crawford No. 8. ....	E. & I. ....	III	3'	50	Pick. ....	No.
Crawford Coal Co. ....	Crawford No. 9. ....	C. & E. I. ....	IV	4'	86	Pick. ....	No.
American Clay Mfg. Co. ....	Monarch. ....	C. & E. I. ....	IV	3'6"	81	.....	No.
Indiana Block Coal Co. ....	Lower Vein No. 1. ....	E. & I. ....	IV	3'	58	Pick. ....	No.
Dan Davis Coal Co. ....	World's Fair No. 2. ....	E. & I. ....	IV	3'6"	57	Pick. ....	No.
Eureka Block Coal Co. ....	Eureka No. 5. ....	C. C. & St. L. ....	III	3'6"	116	Pick. ....	No.
McLaughlin & Treager. ....	Treager. ....	Wagon mine. ....	IV	4'	60	Pick. ....	No.
Vandalia Coal Co. ....	Vandalia No. 50. ....	Center Point branch Vandalia. ....	III	3'	105	Pick. ....	No.
Coal Bluff Mining Co. ....	Glenn No. 1. ....	C. & E. I. ....	IV	4'6"	215	Pick. ....	No.
Coal Bluff Mining Co. ....	Plymouth No. 2. ....	C. & E. I. ....	III	3'3"	110	Pick. ....	No.

## PARKE COUNTY.

Brazil Block Coal Co.	Brazil No. 12	C. & I. C.	III	3'6"	98	Pick.	None
Otter Creek Coal Co.	Mary	C. & I. C.	III	4'10"	105	Machine.	Small per cent.
Brazil Block Coal Co.	Brazil No. 9	C. & I. C.	III	4'6"	120	Pick.	Pick, Non-gaseous.
Zellar-McClellan & Co.	Superior No. 1	C. & I. C.	III	5'	108	Pick.	Non-gaseous.
Zellar-McClellan & Co.	Superior No. 2	C. & I. C.	III-IV	3'6"-3'8"	135	Pick.	Non-gaseous.
Zellar-McClellan & Co.	Superior No. 3	C. & I. C.	III-IV	4'	40	Pick.	Non-gaseous.
Zellar-McClellan & Co.	Superior No. 5	C. & I. C.	III	3'6"	145	Pick.	Non-gaseous.
Plymouth Block Coal Co.	Pan-American	C. C. C. & St. L.	III	4'	70	Pick.	Non-gaseous.

## VIGO COUNTY.

Domestic Block Coal Co.	Domestic Block No. 1	C. & E. I.	IV	4'	110	Pick.	Non-gaseous.
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## BITUMINOUS COAL MINES.

## CLAY COUNTY.

Vandalia Coal Co.	Vandalia No. 60	Vandalia (main line)	VI	7'	32	Pick.	Non-gaseous.
Vandalia Coal Co.	Vandalia No. 63	Vandalia (main line)	VI	7'	100	Pick.	Non-gaseous.
Vandalia Coal Co.	Vandalia No. 64	Vandalia (main line)	VI	7'	90	Pick.	Non-gaseous.
Vandalia Coal Co.	Vandalia No. 65	Vandalia (main line)	VI	7'	100	Pick.	Non-gaseous.
Ideal Block Coal Co.	Fortner	Vandalia (main line)	V	3'4"	110	Pick.	Non-gaseous.
Collins Coal Co.	Gifford No. 1	C. & I. C.	III	4'4"	75	Pick.	Small per cent.
Collins Coal Co.	Gifford No. 2	C. & I. C.	III	4'6"	77	Pick.	Small per cent.
Big Vein Mining Co.	Lewis	Southern Indiana	V	8'	107	Pick.	Non-gaseous.
Vivian Mining Co.	Vivian No. 1	Southern Indiana	III	5'6"	43	Pick.	Non-gaseous.
Vivian Mining Co.	Vivian No. 2	Southern Indiana	IV	5'		Pick.	Non-gaseous.
Jasonville Coal Co.	Gold Knob	Southern Indiana	III	6'6"	104	Pick.	Small per cent.
United Fourth Vein Coal Co.	Island Valley No. 4	Southern Indiana	IV	5'6"	20	Pick.	Non-gaseous.
Stunkard Coal Co.	Stunkard	Wagon mine	II	3'6"	25	Pick.	Non-gaseous.
C. Ehrlich Coal Co.	Klondyke No. 2	Vandalia (main line)	VI	7'		Pick.	Non-gaseous.



## BITUMINOUS COAL MINES—Continued.

## DAVIESS COUNTY.

NAME OF COMPANY.	Name of Mine.	Railroad.	Geological number of Coal Seam.	Thickness of Coal Seam.	Depth from surface to Coal Seam.	Pick or Machine Mine.	Fire Damp.
Stucky & Osborn.....	Stucky.....	Wagon mine.....	III	3'	Drift.....	Pick.....	Non-gaseous.
Davies Coal Co.....	Montgomery No. 3.....	B. & O. S. W.....	V	3'8"	100	Pick.....	Non-gaseous.
Mutual Mining Co.....	Mutual.....	B. & O. S. W.....	III	4'6"	100	Pick.....	Non-gaseous.
Mandabach Bros.....	Mandabach.....	Wagon mine.....	V	6'	56	Pick.....	Non-gaseous.

## FOUNTAIN COUNTY.

Rush Coal Co.....	Indio.....	Clover Leaf.....	III	5'5"	80	Pick.....	Non-gaseous.
Silverwood Coal Co.....	Silverwood.....	Clover Leaf.....	III	3'9"	45	Pick.....	Non-gaseous.

## GIBSON COUNTY.

Princeton Coal & Mining Co.....	Oswald.....	Southern.....	V	6'10"	450	Pick.....	Very gaseous.
Fort Branch Coal Co.....	Fort Branch.....	E. & T. H.....	V	4' 6"	262	Pick.....	Gaseous.
Massey Coal Co.....	Massey.....	E. & I.....	VI	4' 6"	50	Pick.....	Non-gaseous.

## GREENE COUNTY.

United Fourth Vein Coal Co.....	Black Creek.....	Southern Indiana.....	IV	4'8"	82	Machine...	Non-gaseous.
United Fourth Vein Coal Co.....	Island Valley No. 3.....	Southern Indiana.....	IV	5'6"	47	Pick.....	Non-gaseous.
United Fourth Vein Coal Co.....	Glenburn.....	Southern Indiana.....	IV	4'6"	102	Machine.....	Non-gaseous.
United Fourth Vein Coal Co.....	Antioch.....	Southern Indiana.....	IV	4'6"	176	Pick.....	Small per cent.
United Fourth Vein Coal Co.....	North Linton.....	Southern Indiana.....	IV	4'2"	68	Pick.....	Non-gaseous.
Vandalia Coal Co.....	Vandalia No. 2.....	I. & V. branch Vandalia.....	IV	5'	66	Pick.....	Non-gaseous.
Vandalia Coal Co.....	Vandalia No. 3.....	I. & V. branch Vandalia.....	IV	5'	81	Pick.....	Non-gaseous.
Vandalia Coal Co.....	Vandalia No. 4.....	I. & V. branch Vandalia.....	IV	5'	55	Pick.....	Non-gaseous.
Vandalia Coal Co.....	Vandalia No. 5.....	I. & V. branch Vandalia.....	IV	5'	95	Machine.....	Non-gaseous.
Vandalia Coal Co.....	Vandalia No. 6.....	I. & V. branch Vandalia.....	IV	5'	72	Machine.....	Non-gaseous.
Vandalia Coal Co.....	Vandalia No. 8.....	I. & V. branch Vandalia.....	IV	5'6"	132	Machine.....	Non-gaseous.
Vandalia Coal Co.....	Vandalia No. 9.....	I. & V. branch Vandalia.....	IV	5'	128	Machine.....	Non-gaseous.
Vandalia Coal Co.....	Vandalia No. 21.....	I. & V. branch Vandalia.....	IV	5'	95	Machine.....	Non-gaseous.
Midvale Coal Co.....	Midvale.....	Southern Indiana.....	III	7'6"	217	Pick.....	Small per cent.
Indiana Southern Coal Co.....	Gilmour.....	Southern Indiana.....	IV	5'4"	152	Machine.....	Non-gaseous.
Southern Indiana Coal Co.....	Hoosier No. 1.....	Southern Indiana.....	IV	3'7"	133	Pick.....	Non-gaseous.
Southern Indiana Coal Co.....	Hoosier No. 2.....	Southern Indiana.....	V	7'	46	Pick.....	Non-gaseous.
Southern Indiana Coal Co.....	Tower Hill.....	Southern Indiana.....	III	7'	132	Machine.....	Non-gaseous.
Southern Indiana Coal Co.....	Midland.....	Southern Indiana.....	III	7'	245	Machine.....	Small per cent.
Southern Indiana Coal Co.....	Lattas Creek.....	Southern Indiana.....	IV	5'	153	Machine.....	Non-gaseous.
Summitt Coal Co.....	Summitt No. 2.....	I. & V. branch Vandalia.....	IV	5'6"	150	Machine.....	Non-gaseous.
Green Valley Coal Co.....	Green Valley.....	Southern Indiana.....	IV	5'2"	121	Machine.....	Non-gaseous.
Vulcan Coal Co.....	Vulcan.....	Indianapolis Southern.....	V	6'	Slope.....	Pick.....	Non-gaseous.
Shirley Hill Coal Co.....	Victoria.....	Indianapolis Southern.....	IV	5'8"	22	Pick.....	Non-gaseous.
Queen Coal Co.....	Queen.....	Southern Indiana.....	IV	3'7"	87	Pick.....	Non-gaseous.
Indiana Fairmont Coal Co.....	Letsinger.....	Southern Indiana.....	III	7'6"	.....	Pick.....	Small per cent.
Calora Coal Co.....	North West.....	Southern Indiana.....	IV	5'	75	Pick.....	Non-gaseous.
Coal Bluff Mining Co.....	Twin No. 4.....	Southern Indiana.....	V	6'	56	Machine.....	Non-gaseous.
Coal Bluff Mining Co.....	Twin No. 5.....	Southern Indiana.....	IV	4'	152	Machine.....	Non-gaseous.

## KNOX COUNTY.

Knox Coal Company.....	Knox.....	I. & V. (Vandalia).....	V	7'	.....	Machine.....	Small per cent.
Bicknell Coal Company.....	Bicknell.....	I. & V. (Vandalia).....	VI	4'4"	92	Pick.....	Small per cent.
Prospect Hill Coal Co.....	Prospect Hill.....	Wagon mine.....	VII	3'	335	Pick.....	Gaseous at times.
Vandalia Coal Co.....	Vandalia No. 40.....	I. & V. (Vandalia).....	VI	4'3"	154	Pick.....	Gaseous at times.
Big Muddy Coal Co.....	Pine Knot.....	I. & V. (Vandalia).....	VI	4'6"	210	Machine.....	Gaseous at times.
Freeman Coal Co.....	Freeman.....	I. & V. (Vandalia).....	V	7'	234	Machine.....	Small per cent.
Washington-Wheatland Coal Co.....	Wheatland.....	B. & O. S. W.....	VII	5'	100	Pick.....	Small per cent.
Lynn Coal Co.....	Lynn.....	I. & V. (Vandalia).....	V	6'	200	Machine.....	Small per cent.

## BITUMINOUS COAL MINES—Continued.

## PARKE COUNTY.

NAME OF COMPANY.	Name of Mine.	Railroad.	Geological number of Coal Seam.	Thickness of Coal Seam.	Depth from surface to Coal Seam.	Pick or Machine Mine.	Fire Damp.
United Coal & Mining Co. ....	Mecca No. 3. ....	C. & I. C. ....	III	5'	166	Pick. ....	Non-gaseous.
Lincoln Coal & Mining Co. ....	Lyford No. 1. ....	C. & E. I. ....	VI	6'6"	.....	Pick. ....	Small per cent.
Vandalia Coal Co. ....	Vandalia No. 316. ....	Logansport (Vandalia) .....	III	4'6"	150	Pick. ....	Small per cent.
Vandalia Coal Co. ....	Vandalia No. 317. ....	Logansport (Vandalia) .....	III	5'	.....	Pick. ....	Small per cent.
W. P. Harrison. ....	Harrison. ....	Wagon mine. ....	IV	4'	Slope. ....	Pick. ....	Small per cent.
Parke County Coal Co. ....	Parke No. 11. ....	Logansport (Vandalia) .....	VI	6'6"	102	Machine. ....	Small per cent.

## PERRY COUNTY.

Bergenroth Bros. ....	Troy. ....	Ohio River transportation. ....	II	3'	50	Pick. ....	Non-gaseous.
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## PIKE COUNTY.

Muren Coal Co. ....	Muren. ....	Southern. ....	V	4'6"	43	Pick. ....	Non-gaseous.
D. Ingle Coal Co. ....	Ayrshire No. 3. ....	Southern. ....	V	5'	22	Pick. ....	Non-gaseous.
D. Ingle Coal Co. ....	Ayrshire No. 4. ....	Southern. ....	V	4'8"	.....	Pick. ....	Non-gaseous.
D. Ingle Coal Co. ....	Ayrshire No. 5. ....	Southern. ....	V	5'	Drift. ....	Pick. ....	Non-gaseous.
S. W. Little Coal Co. ....	Rogers. ....	E. & I. ....	V	7'	Slope. ....	Pick. ....	Non-gaseous.
S. W. Little Coal Co. ....	Blackburn. ....	E. & I. ....	V	6'6"	Slope. ....	Pick. ....	Non-gaseous.
S. W. Little Coal Co. ....	Littles. ....	E. & I. ....	V	6'6"	80	Pick. ....	Non-gaseous.
Patoka Valley Coal Co. ....	Hartwell No. 1. ....	Southern. ....	V	5'	Drift. ....	Pick. ....	Non-gaseous.
Patoka Valley Coal Co. ....	Hartwell No. 2. ....	Southern. ....	V	5'	Drift. ....	Pick. ....	Non-gaseous.

## SULLIVAN COUNTY.

Indiana Southern Coal Co.	Bunker Hill.	Indianapolis Southern.	VI	4'6"	72	Machine...	Fire damp in faults.
Indiana Southern Coal Co.	Caladonia.	Indianapolis Southern.	VI	5'3"	106	Machine...	Fire damp in faults.
Indiana Southern Coal Co.	Phenix No. 4.	E. & T. H.	VI	6'6"		Machine...	Fire damp in faults.
Indiana Southern Coal Co.	Cummins.	Southern Indiana.	VII	5'	Slope.	Pick.	Fire damp in faults.
Indiana Southern Coal Co.	Hocking.	Southern Indiana.	VI	5'6"	80	Machine...	Fire damp in faults.
Indiana Southern Coal Co.	Citizens.	Southern Indiana.	VI	5'	165	Machine...	Fire damp in faults.
Sunflower Coal Co.	Sunflower.	Indianapolis Southern.	VI	5'		Machine...	Fire damp in faults.
Consolidated Indiana Coal Co.	Consolidated No. 25.	E. & T. H.	VI	5'6"	235	Machine...	Fire damp in faults.
Consolidated Indiana Coal Co.	Consolidated No. 26.	Southern Indiana.	VI	5'	110	Machine...	Fire damp in faults.
Consolidated Indiana Coal Co.	Consolidated No. 28.	Southern Indiana.	VI	6'	200	Machine...	Fire damp in faults.
Consolidated Indiana Coal Co.	Consolidated No. 29.	E. & T. H.	VI	5'6"	120	Machine...	Fire damp in faults.
Consolidated Indiana Coal Co.	Consolidated No. 30.	E. & T. H.	VI	5'6"	197	Machine...	Fire damp in faults.
Consolidated Indiana Coal Co.	Consolidated No. 31.	E. & T. H.	V	6'	53	Pick	Non-gaseous.
Consolidated Indiana Coal Co.	Consolidated No. 32.	Southern Indiana.	V	7'	105	Machine...	Gaseous.
Consolidated Indiana Coal Co.	Consolidated No. 33.	Southern Indiana.	V	6'		Machine...	Gaseous.
Consolidated Indiana Coal Co.	Consolidated No. 34.	E. & T. H.	III	6'		Machine...	Gaseous.
Vandalia Coal Co.	Vandalia No. 10.	I. V. (Vandalia).	IV	5'6"	260	Pick.	Gas in faults.
Jackson Hill Coal Co.	Jackson Hill No. 2.	E. & T. H.	VI	5'8"	104	Machine...	Gas in faults.
Jackson Hill Coal Co.	Jackson Hill No. 4.	E. & T. H.	VI	5'	155	Machine...	Gas in faults.
A. H. Whitsett Coal Co.	Shelburn.	E. & T. H.	V	6'	317	Machine...	Very gaseous.
Sullivan County Coal Co.	Freeman.	Indianapolis Southern.	VI	5'	100	Pick.	Gas in faults.
Dering Coal Co.	Dering No. 12.	E. & T. H.	VII	5'6"	80	Pick.	Gas in faults.
Dering Coal Co.	Dering No. 13.	E. & T. H.	VI	5'	144	Machine...	Gas in faults.
Dering Coal Co.	Dering No. 14.	E. & T. H.	VI	5'6"	103	Machine...	Gas in faults.
Southern Indiana Coal Co.	Semi-Block.	Southern Indiana.	III	6'6"	235	Machine...	Very gaseous.
Southern Indiana Coal Co.	Mammoth Vein.	Southern Indiana.	VI	6'	173	Machine...	Gas in faults.
Shirley Hill Coal Co.	Shirley Hill No. 1.	Monon.	VI	5'6"	110	Machine...	Gas in faults.
Shirley Hill Coal Co.	Little Giant.	Monon.	VI	5'6"		Machine...	Gas in faults.
Shirley Hill Coal Co.	Shirley Hill No. 2.	I. & V. (Vandalia).	IV	4'7"	307	Machine...	Gas in faults.
Hudson Coal Co.	Superior.	E. & T. H.	VII	5'6"	112	Pick.	Gaseous.
Kettle Creek Mining Co.	Kettle Creek.	E. & T. H.	VI	5'3"	152	Machine...	Gas in faults.
Peabody-Alwart Coal & Mining Co.	Reliance.	E. & T. H.	VI	5'	237	Machine...	Gas in faults.
Diamond Coal & Mining Co.	Hamilton.	E. & T. H.	III	6'6"	255	Machine...	Gaseous.
United Fourth Vein Coal Co.	Black Hawk.	Southern Indiana.	III	6'4"	240	Machine...	Small per cent of gas.
Clover Leaf Coal Co.	Cloverleaf.	Indianapolis Southern.	IV	4'7"	307	Machine...	Very gaseous.
Carlisle Coal & Clay Co.	Carlisle.	E. & T. H.	VI	4'7"	307	Machine...	Gas in faults.

GEOLOGICAL NUMBER OF THE COAL SEAMS.

BIMUMINOUS COAL MINES—Continued,  
VANDERBURGH COUNTY.

NAME OF COMPANY.	Name of Mine.	Railroad.	Geological number of Coal Seam.	Thickness of Coal Seam.	Depth from surface to Coal Seam.	Pick or Machine Mine.	Fire Damp.
Diamond Coal Co.....	Diamond.....	Wagon mine.....	V	4'	256	Pick.....	Small per cent.
Banner Coal Co.....	Avenue.....	Wagon mine.....	V	4'	265	Pick.....	Small per cent.
D. Ingle Coal Co.....	Ingleside.....	L. & N.....	V	4'	235	Pick.....	Small per cent.
Sunnyside Coal Co.....	Sunnyside.....	L. & N.....	V	4'	255	Pick.....	Small per cent.
Union Coal Co.....	Union.....	Wagon mine.....	V	4'	235	Pick.....	Small per cent.
Crescent Coal Co.....	Unity.....	L. & N.....	V	4'	225	Pick.....	Small per cent.

VERMILLION COUNTY.

Dering Coal Company.....	Dering No. 5.....	C. & E. I.....	VII	4'10"	85	Pick.....	Non-gaseous.
Dering Coal Company.....	Dering No. 7.....	C. & E. I.....	VI	5' 6"	265	Pick.....	Small per cent.
Dering Coal Company.....	Dering No. 8.....	C. & E. I.....	VII	6'	100	Pick.....	Non-gaseous.
Dering Coal Company.....	Dering No. 15.....	C. & E. I.....	VI	5' 6"	176	Pick.....	Small per cent.
Cayuga Brick & Coal Co.....	Eureka.....	Consumed at Brick yard.....	VI	5' 6"	110	Pick.....	Small per cent.
Clinton Coal Co.....	Crown Hill No. 1.....	C. & E. I.....	VII	5'	164	Pick.....	Non-gaseous.
Clinton Coal Co.....	Crown Hill No. 2.....	C. & E. I.....	VII	4'10"	151	Pick.....	Non-gaseous.
Oak Hill Coal & Mining Co.....	Oak Hill.....	C. & E. I.....	VII	6' 6"	40	Pick.....	Non-gaseous.
Oak Hill Coal & Mining Co.....	Maple Valley No. 1.....	C. & E. I.....	VII	4' 8"	.....	Pick.....	Non-gaseous.
Oak Hill Coal & Mining Co.....	Buckeye No. 2.....	C. & E. I.....	VII	4'10"	110	Pick.....	Non-gaseous.
Oak Hill Coal & Mining Co.....	Prince.....	C. & E. I.....	VII	.....	130	Pick.....	Non-gaseous.

## VIGO COUNTY.

Dering Coal Company.....	Dering No. 6.....	C. & E. I. ....	VI	4'8"	110	Pick.....	Non-gaseous.
Chas. F. Keeler Coal Co.	Atherton.....	C. & E. I. ....	VI	6'9"	165	Machine.....	Small per cent.
Coal Bluff Mining Co.	Diamond.....	C. C. C. & St. L. ....	VI	6'	54	Pick.....	Small per cent.
Coal Bluff Mining Co.	Peerless.....	C. & I. C. ....	VI	7'	101	Pick.....	Non-gaseous.
Coal Bluff Mining Co.	Lawton.....	C. C. C. & St. L. ....	VI	6'6"	110	Pick.....	Small per cent.
Grant Coal & Mining Co.	Grant No. 2.....	C. & E. I. ....	VI	6'6"	120	Pick.....	Small per cent.
Dering Coal Company.....	Dering No. 9.....	C. & I. C. ....	VI	6'6"		Pick.....	Non-gaseous.
Dering Coal Company.....	Dering No. 10.....	C. & I. C. ....	VI	6'6"		Pick.....	Non-gaseous.
Vandalia Coal Company.....	Vandalia No. 66.....	Vandalia.....	VI	6'	103	Pick.....	Non-gaseous.
Vandalia Coal Company.....	Vandalia No. 67.....	Vandalia.....	VI	6'	110	Pick.....	Non-gaseous.
Vandalia Coal Company.....	Vandalia No. 68.....	Vandalia.....	VI	7'	133	Pick.....	Small per cent.
Vandalia Coal Company.....	Vandalia No. 69.....	Vandalia.....	VI	6'	120	Pick.....	Small per cent.
Vandalia Coal Company.....	Vandalia No. 80.....	Vandalia.....				Pick.....	Small per cent.
Vandalia Coal Company.....	Vandalia No. 81.....	Vandalia.....	VII	4'4"	80	Pick.....	Small per cent.
Vandalia Coal Company.....	Vandalia No. 82.....	Vandalia.....	V	6'	105	Machine.....	Small per cent.
Coal Bluff Mining Company.....	Wabash.....	C. C. C. & St. L. ....	IV	5'4"	300	Pick.....	Gaseous.
Lower Vein Coal Company.....	Lower Vein No. 1.....	C. C. C. & St. L. ....	V	4'6"	201	Pick.....	Gaseous.
Miami Coal Company.....	Miami No. 1.....	C. & E. I. ....	VI	7'	82	Pick.....	Non-gaseous.
Miami Coal Company.....	Miami No. 2.....	C. & E. I. ....	VI	6'	50	Pick.....	Non-gaseous.
Miami Coal Company.....	Miami No. 3.....	C. & E. I. ....	VI	7'	85	Pick.....	Non-gaseous.
Parke County Coal Company.....	Parke No. 10.....	Logansport (Vandalia).....	VI	6'6"	100	Machine.....	Non-gaseous.
Fauvre Coal Company.....	Fauvre No. 1.....	Vandalia.....	VI	6'	90	Pick.....	Gaseous.
Domestic Block Coal Co.	Domestic Block No. 1.....	C. & E. I. ....	IV	4'	110	Pick.....	Non-gaseous.
Coal Bluff Mining Co.	Plymouth No. 1.....	C. C. C. & St. L. ....	III		215	Pick.....	Non-gaseous.
Fauvre Coal Company.....	Fauvre No. 2.....	Vandalia.....	V	4'6"	228	Pick.....	Non-gaseous.
West Terre Haute Coal Co.	Larimer.....	Wagon mine.....	VII	4'8"	110	Pick.....	Non-gaseous.
Deep Vein Coal Company.....	Deep Vein.....	Vandalia.....	VI	6'	170	Pick.....	Gaseous.
Vigo County Coal Company.....	Ray No. 2.....	Vandalia.....	VI	7'4"	95	Pick.....	Non-gaseous.
Indiana Southern Coal Co.....	Forrest.....	C. C. C. & St. L. ....	VI	6'5"	150	Machine.....	Small per cent.
Sugar Valley Coal Company.....	Sugar Valley No. 1.....	Wagon mine.....	V	4'6"	185	Pick.....	Small per cent.
Coal Bluff Mining Company.....	Victor.....	C. C. C. & St. L. ....	VI	6'6"	50	Pick.....	Non-gaseous.

## WARRICK COUNTY.

Big Four Coal Company.....	Big Four.....	Southern.....	V	7'		Slope.....	Machine.....	Non-gaseous.
J. Woolly Coal Company.....	Big Vein No. 3.....	Southern.....	V	7'	37		Machine.....	Non-gaseous.
C. Menden Coal Company.....	DeForrest.....	Southern.....	V	7'	65		Machine.....	Small per cent.
John Archibald Coal Co.....	Star No. 1.....	Southern.....	V	4'4"	100		Pick.....	Non-gaseous.
T. D. Seales Coal Co.....	Electric.....	Southern.....	V	7'	30		Machine.....	Non-gaseous.
Worsham Coal Company.....	Burke.....	Southern.....	V	4'4"	110		Pick.....	Non-gaseous.
Caladonia Coal Company.....	Dawson.....	Southern.....	V	4'	87		Pick.....	Non-gaseous.
Erie Canal Coal Company.....	Erie Canal.....	Southern.....	V	5'	130		Machine.....	Small per cent.
Chandler Coal Company.....	Chandler.....	Southern.....	V				Machine.....	Small per cent.
Castle Garden Coal Co.....	Castle Garden.....	Southern.....	V	4'	96		Pick.....	Small per cent.
Elberfield Coal Company.....	Elberfield.....	E. & I. ....	V	4'4"	175		Pick.....	Non-gaseous.

NOTE.—Where "small per cent." is designated in above tables, fire damp is only occasionally found in drill holes and not in sufficient quantity to endanger an explosion.

## EXAMINATIONS.

Examinations of applicants for certificates of competency to serve as mine boss, fire boss and hoisting engineers were held at three different times during the year 1906, all of which examinations were held in Terre Haute. There was a total of one hundred and fifty nine (159) candidates examined, ninety-eight or a fraction over sixty-one per cent. (61%) of whom passed a successful examination and were granted certificates. The date of each examination, the number of each class of applicants examined, the number passed and the number who failed is shown in the annexed table.

	Total Applicants.			Passed.			Failed.		
	M. B.	F. B.	H. E.	M. B.	F. B.	H. E.	M. B.	F. B.	H. E.
May 15, 16.....	24	5	17	18	2	9	6	3	8
August 9, 10.....	44	8	15	21	6	6	23	2	9
November 20, 21.....	21	6	19	20	4	12	1	2	7
Total.....	89	19	51	59	12	27	30	7	24

The following is a list of the names and addresses of persons to whom certificates have been granted, also the number of the certificate, the per cent. grade made by each applicant and the date of the examination at which they passed.

## MINE BOSS.

Examinations held May 15 and 16, 1906.

<i>No.</i>		
<i>Certificate.</i>	<i>Name and Address.</i>	<i>Per cent.</i>
1.	Wm. M. Lee, Jasonville.....	83
2.	W. B. Sharps, Mecca.....	77
3.	M. F. Collins, Seeleyville.....	76
4.	Wm. McGlossin, Cloverland.....	76
5.	W. E. Cox, Bicknell.....	79
6.	Wm. H. Raney, Princeton.....	76
8.	Wm. P. Evans, Brazil.....	79
9.	J. N. Hathaway, Sullivan.....	81
12.	Calvin S. Miller, Linton.....	82
14.	Wm. S. Ball, Brazil.....	80
15.	E. W. Worsham, Evansville.....	77
16.	Fred McClanahan, Hymera.....	80
17.	Eli P. Berry, Bridgeton.....	88
18.	J. L. Brayer, Seeleyville.....	86
21.	Edward G. Epple, Jasonville.....	83
23.	Alfred K. Froeschke, Linton.....	77
24.	Jacob T. Pope, Midland.....	76

## FIRE BOSS.

<i>No.</i>	<i>Name and Address.</i>	<i>Per cent.</i>
<i>Certificate.</i>		
43.	James M. Templeton, Vicksburg.....	85
44.	Wm. Humthrey, Farmersburg.....	80

## HOISTING ENGINEER.

28.	Ray Scott, Bridgeton.....	85
30.	J. W. McKee, Linton.....	80
31.	Park Phillips, Mecca.....	76
34.	James Scott, Vincennes.....	80
36.	F. L. McElroy, Shelburn.....	78
38.	Wm. Squire, Lyons.....	80
39.	David O. Squire, Lyons.....	81
40.	Byrd Squire, Linton.....	80
46.	C. E. Williams, Linton.....	76

## MINE BOSS.

Examination held August 9 and 10, 1906.

1.	James Owens, Linton.....	80
2.	Richard Anderson, Clinton.....	75
3.	Wm. Sheffler, Linton.....	84
5.	Robert Tarrants, Boonville.....	78
6.	Henry West, Brazil.....	75
13.	Nick Anderson, Linton.....	80
14.	Henry Hilton, Dugger.....	85
22.	E. H. Powell, Carlisle.....	77
23.	M. H. Head, Midland.....	77
25.	Jos. Vonderschmitt, Jasonville.....	80
36.	James Dunn, Shelburn.....	88
49.	Charles Stahlberg, Jasonville.....	76
50.	Thomas Oxley, Jasonville.....	79
52.	Wm. Knowles, Elsworth.....	77
55.	James Navin, Diamond.....	80
56.	Ebert Hammack, Boonville.....	76
64.	Wm. F. Brown, Midland.....	77
66.	P. B. Rossiter, Shelburn.....	80
68.	Alexander Hunter, Farmersburg.....	80
71.	William Stinson, Terre Haute.....	80
73.	Wellington O'Connor, Terre Haute.....	81

## FIRE BOSS.

53.	W. W. Burgess, Shelburn.....	80
58.	John Dawson, Sullivan.....	81
59.	W. E. Cox, Bicknell.....	84
60.	Thomas Gillespie, Bicknell.....	81
61.	Jack Smith, Jackson Hill.....	76
62.	David Price, Farmersburg.....	81



## HOISTING ENGINEER.

<i>No.</i>	<i>Name and Address.</i>	<i>Per cent.</i>
<i>Certificate.</i>		
29.	Dan Fitzpatrick, Dugger.....	79
38.	Noble Azbell, Linton.....	78
39.	Wm. Thompson, Bicknell.....	85
42.	Oliver D. Targett, Brazil.....	89
44.	W. H. Sexton, Midland.....	85
48.	Shirley Devine, Brazil.....	86

## MINE BOSS.

Examination held November 20 and 21, 1906.

1.	Joseph Osha, Washington.....	78
2.	Thomas Gillespie, Bicknell.....	81
3.	James Robertson, Bicknell.....	83
4.	A. J. Miller, Linton.....	84
5.	Thomas Fleming, Brazil.....	85
8.	Henry Thompson, Jasonville.....	77
9.	Thomas Rosser, Jasonville.....	76
10.	Samuel Roebuck, Farmersburg.....	85
11.	P. A. Roberts, Clinton.....	82
12.	Hugh Barron, Bicknell.....	82
13.	Morgan Jenkins, Brazil.....	76
14.	Bernerd Navin, Brazil.....	84
16.	Pat McQuade, Brazil.....	82
17.	Wm. Burrows, Shelburn.....	80
19.	H. A. Barrick, Jasonville.....	80
20.	Thos. J. McKanna, Brazil.....	80
42.	George Wilkes, Dugger.....	79
43.	David Price, Farmersburg.....	75
49.	Wm. Seckenger, Farmersburg.....	85

## FIRE BOSS.

6.	James Kerr, Paxton.....	79
7.	John Richards, Dugger.....	80
46.	Emile Dubrell, Linton.....	80
47.	Victor Novens, Midland.....	85

## HOISTING ENGINEER.

22.	James Marlow, Hymera.....	80
23.	Wm. Jeffreys, Brazil.....	77
26.	Edward Pirtle, Paxton.....	87
25.	O. B. Martin, Linton.....	79
27.	W. H. Gladish, Winslow.....	82
28.	Henry Ammis, Clinton.....	78
30.	Con McCain, Petersburg.....	78
31.	P. H. McKee, Midland.....	79
32.	Bert R. Sherwood, Sullivan.....	79
34.	Frank Lyib, Bicknell.....	83
36.	Eli Dickey, Clay City.....	79
41.	Christ J. George, Elberfield.....	77

## SERVICE CERTIFICATES.

Certificates of service have been granted to the following persons in 1906:

## MINE BOSS.

John Bray, Brazil.....November 21.

## HOISTING ENGINEER.

John C. Crenshaw, Boonville.....September 24.

John H. Wetsel, Brazil.....September 24.

## FIRE BOSS.

Enoch Atkinson, Shelburn.....July 24.

Note.—Owing to the fact that the larger number of mines opened at the present time are sunk to the lower coal measures, which in numerous instances generates fire damp, the demand for good fire bosses is increasing daily and the young man who studies and equips himself for this line of work will find a ready demand for his services in the future.

## FATALITIES AND INJURIES.

It is pleasing to note that notwithstanding the fact that more coal was mined in Indiana during the year 1906 than in any preceding year, yet the year shows a decrease under 1905 (the next largest year in production in the history of the State) of sixteen in the number of fatal accidents or seventeen under the total number of mine casualties.

The monthly reports of mine bosses made to this office in 1906 show an aggregate of two hundred and thirty-three accidents to mine employes, classed as follows: Fatal, thirty-one; serious, one hundred and four; minor, ninety-eight. The different causes of these accidents will be found in the annexed table.

## TABLE.

*Exhibiting the Number of Casualties Occurring in the Mines of Indiana, During the Year 1906, and the Different Causes of Such Accidents.*

CAUSE OF ACCIDENT.	Fatal.	Serious.	Minor.	Total.
Falling slate.....	19	28	30	77
Falling coal.....		8	15	23
Ascending cage.....		1		1
Descending cage.....	2	5	1	8
Kicked by mule.....		1	12	13
Injured by mine car.....	3	22	25	50
Falling down shaft.....	1	1		2
Mining machines.....		5	9	13
Railroad cars.....	1	1		2
Coal falling down shaft.....		1	2	3
Delayed shots.....		2	2	4
Premature shots.....		4		4
Misplaced or windy shots.....	2			2
Shot blowing through pillar.....	1	3		5
Smoke explosion.....	1	12	1	14
Fire damp explosion.....	1	5	2	8
Powder explosion.....		5	1	6
Total.....	31	104	98	233

## FATAL ACCIDENTS.

Each of the above fatal accidents have been investigated either by myself or one of my assistants, acting in conjunction with the coroner of the county in which the accident occurred and we submit herewith, by months, the number of accidents occurring, together with a detailed statement of facts and circumstances adduced at investigation, also such comments on same as we deem necessary.

## JANUARY.

Four fatalities resulting from mine accidents, due to different causes, occurred during this month. The first of which was that of Jerry Richardson, American, loader, aged 24 years, who was fatally injured by falling slate, on the 12th inst., in the Citizens Mine, located within the corporate limits of the town of Sullivan. Richardson and one other person were employed to drive a room through a fault which had been struck and were working by the day. About 10:30 o'clock a. m. of above date, he was engaged at work about 8 feet back from the face of his room when a piece of slate 4 feet long, 3 feet wide, ranging from 3 to 11 inches thick, fell on him, injuring him so badly he died 7 hours later. He leaves a dependent wife.

On January 18, Elmer Turpin, a driver, aged 23 years, American, single, was almost instantly killed by being run over by a

loaded mine car, in the Vandalia No. 8 Mine, Greene County. About 2:45 o'clock P. M. he was coming out of the mine with a loaded trip. The mule was traveling at a very rapid pace, and decedent was riding on the front end of the car, standing with one foot on the draw-bar of the car and the other on the tail chain, when by some means, either by being kicked by the mule or by slipping, he fell off the tail chain under the rapidly moving car and was dragged some ten or twelve feet. He made one outcry after falling, calling for help, but when assistance arrived a few moments later and the car was raised up, he was dead.

On January 27th, Charles Robins, loader, aged 38 years, American, single, was killed by falling slate in the Forest Mine. There were no eye witnesses to this accident, but from evidence adduced at the investigation, which was conducted by the Coroner of Vigo County and assisted by Inspector Thomas, it was learned decedent was last seen alive about 3:30 o'clock P. M. A searching party on going into the mine to look for him at 10:30 o'clock P. M. found him lying under a large piece of slate, dead. On inspecting decedent's working place, Mr. Thomas found it well timbered to within 14 feet of the face, the usual distance timber is kept back from the face in electric chain machine mines. The roof inside that point, however, was not very good and should have been timbered.

January 29, Fred Waldon, driver, aged 19 years, American, single, was fatally injured by being run over by a loaded mine car in the Gilmoure Mine, Greene County. This accident was similar to that occurring to Elmer Turpin at the Vandalia No. 8 Mine. Waldon was coming out of the mine with a loaded trip about 9:45 o'clock p. m. when he was either kicked by the mule or slipped and fell off the tail chain under the moving car, injuring him so that he died just as they reached the top of the shaft.

#### FEBRUARY.

Two fatal accidents occurred on the 9th day of this month, when Silvio Andretta, aged 28 years, and John Morush, aged 24 years, both Italians and single, met their death from suffocation in the Maple Valley Mine, Vermillion County. Both men were employed as shot firers in the above mine and had gone into the mine on the evening of the above date as usual to fire the shots which had been prepared by the miners during the day, all other persons being out of the mine at this time. They commenced shooting on the first

west cross entry and had lighted all of the shots (ten in number) on that entry and the second west and had gone into room number one on the first south entry for safety. All of the shots were tamped on fuse and it was presumed that they were lighted one after the other in rotation until all had been lighted, without waiting for any one of them to explode and that a number of them, perhaps all, exploded simultaneously; one of which, as found on inspection, was a blown-out shot causing an explosion creating an after damp, which together with the powder smoke brought death to the two men. The accident occurred about 3:40 o'clock p. m. and when the results were known a short time later, both men were found in the room to which they had gone for safety, lying face downward, dead. Two more lives were sacrificed in this instance that might have been prevented had squibs instead of fuse been used in firing the shots.

#### MARCH.

Eight fatalities is the record for this month. On the 1st day of the month Seth Hayden, a miner, aged 25 years, American, single, was fatally injured by falling slate in the Muren Mine, Pike County. About 8:30 o'clock a. m. decedent was engaged in timbering his room when a large piece of slate measuring 8 feet in length, 6 feet 6 inches in width and ranging from 3 to 10 inches thick, under which he was working, fell on him inflicting injuries from which he died at 9 o'clock p. m. of the same date.

March 2, Enoch James, miner, aged 36 years, Welshman, single, was fatally injured by falling roof in the Crawford No. 6 Mine, Clay County. This accident was investigated by Assistant Inspector Thomas, who reports decedent's working place well timbered to within 7 feet of the face, also that the roof was exceptionally good, other than a roll formation composed of slate, iron and black-jack, commonly called by miners a "pot," which lay across the place between the timbers and the face. At the time of his accident, decedent was engaged at face mining in the coal when a large piece of this formation about 10 feet in length, from 2 to 3 feet wide and 10 inches thick fell on him, crushing and injuring him so that he died one and one-half hours later. This is the first fatal accident to have been reported by this company.

March 2, Balis Yandell, aged 28 years, loader, American, was fatally injured by falling slate in the Reliance Mine, Sullivan County. This accident was investigated by myself, and on examining decedent's working place, i. e., the second northeast cross

entry, I found it well timbered to within 20 feet of the face. The roof inside that point was, however, very bad, due to a large fault which had been struck in the face of the entry. Two props had been set by the day men under this loose slate where at least a half dozen were necessary. The entry had been undercut with an electric chain mining machine. The above fault lay directly across the place and had caused the last shot to blow out and leave a part of the shot. At the time of his accident decedent had just finished loading a car and was engaged shearing off the coal preparatory to placing a shot for shooting down the remainder of the under cut. While so engaged, a large piece of slate fell on him crushing and injuring him internally. His injuries, while serious, were not considered fatal, yet he succumbed on the 6th of the month following at the St. Anthony Hospital, where he had been taken for treatment. He leaves a dependent wife.

March 9th, N. E. Livingston, age 48 years, cager, American, was fatally injured by a descending cage in the Vandalia No. 9 Mine. About 2:45 o'clock p. m. one of the sills forming the cage seat had become disarranged, and Livingston was at work trying to move it in place, when the cage, which at that time was held stationary up in the shaft, was lowered down on him, crushing him, inflicting injuries from which he died on the 13th following. There seems to have been a misunderstanding on the part of deceased and the engineer, as the latter contends that he did not receive a signal from the bottom to hold the cage stationary in the shaft, but that he did receive a signal from the top to stop the cage on which a loaded car was being hoisted; this apparently was due to some changes necessary to be made in the tippie, or possibly changing flat cars. After a short delay the engineer received a signal to lower the cage, which he did, with the result above stated. There are two persons deserving of censure connected with this accident, viz.: decedent himself in going under the cage without some one at the bell to prevent the cage from being lowered. Also the mine management is deserving of censure in not giving explicit orders that no one should go into the sump for the purpose of making repairs, without some one to watch the cages and bells. Deceased leaves a dependent wife and five children.

March 14th, Jacob Hayworth, age 37 years, miner, American, single, was instantly killed by falling roof in the Superior Mine, Sullivan County. There were no eye witnesses to this accident, and the first knowledge of his death was when a searching party found him, at 9 o'clock p. m., lying under a large piece of slate,

dead. On examining his working place we found a shot tamped on a fuse, the end of which was split, his knife and lamp were also laying on the floor just beneath the fuse, indicating that he was in the act of lighting his shot when the rock fell on him.

March 21st, Alvin Roberts, age 24 years, machine helper, American, was instantly killed at the top of the Vandalia No. 5 Mine, Greene County, by being struck with the iron cover of a descending cage. This accident occurred about 6:40 o'clock a. m., at a time when the miners were being lowered into the mine. There were two persons, viz.: the assistant mine boss and one other person in charge of the cage while the miners were descending the shaft, one stationed on each side of the shaft. Their duties were to prevent more than six persons getting on the cage at one time, the maximum number allowed to ride on a cage. Also to bell the cage away when loaded, and in general to look after the safety of persons descending the mine. At the time above mentioned seven men had gotten on the cage, and Roberts, being the seventh and last man to get on, was ordered off by the assistant mine boss, who called to the person on the opposite side of the shaft to hold the cage stationary. This order, however, was misunderstood, and the signal was given the engineer to lower the cage, which he did just as Roberts was in the act of stepping off, the heavy cage bonnet, made of one-fourth-inch boiler plate, striking him, driving him against the side of the shaft, crushing his skull and breaking his neck. He leaves a dependent wife and one child. A strict observance on the part of decedent of the state's regulation permitting only six persons to ride in a cage at one time, would have prevented this accident.

On March 27th a second fatal accident occurred in the Muren Mine, Pike County, when Elisha Copeland, miner, American, age 31 years, met his death from falling slate. About 8:15 o'clock a. m., decedent was engaged at his usual work at the face of his room, when a piece of slate ten feet in length, four feet wide and nine inches thick, fell on him, killing him instantly. From evidence adduced at the investigation, together with the examination of the deceased's working place, made by Mr. Dodds, who conducted the investigation, it was learned that decedent knew that the slate was loose and dangerous; also that there was a number of props of proper length on hand with which the loose slate could have been secured. Also that the length and breadth of the slate would have permitted a sufficient number of props to be set to have secured it. Deceased leaves a dependent wife and four children.

On March 29th Brownie Morris, age 20 years, driver, American,

was fatally injured by being caught and crushed between a boulder in the roof and the top of a loaded mine car in the Crown Hill No. 2 Mine, Vermillion County. About 12:30 o'clock, noon, Morris was coming out of the mine with a trip of loaded cars, riding on the coupling between the two rear cars. When he had reached a point directly under the boulder, which extended down from the regular roof, and which he had apparently forgotten, he raised up and was caught between the boulder and the top of the rear car, and dragged through a space of nine inches, and crushed, inflicting injuries from which he died eight hours later. He leaves as dependents a wife and one child.

#### JULY.

Four fatal accidents is the record for this month. The first of these was that of Charles A. Bledsoe, age 38 years, miner, American, fatally injured by falling slate in the Pennsylvania and Indiana Mine on the 3rd day of the month. The accident was investigated by myself, and from my examination of decedent's working place and evidence adduced, it was learned that he was employed to drive the approach to the manway, which was then being sunk, and was within about 77 feet of the coal. The approach was being driven twelve feet wide, and was within about forty-five feet of the point where the manway would strike the coal. There were two plys or layers of draw slate overlying the coal in this place, the first one three, and the second one two inches thick, both of which had fallen. There were also two or three props, which I presume had been set, lying under this slate fall. Two shots had been fired which were badly overcharged, the coal being broken almost into dust and thrown back down the place some thirty-five feet, knocking out the props which had been set. These shots were fired on the evening of June 30th, and Bledsoe did not return to work until the morning of July 3rd, about 7:30 o'clock on this date. On entering the mine he found an empty car standing in the mouth of his place, which he pushed to where the coal was thrown out on the road. He had gone round the car to examine his place, taking his sledge with him; it is presumed, to reset his props. While making this examination the draw slate gave way and fell on him. He was so injured that he died at 8:30 o'clock p. m., of the same date. He leaves a dependent wife and four children.

July 10th Al Ralston, age 55 years, loader, American, was killed by falling slate in the Dering No. 14 Mine, Sullivan County. At



3:30 o'clock p. m., firing time, of above date, decedent had three shots prepared ready to fire in his room, which had been undercut with an electric chain mining machine. He had fired the center and one of the rib shots, and was returning to fire the remaining rib shot when a large piece of slate fell on him, breaking his neck and crushing him. He was killed instantly. On examining his working place the closest timber was found 17 feet back from the face. There were 33 loose props of proper length with which the place could have been made safe, and had a few of these been set this accident would have been prevented. Deceased leaves a dependent wife and five children.

July 11th, Henry Blacketer, age 58 years, loader, American, was fatally injured by falling slate in the Mecca No. 3 Mine, Park County. About 8:40 o'clock a. m., deceased was engaged in loading a car of coal, when a piece of slate 6 feet long, 4 feet wide, ranging from 4 to 6 inches thick, fell on him, injuring him so that he died about half an hour later. An examination of his working place showed it to be well timbered to within 12 feet of the face, but the roof inside that point was very loose, and evidence adduced at the investigation showed that deceased had knowledge of the fact. Also there were a number of loose props on hand with which the place could have been timbered securely. Deceased leaves a wife and four children.

July 28th, Theodore Rogers, age 35 years, machine runner, American, was killed by falling slate in the Sunflower Mine, Sullivan County. About 8:30 o'clock a. m., decedent was making an undercut with an electric chain machine. He had partially finished the cut and was sitting on the right side of the frame of the machine, when a fall of slate 18 feet long, 12 feet wide, varying from 1 to 6 inches thick, gave way and a portion of it fell on him, crushing him down on the machine frame, killing him instantly. His helper was also seriously injured. The machine helper testified that he had examined the slate, and knew it was loose, but thought they could finish undercutting the room in safety. Decedent leaves a wife and one child.

#### AUGUST.

Three fatal accidents occurred during this month. The first one on the 6th inst., when Edgar Allen, age 25 years, pumper, American, was killed by a gas explosion in the Semi Block Mine, Sullivan County. This mine had been closed down since December, 1905, and with the exception of an occasional visit from the Lattas

Creek mine superintendent, there were but two persons employed, viz.: Allen to do the pumping and Joseph Hagg, engineer, to keep up steam, run the fan and hoist and lower Allen into and out of the mine. It usually required but from two to three hours to do the pumping. However, owing to the fact that the mine generated fire damp, orders were given that the fan be run constantly during the day. It was supposed that by doing this, and by running it a couple of hours in the morning before Allen commenced pumping, the mine could be kept safe from fire damp. The last pumping done prior to the date of the accident was at noon, Saturday, the 4th. The engineer testified that he had started the fan at 6:45 o'clock a. m., on Monday morning of the 6th, and that Allen had gone down into the mine at 9 o'clock, the explosion occurring about 30 minutes later. There was no one present at the mine at the time of the accident, except the engineer, who telephoned the Lattas Creek Mine, some two and one-half miles distant, for help. The mine superintendant and assistant mine boss of that mine started for the scene of the accident at once, arriving at the mine about 10:30 o'clock. On going down into the mine they found Allen lying on the main east entry about 171 feet from the shaft bottom, dead, almost every bone in his body being broken, showing that an explosion of unusual violence had taken place. As evidence of this fact, every door on the side of the mine where the explosion occurred, was blown out, as also brattices, timbers, etc. An investigation of the accident was made by myself, and an examination of the mine made on the 8th inst., after the doors and brattices had been replaced and the ventilating current established, disclosed the fact that a considerable quantity of gas was being given off at three different points on the east side of the mine, viz.: the first and second northeast cross entries, the main east entry and air course, and the fifth room in the second southeast cross entry. The quantity of gas standing in the latter place was small, yet there was a sufficient quantity standing in either the north or east entries to have caused a heavy explosion. In the first north entry the gas was found one foot thick thirty feet from the face; on the second north 18 inches thick 40 feet from the face, and in the main east entry and air course, 18 inches from the roof, some 60 feet from the faces. Inasmuch as he knew that fire damp was being given off in various quantities in different places in the mine, the general mine superintendent, Mr. Thomas Hyatt, is deserving of the severest criticism in permitting Allen to perform the duties as above described, without any safeguard what-

ever. He knew that Allen was an inexperienced miner; that he had never worked in a mine prior to the time he commenced pumping; that he had no knowledge of fire damp, where to look for it, the dangers, etc., and that there was no safety lamp provided him with which to examine the mine for gas, had he been competent to do so. None but a competent miner, thoroughly conversant with the characteristics and dangers of fire damp, should have been employed to do the work for which Allen was employed. I think also that the engineer and decedent himself contributed in no small measure to the accident, as they both knew of the presence of fire damp in the mine, and that the fan had been idle for at least 40 hours. This, together with the fact that previous to this time the fan had only been run during working hours, and that I presume only for six days in the week, thus allowing gas to accumulate in places that were driven ahead of the air, and in high places over falls, etc. Common sense should have taught them that the fan should have been run at least 8 to 10 hours before anyone should be permitted to enter the mine. Decedent leaves a wife and one child.

August 8th, Robert Robison, age 55 years, miner, American, was fatally injured by falling slate in the Kettle Creek Mine, Sullivan County. About two o'clock p. m., deceased was at work at the face of his working place (a room neck) when a piece of slate 4 feet long, 3 feet wide, ranging from 2 to 3 inches thick, fell on him. At the time of the accident he was not thought to be seriously injured, but on being taken to the surface he began vomiting, and on examination the physician discovered his injuries to be internal, from which he died at 10:45 o'clock p. m. of the following day. He leaves a dependent wife and two children.

August 29th, Earl Bridgewater, age 23 years, loader, American, was fatally injured by falling slate in the Forest Mine, Vigo County. Decedent was engaged in loading coal out of a room, which had been undercut with an electric chain mining machine. On the evening of the 28th he had shot his place, but failed to bring the coal down, and about 10:30 o'clock of the following day he was working off this loose coal when a piece of draw slate 10x11 feet, 8½ inches thick, fell on him, injuring him so badly he died an hour and a half later. He leaves a wife and one child.

## OCTOBER.

Five fatal accidents were recorded during this month. On the 3rd inst., Frank Grover, age 41 years, flat timer, American, was fatally injured by being run over by a railroad flat car at the Superior (road) Mine, Sullivan County. About 9:30 o'clock a. m. deceased was dropping a loaded car down from the tippie; he was riding on the front end of the car, and after it had dropped down the proper distance, he attempted to apply the brake, using a short stick to assist in setting it, when either the brake chain or the stick slipped, causing him to fall to the track in front of the moving car, which ran over his left leg, almost severing it at the thigh, from the body, inflicting injuries from which he died a short time later. He leaves a dependent wife and four children.

October 3rd, a second fatal accident occurred about 10 o'clock of this date, when Joseph Lightfoot, age 25 years, loader, was killed by falling slate in the Jackson Hill No. 4 Mine, Sullivan County. At the time of his accident he and his partner (Robert Johnson) were pushing a car into their room, when a large piece of slate fell on him, crushing his head and injuring him otherwise. He died half an hour later. He leaves a wife and one child.

October 15th, Francis Dispensut, age 32 years, miner, American, was killed by falling slate in the Ray No. 3 Mine, Vigo County. About 8:45 o'clock p. m. deceased was at work in the face of his room, mining in the coal, when a piece of draw slate 17½ feet long, 5 feet wide, 5 inches thick, suddenly gave way, falling on and killing him instantly. His room was well timbered to within 6 or 7 feet of the face, but no props had been set under the draw slate, although there was a sufficient number of available props to have done so. He leaves a dependent wife and two children.

October 18th, Oscar Deckard, age 27 years, loader, American, was fatally injured by falling slate in the Summit No. 2 Mine, Greene County. Decedent was engaged loading coal out of a room which had been undercut with an electric chain mining machine. He had shot his place down some time prior to the date of accident, and a piece of draw slate some 3 inches thick, which came down with the shot, was resting on the coal. About 1:30 o'clock p. m. he was working out some of the loose coal from under this slate, when a large piece of it slid off of the shot, catching him in a stooping position, knocking him down and falling on him. At the time he was not thought to be seriously injured, but on removing him to his home it was learned that his injuries were internal. He

succumbed at 5 o'clock p. m. of the same date. He leaves a wife and one child.

October 30th, Thomas Farrell, age 35 years, shot firer, Irish, was fatally injured by a shot blowing through a pillar in the Oswald Mine, Gibson County. Farrell and one other person, Dud Downer, was employed to do the shot firing in this mine, and on the evening of above date were at their usual work. About 9:30 o'clock they had lighted a shot in room 18 and passed around into room 17 for the purpose of firing the shots in that room. The shot in room 18 was behind a chance parallel with the face of the room, and was drilled a short distance into the pillar. Just opposite the point of this drill hole, the pillar in room 17 had been gouged out, reducing its thickness some 2 or 3 feet; number 18 was also over the average width at this point. Taking the extra width in both rooms, the pillar would have been thinned at least 6 feet, leaving it very thin at the point of the drill hole. Just as the two shot firers got opposite where the shot was placed in room 18, it exploded, blowing through the pillar pieces of coal, striking Farrell and injuring him so badly that he died at 5 o'clock a. m. the following day. Downer was also seriously injured. Decedent leaves a dependent wife.

#### NOVEMBER.

Two fatalities is the record for this month.

On the 8th day of the month John Lewis, age 68 years, miner, Norwegian, was killed by falling slate in the Vandalia No. 60 Mine, Clay County. There were no eye witnesses to this accident, and decedent was not found for some time after the accident. A driver went into the room to pull his car, and found Lewis lying under a large piece of slate, dead. From evidence adduced at this investigation it was learned that when last seen alive (about 8:10 o'clock a. m.) Lewis was loading a car of coal. It was also learned that he was usually a very careful miner, keeping his props within 7 to 10 feet of his working face, but that on the evening previous to the accident he had fired two shots, both of which were somewhat overcharged, throwing the coal back some 20 feet from the face, and knocking out 8 or 10 of the props. On going into his room on the following morning, instead of resetting his props at once, he, as is characteristic of the average miner, undertook to load a car of coal first, and while so engaged a large piece of slate 15x16 feet, 2½ inches thick, gave way, falling on and killing him instantly. He leaves a dependent wife.

November 19th, H. L. Gillham, age 55 years, blacksmith, American, was killed by falling down the Vandalia No. 10 shaft, Sullivan County. About 8 o'clock a. m. the keepers on one of the cages had become disarranged, and Gillham and one other person were at work repairing them. The cage had been hoisted a few feet above the ground landing and a skeleton platform laid across the shaft. Gillham was on the cage floor working at the keepers, and the other person was beneath the cage at work on the weights which throw the keeper. The exact cause of decedent's fall could not be learned, and the party (H. L. Davis) working beneath the cage just caught a glimpse of him as he went down the shaft, and he heard no outcry or struggle of any kind. Deceased fell to the bottom of the shaft some 300 feet, and when found was dead. He leaves a wife and six children.

#### DECEMBER.

Three fatal accidents are recorded for this month, the first of which occurred at the Superior (Road Mine), Sullivan County. On the 4th day of the month Frank Dean, age 22 years, miner, American, was killed by falling slate somewhere between the hours of 7 and 10 o'clock a. m. There were no eye witnesses to this accident, and the first known of his accident was when the driver went into his room to pull his car of coal and found him lying under the slate. On examining his working place it was learned that at the time of his accident he was mining off a loose shot mining in the top of the coal seam, when a large V-shaped stone of roll formation 9 feet long and 2 feet wide on the bottom, averaging 18 inches thick in center, suddenly gave way, falling on him and killing him instantly. He leaves a wife and one child.

On December 5th, about nine minutes after three o'clock p. m., a terrific smoke explosion occurred in the Vandalia No. 67 Mine, Vigo County, resulting in the fatal injury of Moriah Geisak, miner, age 30 years, single, who died on the 7th day of the month following from burns and other injuries received. Also the serious injury of 17 other persons. Considering the number of persons injured and the fact that one death resulted, this is probably the most serious mine accident occurring during the year 1906, and was due to what should be termed criminal negligence on the part of Oliver Lewis. A fellow miner, by the name of David Morgân, contributed in no small measure to the accident. Proof of the above contention is hereinafter set forth. An examination of the

affected part of the mine was made on the day following the explosion by Assistant Inspector Thomas, the Mine Committee, Mine Boss, myself and others, at which time the seat of trouble was located in the face of the ninth northwest cross entry, the working place of David Morgan, and room neck No. 4, the working place of Oliver Lewis, located on the same entry. Before commencing our inspection it was the general opinion of those conversant with the situation that the explosion was due to a heavy charge of dynamite which had been fired, in a fault in the face of the tenth northwest cross entry. An examination of this place, however, disproves this theory entirely, as the explosive had done the work intended, throwing the material out in good shape, and there was absolutely no evidence whatever of an explosion having taken place on that entry. In the face of the ninth northwest we found a shot which had been drilled past the cutting or loose end 2 feet and 4 inches. The hole was drilled somewhere near the center of the place, and had apparently been what miners term, a cutting shot. All of the cutting had been blown out, the coal being ground almost into dust, some of it being thrown back down the entry 50 feet, and 2 feet and 4 inches of hole remaining had seamed flat ways. This shot undoubtedly created a large volume of powder smoke at an intense heat. Room neck No. 4 was driven in 15 feet, is 8 feet wide, and the face perfectly straight, with no cutting or chance whatever. On examining this place we found the drill holes of three shots which had been fired. The mouth of one of the holes was 3 feet from the south rib, and the hole was drilled 4 feet 6 inches deep, with a slight angle toward the rib. Two of the holes were located as near the north rib as they could be drilled, one near the bottom was drilled 2 feet and 2 inches deep, and one directly over it near the roof drilled 3 feet and 2 inches deep. Several very heavy shots were also fired in the three rooms outside of room No. 4 and while none of the latter seemed to have been misplaced yet the coal in each was all thrown out, and in some instances broken very fine, evidence that at least a number of them had been considerably overcharged, all of which intensified the heat and increased the volume of powder smoke. From the evidence adduced at the investigation of this accident it was learned that from two to four shots are fired each evening in each working place in this mine, also that shot firing is commenced at a given point, each miner lighting his shots in rotation one after the other, as long as there were any to light, without waiting for those lighted beyond him to explode. This same practice was followed on the evening of

the explosion, and the result obtained from the three misplaced shots in room No. 4 on the ninth northwest was only what could have been expected, viz.: each one of them seamed resulting in blown out shots. The entry shot in this instance, in all probability, exploded first, and as the ninth entry acts as a return air way, the dense body of heated powder smoke created by it was driven down past room No. 4 about the time the first shot exploded in that place; this shot blowing out, very likely ignited gases contained in the smoke, the flame of which was carried on down to that made by the shots fired in the three rooms outside of No. 4, and the two remaining shots in No. 4, each of them seaming and blowing out, thus prolonging the explosion and causing it to travel down and out of the ninth north to a door on the main west, between the seventh and eighth north cross entries. This door was blown out and was the means of checking and dividing the course of the flame and force of the explosion, a portion of which passed out over the double parting just outside the door, and a portion traveling up the eighth north a distance of some 20 feet. Owing to the fact that shooting began somewhat early in the evening of the accident, a number of persons had fired their shots and had reached these two points, viz.: the mouth of the eighth north and the double parting on their way out of the mine. This is where the greater number of persons were injured. Several witnesses testified that they believed that coal dust affected this explosion, yet none of them could explain why, nor state what evidence they found on examination of its having done so. In this connection, I, myself, as did the Assistant General Mine Superintendent, Assistant Inspector Thomas and Mr. James Marsh, one of the Mine Committee, a gentleman thoroughly conversant with such work, being a graduate of the Scranton School of Mines, each of us made a careful examination for signs of coal dust having had any part in the explosion, beginning at a point outside where its force was expended, following in to the place of the ninth north, but we could find not the slightest evidence of its having done so. While it is true there was considerable quantity of dust on the roadway, the entire course over which the explosion traveled, it is mainly composed of fire clay, cut up from the floor by the mules and travel of persons to and from their work, and is non-combustible. We have evidence of this by reason of the fact that the force of the explosion was expended at a point on the eighth north, where the layer of dust on the floor is thicker, finer and dryer than in any other part of the mine where the explosion occurred. In my



opinion the explosion was due absolutely to powder smoke, caused by the misplaced overcharge and blown out shots, which were located in room No. 4 on the ninth northwest, and the face of that entry.

On December 29th, Joe Roskeyoskie, age 32 years, machine runner, single, was killed by falling slate in the Phoenix No. 4 Mine, Sullivan County. At the time of the accident, 10:20 o'clock a. m., he was engaged in cutting a break through at the face of the third southeast cross entry, with an electric chain mining machine. He had made one undercut, had set his machine and started it on the second one, and while the machine was making this cut he stepped back from the face some 13 feet to get an oil can, when a large piece of rock 8 feet long and  $3\frac{1}{2}$  feet wide and 10 inches thick, suddenly gave way, falling on and killing him instantly. The entry was timbered with cross bars to within 20 feet of the face, and the roof inside that point, which was very loose, was timbered with props, pending such a time as the day man could put up cross bars. Decedent was aware of the fact that the slate was loose, yet on going into the place with his machine he found that it could be set more easily by knocking out one of the props, which he did, remarking at the time he would take a chance anyhow. This act of carelessness no doubt cost him his life.

# TABLE OF FATAL ACCIDENTS

*Exhibiting the Date on which each Fatality Occurred, the Names and Addresses of Persons Killed, the Number of Dependents and Cause of Accident.*

Date.	Name.	Occupation.	Residence.	Married.	Widows.	Children.	Single.	Total Dependents.	Cause of Accident.
Jan. 12	Jerry Richardson.	Loader.	Sullivan.	1	1			1	Falling slate.
Jan. 18	Elmer Turpin.	Driver.	Atlas.				1	1	Run over by mine car.
Jan. 27	Chas. Robins.	Loader.	Forrest Park.				1	1	Falling slate.
Jan. 29	Fred Waldon.	Driver.	Gilmour.				1	1	Run over by mine car.
Feb. 9	Silvio Andretta.	Shot firer.	Clinton.				1	1	Windy shot.
Feb. 9	John Morush.	Shot firer.	Clinton.				1	1	Windy shot.
March 1	Seth Hayden.	Miner.	Carbon.				1	1	Falling slate.
March 2	Enoch James.	Miner.	Brazil.				1	1	Falling slate.
March 2	Balis Yandell.	Loader.	Shelburn.	1	1			1	Falling slate.
March 9	N. E. Livingston.	Cager.	Atlas.	1	1	5		6	Descending cage.
March 14	Jacob Hayworth.	Miner.	Shelburn.				1	1	Falling slate.
March 21	Alvin Roberts.	Machine helper.	Linton.	1	1	1		2	Cage bonnet.
March 27	Elisha Coopeland.	Miner.	Muren.	1	1	4		5	Falling slate.
March 29	B. Morris.	Driver.	Clinton.	1	1	1		2	Crushed between mine car and roof.
July 31	Jas. Bledsoe.	Miner.	Midland.	1	1	4		5	Falling slate.
July 10	A. Batson.	Loader.	Farmersburg.	1	1	5		6	Falling slate.
July 11	Henry Blocketer.	Loader.	Mecca.	1	1	4		5	Falling slate.
July 28	Theodore Rogers.	Machine runner.	Dugger.	1	1	1		2	Falling slate.
Aug. 6	Edgar Allen.	Pumper.	Semi Block.	1	1	1		2	Explosion of fire damp.
Aug. 8	Robert Robinson.	Miner.	Shelburn.	1	1	2		3	Falling slate.
Aug. 29	Earl Bridgewater.	Loader.	Forrest.	1	1	1		2	Falling slate.
Oct. 3	Frank Grover.	Flat trimmer.	Road Station.	1	1	4		5	Railroad car.
Oct. 3	Joseph Lightfoot.	Loader.	Jackson Hill.	1	1	1		2	Falling slate.
Oct. 15	Francis Dispenett.	Miner.	Brazil.	1	1	2		3	Falling slate.
Oct. 18	Oscar Deckard.	Loader.	Linton.	1	1	1		2	Falling slate.
Oct. 30	Thos. Farrell.	Shot firer.	Princeton.	1	1			1	Shot blown through pillar.
Nov. 8	John Lewis.	Miner.	Brazil.	1				1	Falling slate.
Nov. 19	H. L. Gillham.	Blacksmith.	Superior.	1		6		7	Fell down shaft.
Dec. 4	Frank Dean.	Miner.	Farmersburg.	1	1	1		2	Falling slate.
Dec. 5	M. Geisak.	Miner.	Brazil.				1	1	Smoke explosion.
Dec. 29	Joe Raskegaskie.	Machine runner.	Shelburn.				1	1	Falling slate.

TABLE

*Exhibiting the Number of Fatal and Serious Accidents Occurring from Use of Explosives in Indiana Coal Mines During the Years 1900 to 1906, Inclusive.*

YEAR.	1900.		1901.		1902.		1903.		1904.		1905.		1906.	
Cause of Accident.	F.	S.	F.	S.	F.	S.	F.	S.	F.	S.	F.	S.	F.	S.
Smoke explosion.....	1		5	3	6	3	10	1	2	1		1	12	
Powder explosion.....			5				4	2	3	5	3	2		5
Delayed shots.....	1	3	1	2	2	7	4	1	5	3	2	6		2
Premature shots.....	1		3	2	2	2	5	7		5	2	2		4
Misplaced, windy or blown out shots.....		2		7		4	2	5		2	9	7	2	
Shot blowing through pillar.....	1					2	1	1			1		1	3
Smoke and dust combined.....									3					
Total.....	3	6	4	21	7	21	19	26	9	20	18	17	4	26

NOTE.—The use of fuse in shot firing became general in the mines of this State during 1902 and 1903, and at present time at least 98% of shots are fired by this method.

TABLE

*Exhibiting the Number of Deaths, also Serious Accidents, Due to Explosions of Various Kinds During the Years 1900 to 1906, Inclusive.*

YEAR.	1900.		1901.		1902.		1903.		1904.		1905.		1906.	
Nature of Explosion.	F.	S.	F.	S.	F.	S.	F.	S.	F.	S.	F.	S.	F.	S.
Fire damp.....				2		2	1				1	9		
Powder smoke.....				5	3	6	3	10	1	2	1		1	
Gas, dust, smoke, combined.....		1								3				
Explosion of powder.....				5					3	5	3	2		
Misplaced, windy or blown out shots.....	1			7		4	2	5		2	9	7	2	

TABLE

*Comparative Table of Fatalities Covering a Period of Ten Years, from 1897 to 1906 Inclusive, Exhibiting the Number of Fatalities Occurring Each Year and the Different Causes, and the Number of Tons of Coal Mined Each Year.*

YEAR.	Deaths Due to Use of Powder.						Other Causes.						Coal.	
1897.....	1			2	2		9		1	1			4,228,085	
1898.....	1	1		2	7		14				1		5,027,044	
1899.....			2				8		2	2	1		5,864,975	
1900.....	1	1	1				11		2	1	1		6,283,063	
1901.....	1	3					10	2	4	3	1		7,019,203	
1902.....	2	2		3			11			3	2		8,763,197	
1903.....	4	5	1	2	3	4	17	1	5	5	3		9,992,553	
1904.....	5			1	3	1	13		4	6			9,872,404	
1905.....	2	2	9	1	1	3	18		2	3	4	1	10,995,972	
1906.....			1	2	1		1	20		3	2		11,422,027	

NOTE.—It will be noticed from the above table that since the use of fuse in shot firing and the excessive use of powder has become so prevalent, beginning in 1902 and 1903, accidents not only from this source have become more frequent, but accidents from falling slate have also nearly doubled. This is due to props and other timbers having been knocked down by flying coal when the miner fires his shots at an evening and the fact that instead of resetting these timbers the first thing in the morning, he commences loading out his coal, with the result a slate fall frequently occurs, causing the loss of life or serious injury to the workman.

## SERIOUS ACCIDENTS.

The aggregate of one hundred and four accidents shown in the table of causes, includes only those resulting in broken bones, internal injuries, cuts and bruises of a nature serious enough to call for special mention are due to the same causes and conditions as shown in the description of fatal accidents.

Of these serious injuries, twenty-eight were caused by slate falls, the major portion of which occurred at the working faces that were directly in care of the workmen injured. It is safe to say that many of these accidents could have been prevented had ordinary care been used in resetting props knocked out by shots and to the matter of timbering or taking down loose slate.

Falling coal caused eight of these accidents, while those injured were mining off loose shots, and the same lack of precaution is evident as cited above.

Twenty-two drivers were hurt by mine cars and one by a mule kick. Driving is the most hazardous work in or about a mine, therefore this number, compared with those injured in any former year, taking into consideration the increased production of 1906, shows a gratifying decrease in the average of injured drivers.

Nine workmen were injured by shots, two by delayed, four by premature and three by shots blowing through pillars. In the first instance of delayed shots both men had gone back on lighted shots which were tamped on fuse. (Comments are unnecessary.) There is no direct information at hand concerning the premature shots, hence no comments.

Of the three accidents due to shots blowing through pillars, two resulted from gross carelessness and occurred at the same time. Both men were shot firers and had lighted a shot in one room that pointed into the pillar of the room to be fired next. After lighting the shot they passed into this room, stopping directly opposite the charge they had just lighted. The explosion blew through the pillar and both men were badly hurt by pieces of flying coal.

Twelve men were burned by a smoke explosion following three badly misplaced shots in an eight-foot room neck.

Five men were burned and otherwise injured by explosions of fire damp and five by powder explosions. The remaining fifteen were hurt in various ways, by coal falling down the shaft, mining machines, etc.

The following table exhibits in detail the number of serious accidents, the dates, extent and causes of injuries, the names and occupations of those hurt, together with the names of the mines in which the accidents occurred, the companies owning same and the counties in which the properties are located:

# TABLE

## Serious Accidents.

### CLAY COUNTY

DATE.	NAME.	OCCUPATION.	INJURY.	CAUSE.	MINE.	COMPANY.	DEPENDENTS.
Jan. 2	Hugh Clements.....	Miner.....	Four ribs broken.....	Falling coal.....	Vandalia No. 65.....	Vandalia Coal Co.....	1
Jan. 21	Jas. Masteller.....	Driver.....	Bruised.....	Mine car.....	Vandalia No. 63.....	Vandalia Coal Co.....	3
Jan. 26	Jas. Beatty.....	Miner.....	Back and ankle.....	Falling coal.....	Lewis.....	Big Vein Coal Co.....	2
Feb. 13	Geo. Froshour.....	Miner.....	Face and hands burned.....	Shot blowing through pillar.....	Vandalia No. 64.....	Vandalia Coal Co.....	4
Feb. 13	Wm. Burkhart.....	Miner.....	Face and hands burned.....	Shot through pillar.....	Vandalia No. 64.....	Vandalia Coal Co.....	1
Feb. 13	Geo. Roebuck.....	Miner.....	Face and hands burned.....	Shot through pillar.....	Vandalia No. 64.....	Vandalia Coal Co.....	2
Feb. 27	Ed Clark.....	Miner.....	Foot mashed.....	Falling coal.....	Gold Knob.....	Jasonville Coal Co.....	
July 11	Grover Craig.....	Miner.....	Spine fractured.....	Falling rock.....	Eureka.....	Eureka Block Coal Co.....	
July —	John Depew.....	Miner.....	Internally.....	Falling rock.....	Gifford No. 2.....	Collins Coal Co.....	
July —	Thomas Bledsoe.....	Miner.....	Face burned.....	Powder explosion.....	Vandalia No. 60.....	Vandalia Coal Co.....	
July —	Wm. Bryson.....	Miner.....	Crushed through chest.....	Falling coal.....	Superior No. 4.....	Zellar-McClellan & Co.....	2

### GIBSON COUNTY.

Oct. 30	H. Downer.....	Shot firer.....	Severely burned.....	Shot through pillar.....	Oswald.....	Princeton Coal & Mining Co.	
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### GREENE COUNTY.

Jan. 27	J. M. Tennis.....	Machine runner.....	Foot crushed.....	Falling slate.....	Gilmour.....	Indiana Southern Coal Co...	
Feb. 7	Walter Irwin.....	Timberman.....	Head cut, back injured.....	Falling slate.....	Gilmour.....	Indiana Southern Coal Co...	1
	John W. Cruse.....	Loader.....	Back and ribs, foot.....	Falling slate.....	Gilmour.....	Indiana Southern Coal Co...	
March 17	John Wolger.....	Driver.....	Foot mashed.....	Mine car.....	Lattas Creek.....	Southern Indiana Coal Co...	
June 12	Newton Robinson.....	Jerryman.....	Leg bruised.....	Between cars.....	Lattas Creek.....	Southern Indiana Coal Co...	2
July 19	Evert Pribby.....	Driver.....	Body crushed.....	Between cars.....	Lattas Creek.....	Southern Indiana Coal Co...	
Aug. 29	L. L. Godberry.....	Loader.....	Spine injured.....	Falling slate.....	Lattas Creek.....	Southern Indiana Coal Co...	
Aug. 20	Earnest Lynn.....	Miner.....	Spine injured.....	Falling slate.....	Vandalia No. 9.....	Vandalia Coal Company.....	4
Nov. 21	Randolph Pastler.....	Loader.....	Face and eyes burned.....	Delayed shot.....	Green Valley.....	Green Valley Coal Co.....	2
Nov. 26	Sanford Bridle.....	Machine runner.....	Hip lacerated.....	Fell on machine.....	Green Valley.....	Green Valley Coal Co.....	1
Sept. 18	Joseph Herd.....	Driver.....	Foot broken.....	Between car and rock.....	Summitt No. 2.....	Summitt Coal Co.....	1

*Serious Accidents—Continued.*

## KNOX COUNTY.

DATE.	NAME.	OCCUPATION.	INJURY.	CAUSE.	MINE.	COMPANY.	DEPENDENTS.
Feb. 28	Charles Macy .....	Miner .....	Face and hands burned...	Gas explosion .....	Vandalia No. 40 .....	Vandalia Coal Co. ....	1
Feb. 16	Benjamin Scott .....	Miner .....	Head injured .....	Falling slate .....	Vandalia No. 40 .....	Vandalia Coal Co. ....	
June 4	Ottie Pulliam .....	Miner .....	Back injured .....	Falling rock .....	Wheatland .....	Washington-Wheat. Coal Co	2
Nov. 6	Henry Deitz .....	Miner .....	Face and hands burned...	Gas explosion .....	Prospect Hill .....	Prospect Hill Coal Co. ....	

## PARKE COUNTY.

July 31	Richards Henderson ..	Machine runner ..	Arm broken .....	Mining machine .....	Mary .....	Otter Creek Coal Company..	3
Nov. 11	Chas. Connoley .....	Miner .....	Leg broken .....	Falling slate .....	Parke No. 11 .....	Parke County Coal Co. ....	
Nov. 13	Clifford Adams .....	Driver .....	Finger cut off .....	Mine car .....	Miami No. 2 .....	Miami Coal Co. ....	
Nov. 26	Joseph Stiff .....	Machine runner ..	Arm crushed .....	Falling slate .....	Parke No. 11 .....	Parke County Coal Co. ....	
Nov. 6	Ww. L. Llewellyn .....	Miner .....	Back injured .....	Falling slate .....	Miami No. 2 .....	Miami Coal Co. ....	
Nov. 6	Geo. Harfold .....	Driver .....	Foot badly crushed ..	Falling slate .....	Miami No. 2 .....	Miami Coal Co. ....	
	Nick Sanks .....	Miner .....	Crushed in breast .....	Falling coal .....	Miami No. 2 .....	Miami Coal Co. ....	
Aug. 14	Walter Gentry .....	Driver .....	Shoulder crushed .....	Between cars .....	Miami No. 2 .....	Miami Coal Co. ....	
Aug. 31	Edward Frayer .....	Driver .....	Crushed in breast .....	Between cars .....	Mecca No. 3 .....	United Coal & Mining Co. ..	
July 27	Frank Green .....	Miner .....	Hip and ankle injured...	Falling slate .....	Vandalia No. 317 .....	Vandalia Coal Co. ....	

## PIKE COUNTY.

March 19	Hiram Wright .....	Miner .....	Two fingers cut off .....	Falling slate .....	Ayrshire No. 4 .....	D. Ingle Coal Co. ....	7
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# SULLIVAN COUNTY

Jan. 22	John Dick	Miner	Eye destroyed	Delayed shot	Little Giant	Shirley Hill Coal Co.	4
Feb. 21	Thomas Brown	Miner	Back bruised	Falling slate	Shirley Hill	Shirley Hill Coal Co.	4
March 3	John Sutton	Fire boss	Face and head badly burned	Gas explosion	Hoeking	Indiana Southern Coal Co.	7
March 3	Robert Lockhart	Miner	Face and body burned	Gas explosion	Hoeking	Indiana Southern Coal Co.	4
March 14	Jas. Onemans	Driver	Leg fractured	Car and door	Jackson Hill No. 2	Jackson Hill Coal Co.	
March 15	Isaac Bryant	Miner	Leg broken	Falling slate	Dering No. 12	Dering Coal Co.	1
March 16	John Isabel	Driver	Back injured	Mine car	Little Giant	Shirley Hill Coal Co.	
March 17	Commodore Parks	Driver	Collar bone broken	Between car and roof	Shirley Hill	Shirley Hill Coal Co.	
April 6	Robert Parks	Track layer	Burned	Gas explosion	Shelburn	D. H. Whitsett Coal Co.	
April 6	Chas. Martin	Miner	Burned	Gas explosion	Shelburn	D. H. Whitsett Coal Co.	
Feb. 21	Thos. Silverwood	Miner	Head mashed	Falling slate	Bunker Hill	Indiana Southern Coal Co.	
March 15	Joseph Booker	Machine runner	Foot cut	Foot caught in machine	Mammoth	Southern Indiana Coal Co.	
June 22	Andrew Mason	Miner	Back injured	Falling slate	Citizens	Indiana Southern Coal Co.	5
July 10	Chas. Godfrey	Driver	Hip injured	Between cars	Mammoth	Southern Indiana Coal Co.	3
Aug. 30	Frank Ralston	Miner	Hip crushed	Falling slate	Dering No. 14	Dering Coal Co.	
Aug. 30	Norman Davis	Driver	Arm broken	Fell off mine car	Jackson Hill	Jackson Hill Coal Co.	
Aug. 30	James Stone	Miner	Back and breast crushed	Falling slate	Freeman	Sullivan County Coal Co.	
Aug. 30	John Collins	Miner	Back and head injured	Engineer lost control of engine	Clover Leaf	Clover Leaf Coal Co.	
Aug. 30	Bogard Richardson	Miner	Back and head injured	Engineer lost control of engine	Clover Leaf	Clover Leaf Coal Co.	
Aug. 30	Ross Collins	Miner	Back and head injured	Engineer lost control of engine	Clover Leaf	Clover Leaf Coal Co.	
Aug. 30	Clarence Schraum	Miner	Back and head injured	Engineer lost control of engine	Clover Leaf	Clover Leaf Coal Co.	
Aug. 30	F. Burchard	Miner	Back and head injured	Engineer lost control of engine	Clover Leaf	Clover Leaf Coal Co.	
Sept. 14	A. Richmond	Miner	Body injured	Falling slate	Viola	Carlisle Clay & Coal Co.	
Nov. 17	Chas. Cartwright	Driver	Hip injured	Mine car	Mammoth	Southern Indiana Coal Co.	
Oct. 15	Joseph Hixon	Driver	Foot and ankle crushed	Mine car	Jackson Hill	Jackson Hill Coal Co.	
Dec. 27	Frank McComb	Driver	Collar bone broken	Mine car	Jackson Hill	Jackson Hill Coal Co.	
Nov. 6	Earl Chapman	Driver	Body bruised	Mine cars	St. Clair	Consolidated Indiana Coal Co.	
June	Millard Early	Miner	Leg broken	Falling coal	Superior	Superior Coal Co.	
Aug. 22	Thos. Kunup	Fire boss	Body burned	Gas explosion	Vandalia No. 10	Vandalia Coal Co.	
Sept.	Robert Robinson	Loader	Leg broken	Falling slate	Kettle Creek	Kettle Creek Coal Co.	
Oct. 3	Joseph Lightfoot	Loader	Skull fractured	Falling slate	Jackson Hill	Jackson Hill Coal Co.	
Dec. 14	Oscar Cochran	Loader	Back sprained	Falling rock	Dering No. 13	Dering Coal Co.	
Nov. 12	Wm. Hayworth	Miner	Body burned	Powder explosion	Hoeking	Indiana Southern Coal Co.	
Aug. 10	John Bedwell	Driver	Foot crushed	Mine cars	Citizens	Indiana Southern Coal Co.	
Aug.	John Thomas	Driver	Leg crushed	Mine cars	Hoeking	Indiana Southern Coal Co.	
Aug. 17	Joseph Watts	Driver		Kicked by mule	Shirley Hill	Shirley Hill Coal Co.	
July 31	O. Meade	Driver		Mine cars	Phenix	Indiana Southern Coal Co.	



## Serious Accidents—Continued.

## VIGO COUNTY.

DATE.	NAME.	OCCUPATION.	INJURY.	CAUSE.	MINE.	COMPANY.	DEPENDENTS.
Jan. 9	Henry Lee.....	Dumper.	Hip bruised.	Stairway fell.	Hector.....	Indiana Southern Coal Co.	3 4
	James Barnett.	Miner.	Hips and legs injured.	Falling slate.	Forrest.....	Indiana Southern Coal Co.	
Feb. 21	Lawrence Kane.	Miner.	Knee dislocated.	Falling slate.	Miami No. 2.	Miami Coal Company.	
Feb. 15	Edward Lindsley.	Machine runner.	Hand crushed.	Mining machine.	Domestic Block.	Miami Coal Company.	
	William Reef.	Machine runner.	Leg crushed.	Mining machine.	Atherton.	Chas. F. Keeler Coal Co.	
June 24	Theodore Haskins.	Miner.	Head and body injured.	Ascending cage.	Miami No. 2.	Miami Coal Co.	
May 4	Andrew Ridsavage.	Miner.	Face and body burned.	Powder explosion.	Ray No. 2.	Vigo County Coal Co.	
May 4	Charles Ruggie.	Miner.	Face and body burned.	Powder explosion.	Ray No. 2.	Vigo County Coal Co.	
June 25	Scott Montgomery.	Miner.	Head and legs injured.	Falling slate.	Miami No. 1.	Miami Coal Company.	
July 2	Major Gordon.	Miner.	Back injured.	Falling slate.	Miami No. 1.	Miami Coal Company.	
	Willard King.	Pumper.	Foot injured.	Stepped on nail.	Vandalia No. 68.	Vandalia Coal Co.	
Aug. 20	James Elder.	Timberman.	Foot amputated.	Between mine cars.	Miami No. 2.	Miami Coal Co.	
Sept. 28	John Gordon.	Miner.	Leg amputated.	Between mine cars.	Miami No. 1.	Miami Coal Company.	
Nov. 15	Chas. Walker.	Driver.	Arm broken.	Mine cars.	Atherton.	Chas. F. Keeler Coal Co.	
Nov. 21	Wm. Brennan.	Loader.	Arm injured.	Dynamite cap.	Forrest.....	Indiana Southern Coal Co.	
Aug. 29	E. Bridgewater.	Loader.	Leg broken.	Falling slate.	Forrest.....	Indiana Southern Coal Co.	
Dec. 5	David Morgan.	Miner.	Badly burned.	Smoke explosion.	Vandalia No. 67.	Vandalia Coal Company.	
Dec. 5	William Yomen.	Miner.	Badly burned.	Smoke explosion.	Vandalia No. 67.	Vandalia Coal Company.	
Dec. 5	Riley Rinehard.	Miner.	Badly burned.	Smoke explosion.	Vandalia No. 67.	Vandalia Coal Company.	
Dec. 5	Samuel James.	Miner.	Badly burned.	Smoke explosion.	Vandalia No. 67.	Vandalia Coal Company.	
Dec. 5	Lewis James.	Miner.	Badly burned.	Smoke explosion.	Vandalia No. 67.	Vandalia Coal Company.	
Dec. 5	Edward Harveycamp.	Miner.	Badly burned.	Smoke explosion.	Vandalia No. 67.	Vandalia Coal Company.	
Dec. 5	A. Lawson.	Miner.	Badly burned.	Smoke explosion.	Vandalia No. 67.	Vandalia Coal Company.	
Dec. 5	Carl Harveycamp.	Miner.	Badly burned.	Smoke explosion.	Vandalia No. 67.	Vandalia Coal Company.	
Dec. 5	George Ambright.	Miner.	Badly burned.	Smoke explosion.	Vandalia No. 67.	Vandalia Coal Company.	
Dec. 5	Lewis Smith.	Miner.	Badly burned.	Smoke explosion.	Vandalia No. 67.	Vandalia Coal Company.	
Dec. 5	Elsie Danhour.	Miner.	Badly burned.	Smoke explosion.	Vandalia No. 67.	Vandalia Coal Company.	
Dec. 5	William Travis.	Miner.	Badly burned.	Smoke explosion.	Vandalia No. 67.	Vandalia Coal Company.	
Dec. 5	Thomas Nealy.	Miner.	Badly burned.	Smoke explosion.	Vandalia No. 67.	Vandalia Coal Company.	
Dec. 5	Elmer Tirnay.	Miner.	Badly burned.	Smoke explosion.	Vandalia No. 67.	Vandalia Coal Company.	
Dec. 5	Joseph Kowande.	Miner.	Badly burned.	Smoke explosion.	Vandalia No. 67.	Vandalia Coal Company.	

## WARRICK COUNTY.

Nov. 14	Charles Himan.....	Miner.....	Body burned.....	Premature shot.....	Chandler.....	Chandler Coal Company....	6
Nov. 14	John Ferris.....	Miner.....	Body burned.....	Premature shot.....	Chandler.....	Chandler Coal Company....	6

## COMPARATIVE TABLE

*Showing Number of Tons of Coal Mined Each Year, the Number of Persons Employed and the Number of Tons of Coal Produced per Each Death from January 1, 1881, to January 1, 1907.*

YEAR.	Tons Produced.	Employees.	Fatal Accidents.	Tons Produced Per Death.
1881.....	1,771,536	4,567	10	177,153
1882.....	1,900,000	No report.		
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.		
1888.....	3,140,979	6,685	17	184,763
1889.....	No report.			
1890.....	3,791,211	6,550	5	758,242
1891.....	3,819,600	6,975	5	763,900
1892.....	4,408,471	7,600	19	232,024
1893.....	4,358,897	7,431	22	193,586
1894.....	No report.			
1895.....	4,202,084	7,885	23	182,699
1896.....	4,068,124	7,112	28	170,290
1897.....	4,088,100	7,934	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	10,296	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
1906.....	11,422,027	19,562	31	368,45

## ACCIDENTS TO MINE PROPERTY.

Few accidents occurred to mine property during the past year, fires in the interior of mines causing the largest financial losses. Other and smaller losses were occasioned by local fires in surface plants, squeezes in the mines, and various minor accidents. The most serious loss occurred at firing time on the afternoon of March 26 in the Clover Leaf Mine in Sullivan County. A gas feeder was lighted from one of the shots fired which in turn ignited the coal. The mine was not examined that evening after the shooting and the fire was not discovered until morning, when it had reached such proportions that it necessitated the closing of that portion of the mine. A loss of \$900.00 was incurred before the fire was extinguished and work resumed in the affected part of the mine. On Saturday evening, January 27, a similar fire to that of the Clover Leaf occurred in the second northeast cross entry in the Phoenix No. 4 Mine, Sullivan County, and as in the foregoing instance was not discovered until the following morning. By this time the fire had gained such headway the smoke and heat made

it impossible to penetrate the mine any distance from the shaft bottom. It was then decided to smother the fire and the main entrance and air course were walled up, excluding the air and completely blocking off that entire side of the mine. After nine days the stoppings were removed, the fire having been extinguished, work was resumed. The financial loss in this instance, estimating the time lost, would probably reach the sum of eight hundred dollars (\$800.00).

The Lost Creek Mine in Vigo County has been at a heavy expense combating a series of squeezes at intervals during the year. Early in January a squeeze set in on the north side of the mine, resulting in the entire loss of the first and second west, third and fourth east and the partial loss of the first and second east. At one time the entire north side of the mine was in danger of being closed. A later squeeze began in the south side of the mine and it was only with much difficulty and labor that several pairs of cross entries were saved. The mine has an extremely hard sandstone roof and a very soft fire clay bottom, conditions that require extra heavy and uniform pillars. Either through ignorance or negligence, however, this necessity had been utterly disregarded by a former mine management, as an examination showed the pillars to range in size anywhere from three to thirty feet in thickness.

About the 15th of March an extremely heavy squeeze started in the main west entry in the Superior Mine in Sullivan County. This was due to the robbing of pillars and the soft fire clay bottom. It extended from the second to the third north cross entries embracing several rooms on each entry and at one time looked as though that entire side of the mine would close. The company succeeded in stopping it after two months of incessant effort, however, and the mine is now producing about 600 tons per diem.

On June 7th the blacksmith shop at the Atherton Mine in Vigo County burned down. The loss was estimated at \$750.00.

A small fire in the boiler room of the Miami Mine last October resulted in the loss of about \$100.00.

## MINE DIRECTORY

## CLAY COUNTY.

NAME OF COMPANY.	ADDRESS OF COMPANY.	NAME OF MINE.
Brazil Block Coal Company.....	Brazil.....	Brazil No. 1.
Brazil Block Coal Company.....	Brazil.....	Brazil No. 4.
Brazil Block Coal Company.....	Brazil.....	Brazil No. 7.
Brazil Block Coal Company.....	Brazil.....	Brazil No. 8.
Continental Clay & Mining Co.....	Brazil.....	Continental No. 1
Superior Block Coal Co.....	Brazil.....	Rebstock.
Vandalia Coal Company.....	Indianapolis, State Life Bldg.	Vandalia No. 50.
Vandalia Coal Company.....	Indianapolis, State Life Bldg.	Vandalia No. 60.
Vandalia Coal Company.....	Indianapolis, State Life Bldg.	Vandalia No. 62.
Vandalia Coal Company.....	Indianapolis, State Life Bldg.	Vandalia No. 65.
Zellar-McClellan Co.....	Indianapolis, State Life Bldg.	Superior No. 4.
Crawford Coal Company.....	Brazil.....	Crawford No. 2.
Crawford Coal Company.....	Brazil.....	Crawford No. 6.
Crawford Coal Company.....	Brazil.....	Crawford No. 8.
Crawford Coal Company.....	Brazil.....	Crawford No. 9.
Ideal Block Coal Co.....	Brazil.....	Fortner.
Collins Coal Company.....	Brazil.....	Gifford No. 1.
Collins Coal Company.....	Brazil.....	Gifford No. 2.
Coal Bluff Mining Co.....	Terre Haute.	Glenn No. 1.
Coal Bluff Mining Co.....	Terre Haute.	Plymouth No. 2.
American Clay Mfg. Co.....	Brazil.....	Monarch.
Big Vein Mining Co.....	Terre Haute.	Lewis.
Vivian Mining Company.....	Chicago, Ill.	Vivian No. 1.
Vivian Mining Company.....	Chicago, Ill.	Vivian No. 2.
Progressive Coal Company.....	Brazil.....	Progressive.
Indiana Block Coal Co.....	Saline City.	Lower Vein No. 1.
Jasonville Coal Company.....	Jasonville.	Gold Knob.
Dan Davis Coal Company.....	Brazil.....	World's Fair.
United Fourth Vein Coal Co.....	Linton.	Island Valley No. 4.
Chicago-Indiana Block Coal Co.....	Clay City.	Harrison No. 4.
Eureka Block Coal Co.....	Brazil.....	Eureka No. 5.
McLaughlin & Treager.....	Brazil.....	Treager.
Stunkard Coal Company.....	Brazil.....	Stunkard.
C. Ehrlich Coal Company.....	Turner.	Klondyke.

## DAVIESS COUNTY.

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

## FOUNTAIN COUNTY.

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

## GREENE COUNTY.

NAME OF COMPANY.	ADDRESS OF COMPANY.	NAME OF MINE.
United Fourth Vein Coal Company.....	Linton.....	North Linton.
United Fourth Vein Coal Company.....	Linton.....	Sponsler.
United Fourth Vein Coal Company.....	Linton.....	Black Creek.
United Fourth Vein Coal Company.....	Linton.....	Glenburn.
United Fourth Vein Coal Company.....	Linton.....	Antioch.
Vandalia Coal Company.....	Indianapolis, State Life Bldg.....	Vandalia No. 2.
Vandalia Coal Company.....	Indianapolis, State Life Bldg.....	Vandalia No. 3.
Vandalia Coal Company.....	Indianapolis, State Life Bldg.....	Vandalia No. 4.
Vandalia Coal Company.....	Indianapolis, State Life Bldg.....	Vandalia No. 5.
Vandalia Coal Company.....	Indianapolis, State Life Bldg.....	Vandalia No. 6.
Vandalia Coal Company.....	Indianapolis, State Life Bldg.....	Vandalia No. 8.
Vandalia Coal Company.....	Indianapolis, State Life Bldg.....	Vandalia No. 9.
Vandalia Coal Company.....	Indianapolis, State Life Bldg.....	Vandalia No. 21.
Southern Indiana Coal Co.....	Chicago, Ill., Old Colony Bldg.....	Hoosier No. 1.
Southern Indiana Coal Co.....	Chicago, Ill., Old Colony Bldg.....	Hoosier No. 2.
Southern Indiana Coal Co.....	Chicago, Ill., Old Colony Bldg.....	Midland.
Southern Indiana Coal Co.....	Chicago, Ill., Old Colony Bldg.....	Tower Hill.
Southern Indiana Coal Co.....	Chicago, Ill., Old Colony Bldg.....	Lattas Creek.
Indiana Southern Coal Co.....	Chicago, Ill., Old Colony Bldg.....	Gilmour.
Vulcan Coal Company.....	Indianapolis, Lemcke Bldg.....	Vulcan.
New Summitt Coal Co.....	Bloomfield.....	Summitt No. 2.
Shirley Hill Coal Company.....	Indianapolis, Terminal Bldg.....	Victoria.
Green Valley Coal Company.....	Jasonville.....	Green Valley.
Queen Coal Company.....	Jasonville.....	Queen.
Indiana Fairmont Coal Co.....	Terre Haute.....	Letsinger.
Calora Coal Company.....	Indianapolis, Terminal Bldg.....	North West.
Coal Bluff Mining Company.....	Terre Haute.....	Twin No. 4.
Coal Bluff Mining Company.....	Terre Haute.....	Twin No. 5.
Midvale Mining Company.....	Midland.....	Midvale.

## GIBSON COUNTY.

Princeton Coal & 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.
Freeman Coal Company.....	Bicknell.....	Freeman.
Knox Coal Company.....	Bicknell.....	Knox.
Lynn Coal Company.....	Bicknell.....	Lynn.
Prospect Hill Coal Company.....	Vincennes.....	Prospect Hill.
Vandalia Coal Company.....	Bicknell.....	Vandalia No. 40.
Washington-Wheatland Coal Co.....	Washington.....	Wheatland.
Chicago & Big Muddy Coal Co.....	Bicknell.....	Pine Knot.

## PARKE COUNTY.

Bridgeton Mining Company.....	Bridgeton.....	Bridgeton No. 1.
Brazil Block Coal Co.....	Brazil.....	Brazil No. 9.
Brazil Block Coal Co.....	Brazil.....	Brazil No. 12.
United Coal & Mining Co.....	Mecca.....	Mecca No. 3.
Lincoln Coal & Mining Co.....	Chicago, Ill.....	Lyford No. 1.
Otter Creek Coal Company.....	Chicago, Ill.....	Mary.
Zellar-McClellan & Co.....	Brazil.....	Superior No. 1.
Zellar-McClellan & Co.....	Brazil.....	Superior No. 2.
Zellar-McClellan & Co.....	Brazil.....	Superior No. 3.
Zellar-McClellan & Co.....	Brazil.....	Superior No. 5.
Vandalia Coal Company.....	Indianapolis, State Life Bldg.....	Vandalia No. 316.
Vandalia Coal Company.....	Indianapolis, State Life Bldg.....	Vandalia No. 317.
Parke County Coal Company.....	Rosedale.....	Parke No. 10.
Parke County Coal Company.....	Rosedale.....	Parke No. 11.
W. P. Harrison.....	Rockville.....	Harrison.
Clay County Coal Co.....	Carbon.....	Whips

## PERRY COUNTY.

NAME OF COMPANY.	ADDRESS OF COMPANY.	NAME OF MINE.
Bergenroth Bros. ....	Troy.....	Troy.

## PIKE COUNTY.

Muren Coal & Ice Co. ....	St. Louis, Mo. ....	Aberdeen.
D. Ingle Coal Co. ....	Oakland City. ....	Ayrshire No. 3.
D. Ingle Coal Co. ....	Oakland City. ....	Ayrshire No. 4.
D. Ingle Coal Co. ....	Oakland City. ....	Ayrshire No. 5.
Muren Coal & Ice Co. ....	St. Louis, Mo. ....	Carbon.
S. W. Little Coal Co. ....	Evansville. ....	Rogers.
S. W. Little Coal Co. ....	Evansville. ....	Blackburn.
S. W. Little Coal Co. ....	Evansville. ....	Littles.
Patoka Valley Coal Co. ....	Huntingburg. ....	Hartwell No. 1.
Patoka Valley Coal Co. ....	Huntingburg. ....	Hartwell No. 2.
Muncie Coal & Mining Co. ....	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., Old Colony Bldg. ....	Washington.
Indiana Southern Coal Company. ....	Chicago, Ill., Old Colony Bldg. ....	Caledonia.
Indiana Southern Coal Company. ....	Chicago, Ill., Old Colony Bldg. ....	Phoenix No. 4.
Indiana Southern Coal Company. ....	Chicago, Ill., Old Colony Bldg. ....	Cummins.
Indiana Southern Coal Company. ....	Chicago, Ill., Old Colony Bldg. ....	Hocking.
Indiana Southern Coal Company. ....	Chicago, Ill., Old Colony Bldg. ....	Citizens.
Sunflower Coal Company. ....	Dugger. ....	Sunflower.
Consolidated Indiana Coal Co. ....	Chicago, Ill., Old Colony Bldg. ....	Consolidated No. 25.
Consolidated Indiana Coal Co. ....	Chicago, Ill., Old Colony Bldg. ....	Consolidated No. 26.
Consolidated Indiana Coal Co. ....	Chicago, Ill., Old Colony Bldg. ....	Consolidated No. 28.
Consolidated Indiana Coal Co. ....	Chicago, Ill., Old Colony Bldg. ....	Consolidated No. 30.
Consolidated Indiana Coal Co. ....	Chicago, Ill., Old Colony Bldg. ....	Consolidated No. 32.
Consolidated Indiana Coal Co. ....	Chicago, Ill., Old Colony Bldg. ....	Consolidated No. 33.
Consolidated Indiana Coal Co. ....	Chicago, Ill., Old Colony Bldg. ....	Consolidated No. 34.
Vandalia Coal Company. ....	Indianapolis. ....	Vandalia No. 10.
West Linton Coal Co. ....	Indianapolis. ....	West Linton.
Jackson Hill Coal Co. ....	Terre Haute, Opera Block. ....	Jackson Hill No. 2.
Jackson Hill Coal Co. ....	Terre Haute, Opera Block. ....	Jackson Hill No. 4.
A. H. Whitsett Coal Co. ....	Shelburn. ....	Keystone.
Sullivan County Coal Co. ....	Dugger. ....	Freeman.
Dering Coal Company. ....	Chicago, Ill., Old Colony Bldg. ....	Dering No. 12.
Dering Coal Company. ....	Chicago, Ill., Old Colony Bldg. ....	Dering No. 13.
Dering Coal Company. ....	Chicago, Ill., Old Colony Bldg. ....	Dering No. 14.
Southern Indiana Coal Co. ....	Chicago, Ill., Old Colony Bldg. ....	Semi-Block.
Southern Indiana Coal Co. ....	Chicago, Ill., Old Colony Bldg. ....	Mammoth Vein.
Shirley Hill Coal Co. ....	Indianapolis, Terminal Bldg. ....	Shirley Hill No. 1.
Shirley Hill Coal Co. ....	Indianapolis, Terminal Bldg. ....	Shirley Hill No. 2.
Shirley Hill Coal Co. ....	Indianapolis, Terminal Bldg. ....	Little Giant.
Hudson Coal Company. ....	Farmersburg. ....	Hudson.
Kettle Creek Coal Company. ....	Terre Haute. ....	Pearl.
Peabody-Alwart Coal Co. ....	Chicago, Ill. ....	Reliance.
Diamond Coal & Mining Co. ....	Chicago, Ill. ....	Hamilton.
United Fourth Vein Coal Co. ....	Linton. ....	Black Hawk.
Clover Leaf Coal Co. ....	Dugger. ....	Clover Leaf.

## VANDERBURGH COUNTY.

Diamond Coal Co. ....	Evansville. ....	Diamond.
D. Ingle Coal Co. ....	Evansville. ....	Ingliside.
Sunnyside Coal Co. ....	Evansville. ....	Sunnyside.
Crescent Coal Co. ....	Evansville. ....	Unity.
Banner Coal Co. ....	Evansville. ....	First Avenue.

## VERMILLION COUNTY.

NAME OF COMPANY.	ADDRESS OF COMPANY.	NAME OF MINE.
Dering Coal Company.....	Chicago, Ill., Old Colony Bldg.....	Dering No. 5.
Dering Coal Company.....	Chicago, Ill., Old Colony Bldg.....	Dering No. 6.
Dering Coal Company.....	Chicago, Ill., Old Colony Bldg.....	Dering No. 7.
Dering Coal Company.....	Chicago, Ill., Old Colony Bldg.....	Dering No. 8.
Dering Coal Company.....	Chicago, Ill., Old Colony Bldg.....	Dering No. 15.
Cayuga Brick & Coal Co.....	Cayuga.....	Eureka.
Clinton Coal Co.....	Clinton.....	Crown Hill No. 1.
Clinton Coal Co.....	Clinton.....	Crown Hill No. 2.
Oak Hill Coal Co.....	Clinton.....	Oak Hill.
Oak Hill Coal Co.....	Clinton.....	Maple Valley.
Oak Hill Coal Co.....	Clinton.....	Buckeye No. 2.
Oak Hill Coal Co.....	Clinton.....	Prince.

## VIGO COUNTY.

Coal Bluff Mining Company.....	Terre Haute.....	Lawton.
Coal Bluff Mining Company.....	Terre Haute.....	Plymouth No. 1.
Coal Bluff Mining Company.....	Terre Haute.....	Victor.
Coal Bluff Mining Company.....	Terre Haute.....	Wabash.
Lower Vein Coal Company.....	Terre Haute.....	Lower Vein No. 1.
Vandalia Coal Company.....	Indianapolis.....	Vandalia No. 67.
Vandalia Coal Company.....	Indianapolis.....	Vandalia No. 68.
Vandalia Coal Company.....	Indianapolis.....	Vandalia No. 69.
Vandalia Coal Company.....	Indianapolis.....	Vandalia No. 80.
Vandalia Coal Company.....	Indianapolis.....	Vandalia No. 82.
Miami Coal Company.....	Brazil.....	Miami No. 1.
Miami Coal Company.....	Brazil.....	Miami No. 2.
Miami Coal Company.....	Brazil.....	Miami No. 3.
Parke County Coal Company.....	Rosedale.....	Parke No. 10.
Fauvre Coal Company.....	Indianapolis.....	Fauvre No. 1.
Fauvre Coal Company.....	Indianapolis.....	Fauvre No. 2.
West Terre Haute Coal Co.....	W. Terre Haute.....	Larimer.
Deep Vein Coal Company.....	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.
Sugar Valley Coal Co.....	West Terre Haute.....	Sugar Valley No. 1.
Charles F. Keeler Coal Co.....	Chicago, Ill.....	Atherton.
M. D. West Coal Co.....	Cloverland.....	Chicago No. 6.
Grant Coal & Mining Co.....	Burnett.....	Grant No. 2.
Sugar Valley Coal Co.....	West Terre Haute.....	Sugar Valley.

## WARRICK COUNTY.

Hall & Marsh.....	Chandler.....	Air Line.
Big Four Coal Company.....	Boonville.....	Big Four.
J. W. Woolley Coal Co.....	Boonville.....	Big Vein No. 3.
Chandler Coal Company.....	Evansville.....	Chandler.
John Archibald Coal Co.....	Evansville.....	Star No. 1.
Charles Menden Coal Co.....	Evansville.....	DeForest.
T. D. Scales Coal Co.....	Boonville.....	Electric.
Worsham Coal Company.....	Newburg.....	Star No. 2.
Caladonia Coal Company.....	Boonville.....	Dawson.
Erie Canal Coal Company.....	Boonville.....	Erie Canal.
Castle Garden Coal Company.....	Boonville.....	Castle Garden.