

REPORT OF STATE INSPECTOR OF MINES FOR 1896.

PROF. W. S. BLATCHLEY,

State Geologist of Indiana:

In beginning my second annual report as Inspector of Mines for the State of Indiana I desire to return thanks to the mine officials and others whose co-operation has to some extent lightened the labors of the office and made it possible to give an approximately correct statistical report of the coal business of the State for the year just closed. I found it necessary early in the year to institute legal proceedings against several mine bosses for failure to make reports provided for in section 19 of the coal mine act of 1891. In only one case was any defense made in court. In that a conviction was secured. Other cases were disposed of without my being called upon to attend court, and I have had no further trouble in any of the counties where such proceedings were had.

While there is no statute requiring a report of tonnage or wages paid from any operator or agent, I am pleased to state that there has been a very general compliance with my requests for such information, but the early date at which this report is filed prevents me from including the returns for December herein, and I therefore omit the table showing the output of each mine. I shall supplement this report later with such a table, if I can get the returns before this goes to press. I have made an estimate of the items enumerated by statute which are to be included in this report. The figures are likely to be changed when the reports are all received, but I think the totals will be found practically correct. There is quite a decrease in the production of coal from last year. This is caused partly by the general depression in manufacturing and transportation lines, but the shortage in Indiana has been increased by the strike of bituminous miners, which began on May 1 and was not finally ended till December 1. Its effects will be noted by comparing the production of the counties of Greene, Parke, Sullivan and Vigo during the present year with that of 1895. The only other county affected by the strike was Vermillion, where the Buckeye mine was idle for a short time. The causes mentioned have reduced this year's output to 4,068,124 tons as against 4,312,084 tons in 1895, a decrease of 243,960 tons in this State, while the best figures obtainable at this date show an increased production of bituminous coal in the United States of 4,371,752 tons in a total of 141,770,099 tons.

I am pleased to be able to remark a great improvement in the condition of those mines, which have been at work during the entire year, in respect to ventilation, and a more general compliance with minor provisions of the mining law in those points that come under the observation of the Inspectors. Some statutes are practically ignored because the idea seems to be entertained that only the Inspector of Mines has the authority to prosecute for violations of their provisions. Of these I note, that requiring regular visits of mine bosses to the working places of employes, that prohibiting the leaving open of doors used to direct air currents, and that prohibiting riding on loaded cars. These may be violated daily without such violation coming to the knowledge of the Inspector unless a fatal accident occurs from such violation. Some of these could have been prevented if the law had been enforced by those in authority, and the necessity for such enforcement can not be too strongly emphasized. This is referred to at greater length in noticing accidents which have occurred during the year.

It will be noticed that there has been a large increase in the number of fatal accidents during the year under review. With but few exceptions they have arisen from the ordinary risks of the mining business. The exceptions are noted in another part of this report. The increased number of serious and minor accidents reported is doubtless due to the fact that full reports were not made in former years. This is also true to some extent in the case of fatal accidents. Previous to July, 1895, reports were made from the offices of the operators, and were not as full as those since made by the persons in charge of the mines.

As many of the mines of the State were idle for fully half of the year we did not make any inspections of such during that time, and we have not found time to examine all of them since they resumed work. This has given us an opportunity to pay more attention to those which were in operation, which we have done, with good results. Mr. James Epper-son, of Linton, Indiana, has been Assistant Inspector during the whole of the year, and has discharged the duties of the position to my entire satisfaction. A list of mines, with their owners and mine bosses, is given on another page, followed by a short description of each mine. For convenience I have arranged them alphabetically by counties, and the names of the owners. The table shows also the number of men employed inside of the mine, number employed outside, and the number of mules or horses used in the mines. In some instances I think that the men employed outside, as given, includes the office force, while in others it does not, but as I have no data from which to make the necessary corrections I have copied the figures as given in the latest reports. The totals given in the following summary give as nearly as can be ascertained the number of men employed in and about the mines of the State at the end of the year by counties, and the number of mines opened during the

year, the number abandoned, and the number available for work, including those temporarily suspended, but which are in condition to employ ten or more men.

COUNTIES.	New Mines.	Mines Abandoned.	Mines Open.	Men Employed Inside.	Men Employed Outside.	Animals Used.
Clay	5	6	29	2,216	180	148
Daviess	1	2	10	376	44	56
Fountain	1	2	1	100	8	9
Gibson	1		2	62	21	3
Greene	1		7	614	52	48
Knox			3	119	16	7
Martin	1		1	17	2	1
Owen			1	52	4	2
Parke	1	1	14	816	79	50
Perry			2	55	10	7
Pike	1		5	332	40	39
Spencer		2				
Sullivan			12	618	95	65
Vanderburgh			6	165	44	31
Vermillion	1	1	4	412	44	38
Vigo	5		17	348	39	25
Warrick	4		7	111	21	13
Totals	21	14	121	6,413	699	542

The large reduction in the number of men employed inside at the close of the year as compared with 1895 is due to the fact that the strike which continued in the bituminous field from May 1 well into December left many of the mines in such a state that a full complement of men could not be put to work.

TABLE SHOWING EMPLOYES AND PRODUCTION BY MONTHS.

MONTH.	Inside.	Outside.	Mules.	Days Worked.	Screened.	Slack and Nut.	Mine Run.	Total.
January	7,259	796	580		260,017	91,952	93,108	445,077
February	6,669	719	569		205,114	83,874	83,610	372,628
March	6,445	688	557		223,489	83,291	126,971	433,751
April	5,886	669	498		200,175	84,755	132,225	417,155
May	3,835	404	339		51,070	20,608	60,651	132,329
June	4,130	330	333		79,312	27,035	89,948	196,295
July	3,937	403	318		85,554	28,018	68,287	181,839
August	4,453	461	387		109,120	41,297	103,548	253,965
September	4,757	505	388		141,360	58,032	101,658	301,050
October	5,111	571	459		186,490	73,753	122,029	382,272
November	6,143	614	531		191,395	74,214	121,993	390,602
December	6,413	699	542		208,134	80,705	135,921	424,763
Small mines							136,398	136,398
Total					1,941,230	747,534	1,379,360	4,068,124

TABLE SHOWING THE ANNUAL PRODUCTION OF COAL FOR THE STATE OF INDIANA, FROM 1879 TO 1896 INCLUSIVE, AS SHOWN BY REPORTS OF MINE INSPECTORS.

YEAR.	TONS.	CAPITAL.	INSPECTOR.
Oct., 1879 to Oct., 1880	1,996,490	\$1,135,562	Richards.
1881	1,771,536	1,442,210	Wilson.
1882	.....	.....	.....
1883	2,560,000	1,600,000	Wilson.
1884	Est. 2,260,000	1,750,000	Wilson.
1885	2,375,000	1,850,000	McQuade.
1886	3,000,000	1,975,000	McQuade.
1887	3,140,979	.....	McQuade.
1888	.....	.....	.....
1889	3,676,000	2,081,000	McQuade.
1890	.....	.....	Tielow.
1891	3,819,600	(new) 185,000	McQuade.
1892	4,494,811	.....	McQuade.
1893	4,358,897	.....	McQuade.
1894	3,440,353	.....	McQuade.
1895	4,312,084	1,852,500	Fisher.
1896	4,068,124	1,750,000	Fisher.

Table Showing the Number of Mines, Men Employed, and Estimated Capital Invested in the Coal Business in the State of Indiana, by Counties, for 1895.

CLAY COUNTY.

Number.	OWNER.	ADDRESS.	MINE.	MINE BOSS.	ADDRESS.	EMPLOYES.		Mules.	REMARKS.
						Inside.	Outside.		
1	Brazil Block Coal Co	Brazil, Ind	B. B. No. 1	John Bolin	Brazil, Ind	121	15	11	Electric machine.
2	Brazil Block Coal Co	Brazil, Ind	Gart No. 3	Wm. Conroy	Brazil, Ind				Flooded.
3	Brazil Block Coal Co	Brazil, Ind	Gart No. 5	Andrew Gilmour	Cardonia, Ind	183	11	10	
4	Brazil Block Coal Co	Brazil, Ind	B. B. No. 6						Abandoned.
5	Brazil Block Coal Co	Brazil, Ind	B. B. No. 8	August Norkus	Diamond, Ind	207	19	12	Electric machine.
6	Brazil Block Coal Co	Brazil, Ind	B. B. No. 10	John Mushett	Brazil, Ind	32	3	2	Being finished.
7	Brazil Block Coal Co	Brazil, Ind	B. B. No. 11	Robt. J. Wallace	Diamond, Ind	154	13		New mine.
8	Brazil Block and Pav'g Co	Brazil, Ind	Brick	James Kennedy	Brazil, Ind	10	2	2	Use their own coal.
9	Brazil Mining Co	Chicago, Ill	Gladstone	M. McMarrow	Brazil, Ind	102	6	8	
10	Briar Block Coal Co.	Chicago, Ill	Briar Hill	A. L. Boore	Clay City, Ind.	4	1	1	
11	Chicago & Indiana Coal Co	Terre Haute, Ind	Harrison	Thomas Faulds	Clay City, Ind.	104	9	10	
12	Coal Bluff Mining Co	Terre Haute, Ind	Pratt	H. W. Jenkins	Coal Bluff, Ind	146	8	7	
13	Crawford Coal Co	Brazil, Ind	Pratt No. 2	Walter Knox	Ashersville, Ind.	134	7	4	
14	Crawford Coal Co	Brazil, Ind	Pratt No. 3	Wm. Penze	Hoosiersville, Ind.	42	3	3	New mine.
15	D. H. Davis Coal Co.	Knightsville, Ind.	World's Fair	Robert Jenkins	Knightsville, Ind.	38	3	3	
16	Diamond Block Coal Co.	Chicago, Ill	Diamond No. 3	Thos. McQuade	Brazil, Ind	117	12	9	
17	C. Ehrlich	Turner, Ind	Fortner	Ellsworth Tibbits	Turner, Ind	59	7	5	Bituminous.
18	C. Ehrlich & Co	Turner, Ind	Excelsior	H. B. Ehrlich	Brazil, Ind	29	4	3	
19	P. Ehrlich	Turner, Ind	Superior		Turner, Ind	85	6	3	
20	Eureka Block Coal Co.	Terre Haute, Ind	Eureka No. 1						Burned down.
21	Eureka Block Coal Co.	Terre Haute, Ind	Eureka No. 2	Thomas Dalton	Carbon, Ind	204	7	16	
22	Goucher, McAdoo & Co	Brazil, Ind	Monarch	James King	Brazil, Ind	16	1	2	Use their own coal.
23	Jackson Coal and Min. Co	Brazil, Ind	Brazil	Moses Marks	Cardonia, Ind	140	7	7	
24	Jackson Coal and Min. Co	Brazil, Ind	Nickel Plate	John Cox	Brazil, Ind	68	7	7	
25	I. McIntosh & Co	Brazil, Ind	McIntosh No. 2	W. L. Wallace	Brazil, Ind	13	2	1	Being finished.
26	Markland Coal Co.	Clay City, Ind.	Burger						
27	Otter Creek Coal Co.	Brazil, Ind	Fairview	W. J. Price	Cardonia, Ind	103	6	8	
28	Otter Creek Coal Co.	Brazil, Ind	Nellie	D. J. Evans	Brazil, Ind	17	2	2	Being finished.
29	Jos. Somers	Staunton, Ind.	San Pedro	Ed. Somers	Staunton, Ind				Shut down.
30	Watson, Little & Co.	Chicago, Ill	Gartside						Abandoned.
31	Henry E. Weaver	Chicago, Ill	Louise	Grif Howels	Center Pont, Ind	50	6	6	
32	Zeller, McClellan & Co	Brazil, Ind	Briar Hill	M. Hofmann	Ashersville, Ind	73	5	5	
33	Zeller, McClellan & Co	Brazil, Ind	Columbia						Abandoned.
34	Zeller, McClellan & Co	Brazil, Ind	American Beauty						Abandoned.
35	Zeller, McClellan & Co	Brazil, Ind	Columbia No. 4	Thos. Thompson	Hoosiersville, Ind	55	5	2	

DAVIESS COUNTY.

36	Cabel & Co.	Washington, Ind.	No. 4	Anton Kocher	Washington, Ind.	106	10	18	Abandoned.
37	Cabel & Co.	Washington, Ind.	No. 7						
38	Cabel & Co.	Washington, Ind.	No. 9	Gus Wellinger	Washington, Ind.	91	8	10	Abandoned.
39	Cabel & Co.	Washington, Ind.	Maple Valley						
40	Daviess County Coal Co.	Montgomery, Ind.	Montgomery, No. 1	James Brown	Montgomery, Ind.	75	12	13	Suspended.
41	Daviess County Coal Co.	Montgomery, Ind.	Montgomery, No. 2	Geo. B. Brown	Montgomery, Ind.	48	9	3	
42	Mutual Mining Co.	Cannelburg, Ind.	Mutual	M. Cahill	Cannelburg, Ind.	7			
43	Odon Coal Co.	Odon, Ind.	Winkelpfeck						
44	A. F. Stoy & Son	Odon, Ind.	Stoy	Oliver Herndon	Raglesville, Ind.	12	1		
45	Union Coal Co.	Raglesville, Ind.	Union	W. A. Jacobs	Raglesville, Ind.	15	1		
46	Washington Coal Co.	Washington, Ind.	Hawkins	Thomas Harris	Washington, Ind.	22	3	2	Suspended.
47	Washington Coal Co.	Washington, Ind.	No. 2						

FOUNTAIN COUNTY.

48	Indiana Bituminous C. Co.	Terre Haute, Ind.	No. 2	Steward Shirkie	Silverwood, Ind.	100	8	9	Abandoned.
49	Indiana Bituminous C. Co.	Terre Haute, Ind.	Shipman						
50	M. Sturm	Silverwood, Ind.	Sturm						

GIBSON COUNTY.

51	M. G. Berry	Oakland City, Ind.	Oakland			7	1	1	Sink'g escape shaft.
52	Maule Coal Co.	Princeton, Ind.	Oswalt	Thomas Thomas	Princeton, Ind.	55	20	2	

GREENE COUNTY.

53	Island Coal Co.	Indianapolis, Ind.	Island No. 1	S. C. Risher	Linton, Ind.	93	13	7	
54	Island Coal Co.	Indianapolis, Ind.	Island No. 2	J. S. Newport	Linton, Ind.	199	19	17	
55	Island Valley Coal Co.	Linton, Ind.	Island Valley	Jos. Fennell	Linton, Ind.	64	5	5	
56	Linton Coal Co.	Linton, Ind.	Fluhart	James Dunn	Linton, Ind.	120	10	9	
57	South Linton Coal Co.	Linton, Ind.	South Linton	Joe Ferry	Linton, Ind.	50	4	3	
58	Summit Coal Co.	Bloomfield, Ind.	Summit	Frank Lockhart	Linton, Ind.	53	7	5	
59	Summit Coal Co.	Bloomfield, Ind.	Templeton	Jno. Templeton	Linton, Ind.	35	4	2	

Table Showing the Number of Mines, Men Employed, Etc.—Continued.

KNOX COUNTY.

Number.	OWNER.	ADDRESS.	MINE.	MINE BOSS.	ADDRESS.	EMPLOYES.			REMARKS.
						Inside.	Outside.	Mules.	
60	Bicknell Coal Co	Bicknell, Ind	Bicknell	R. M. Freeman	Bicknell, Ind	39	4	2	
61	H. Edwardsport Coal Co .	Edwardsport, Ind. . .	Edward	Chas. Harting	Edwardsport, Ind. . .	50	7	3	
62	Prospect Hill Coal Co. . .	Vincennes, Ind	Prospect Hill	Wm. R. Scott	Vincennes, Ind	50	5	2	

MARTIN COUNTY.

63	The Bedford C. M. Co . . .	Bedford, Ind	Bedford	Matthew Dickie	Shorts, Ind	17	2	1	New mine.
----	----------------------------	------------------------	-------------------	------------------------	-----------------------	----	---	---	-----------

OWEN COUNTY.

64	Lancaster Coal Co.	Clay City, Ind	Lancaster, No. 4	Jas. F. Andrews	Clay City, Ind.	52	4	2	
----	----------------------------	--------------------------	--------------------------	-------------------------	-------------------------	----	---	---	--

PARKE COUNTY.

65	Brazil Block Coal Co . . .	Brazil, Ind	Cox No. 3	George E. Davis . . .	Coxville, Ind . . .	18	18	2	Cleaning up after
66	Brazil Block Coal Co . . .	Brazil, Ind	Otter Creek	J. O. Lewis	Carbon, Ind. . . .	74	6	4	strike.
67	Calumet Coal Co	Chicago, Ill	Lyford No. 1	J. F. Bailey	Lyford, Ind	14	8	2	Opening after
68	Calumet Coal Co	Chicago, Ill	Lyford No. 2		Lyford, Ind				Shut down. strike.
69	Crawford Coal Co	Brazil, Ind.	Crawf. No. 1	Wm. Spears	Brazil, Ind	148	7	8	
70	I. M. McIntosh & Co	Brazil, Ind.	McIntosh No. 1	Henry Schlatter . . .	Brazil, Ind	142	8	5	
71	Otter Creek Coal Co	Brazil, Ind.	Mecca No. 1	James Skene	Mecca, Ind	43	4	6	
72	Otter Creek Coal Co	Brazil, Ind.	Mecca No. 2	Morgan Roberts	Mecca, Ind				On strike.
73	Parke County Coal Co	Rosedale, Ind	Parke No. 7						Abandoned.
74	Parke County Coal Co	Rosedale, Ind	Parke No. 8	Geo. Mitch	Rosedale, Ind	45	6	3	Open'g after strike.
75	Parke County Coal Co	Rosedale, Ind	Parke No. 6	I. H. Valentine	Rosedale, Ind	22	3	3	Open'g after strike.
76	Standard Coal Co	Brazil, Ind.	Standard	John Scott	Knightsville, Ind . .	35	4	1	New mine. "rior."
77	Zeller, McClelland & Co . . .	Brazil, Ind.	Columbia No. 1	George Myers	Knightsville, Ind . .	150	9	12	Formerly "Superior."
78	Zeller, McClelland & Co . . .	Brazil, Ind.	Columbia No. 2	John Chesterfield . . .	Brazil, Ind	125	6	4	

PERRY COUNTY.

79	Am. Cannel Coal Co	Cannelton, Ind	Cannelton	Geo. W. Briggs	Cannelton, Ind	40	7	5	
80	Bergenroth Bros	Troy, Ind	Troy	R. Walker	Troy, Ind	15	3	2	

PIKE COUNTY.

81	Cabel Kaufman Co	Washington, Ind	Hartwell	G. C. Potter	Augusta, Ind	48	6	6	
82	D. Ingle	Oakland City, Ind	Ayrshire	John Jennings	Ayrshire, Ind	136	15	20	
83	The S. W. Little Coal Co . . .	Evansville, Ind	Blackburn	Jno. Willey	Petersburgh, Ind . . .	40	8	4	
84	The S. W. Little Coal Co . . .	Evansville, Ind	Littles	A. Dodds	Littles, Ind	83	8	7	
85	W. H. Jackson	Oakland City, Ind	Carbon Hill	B. Stinson	Ayrshire, Ind	25	3	2	

Table Showing the Number of Mines, Men Employed, Etc.—Continued.

SULLIVAN COUNTY.

Number.	OWNER.	ADDRESS.	MINE.	MINE BOSS.	ADDRESS.	EMPLOYES.		Mules.	REMARKS.
						Inside.	Outside.		
86	Dugger Co-op. C. Co . . .	Dugger, Ind. . . .	Briar Hill	R. W. Evans.	Dugger, Ind.	8	1	1	Shut down.
87	Hancock & Conkel	Farnsworth, Ind. . . .	Bunker Hill	Frank Smith	Farnsworth, Ind. . . .	53	6	6	
88	Harder Hafer C. Co	Del Carbo, Ind.	Star	Samuel Campbell	Del Carbo, Ind.	104	15	5	Electric machines.
89	Indiana & Chicago C. Co . .	Dugger, Ind.	Dugger	H. A. Butler.	Dugger, Ind.	133	16	10	
90	Jackson Hill C. & C. Co. . .	Eagle, Ind.	Jumbo.	W. E. Evans.	Eagle, Ind.	128	21	18	Comp. air mach.
91	New Currysville C. Co . . .	Shelburn, Ind.	Currysville	C. C. Hull	Shelburn, Ind.	40	10	5	Comp. air mach. □
92	New Pittsburgh C. & C. Co	Alum Cave, Ind.	Phenix, No. 1	W. F. Brown	Alum Cave, Ind.	104	20	15	Comp. air mach.
93	New Pittsburgh C. & C. Co	Alum Cave, Ind.	Phenix, No. 2	W. F. Brown	Alum Cave, Ind.	18	2	2	Comp. air mach.
94	Old Pittsburgh C. Co	Chicago, Ill.	Harrison	Ed Stewart	Hymera, Ind.				Reb'id'g after fire.
95	Shelburn Mining Co	Shelburn, Ind.	Shelburn		Shelburn, Ind.	30	4	3	Comp. air mach.
96	Shelburn Mining Co	Shelburn, Ind.	Shelburn, No. 2		Shelburn, Ind.				
97	Watson, Little & Co	Chicago, Ill.	Bush Creek						Shut down.

VANDERBURGH COUNTY.

98	Diamond Coal Co	Evansville, Ind.	Diamond	William Horst.	Evansville, Ind.	36	7	4	
99	Evansville Union C. Co. . . .	Evansville, Ind.	Union	Pius Schultheis	Evansville, Ind.	27	6	3	
100	John Ingle C. Co	Evansville, Ind.	Ingleside	John Odell	Evansville, Ind.	36	12	4	
101	H. A. Lozier.	Evansville, Ind.	First Avenue	Frank Gendbar	Evansville, Ind.	31	9	8	
102	Sunnyside C. & C. Co	Evansville, Ind.	Sunnyside, No. 1	C. W. Baetz	Evansville, Ind.	45	10	12	Comp. air mach.
103	Sunnyside C. & C. Co	Evansville, Ind.	Sunnyside, No. 2		Evansville, Ind.				Shut down.

VERMILLION COUNTY.

104	Hamilton, Vannest & Co.	Clinton, Ind.	Hazel Creek, No. 1.	Dexter Vannest	Clinton, Ind.				
105	Hazel Creek C. Co.	Clinton, Ind.	Fern Hill	Frank Dunlap	Clinton, Ind.	97	12	17	
106	Indiana Bituminous C. Co.	Terre Haute, Ind.	I. B. No. 1	D. W. James	Clinton, Ind.	120	10	12	
107	Torrey Coal Co.	Voorhees, Ind.	Torrey, No. 4	T. V. Robertson	Voorhees, Ind.	91	13	6	Comp. air mach.
108	McClellan, Eastman & Co.	Clinton, Ind.	Buckeye	William Chesterfield	Clinton, Ind.	104	9	3	

VIGO COUNTY.

109	Coal Bluff Mining Co.	Terre Haute, Ind.	Diamond	Thomas Gregory	Fontanet, Ind.				Shut down.
110	Coal Bluff Mining Co.	Terre Haute, Ind.	Peerless	G. R. Anthony	Fontanet, Ind.				No rep. since strike.
111	Coal Bluff Mining Co.	Terre Haute, Ind.	Star						No rep. since strike.
112	Coal Bluff Mining Co.	Terre Haute, Ind.	Union	James Johnson	Fontanet, Ind.				No rep. since strike.
113	Coal Bluff Mining Co.	Terre Haute, Ind.	Victor	C. R. McGranahan	Fontanet, Ind.	13	1	1	Being finished.
114	Davis Bros.	Elsie, Ind.	Bagle	Ed. Davis	Elsie, Ind.	10	2	1	
115	J. N. & G. W. Broadhurst.	Terre Haute, Ind.	Broadhurst	J. N. Broadhurst	W. T're Haute, Ind.	20	3	2	
116	J. Ehrlich	Seeleyville, Ind.	Seeleyville						Shut down all year.
117	A. F. Miller	W. T're Haute, Ind.	Gruenholz		W. T're Haute, Ind.	10	2		
118	Ehrmann Coal Co.	Terre Haute, Ind.	Nickel-Plate	C. C. Hawkins	Terre Haute, Ind.	52	6	5	
119	Loughner Coal Co.	Seeleyville, Ind.	Loughner			14	3	1	
120	Grant Coal Co.	Burnet, Ind.	Grant	James Devionate.	Burnet, Ind.	100	10	9	
121	Parke County Coal Co.	Rosedale, Ind.	Parke No. 10.						Shut down.
122	Risher & Murray	Clinton, Ind.	New Mine	J. W. Risher	Clinton, Ind.				No report yet.
123	T. H. Brick and P. Co.	Terre Haute, Ind.	Vigo	Robert Bieler	W. T're Haute, Ind.	9	1	1	Use their own coal.
124	Vigo Coal Co.	Chicago, Ill.	Ray						Shut down.
125	Vigo County Coal Co.	Seeleyville, Ind.	Ray	Geo. West	Seeleyville, Ind.	120	11	5	

WARRICK COUNTY.

126	John Archbold	Evansville, Ind.	Star	Geo. Archbold	Newburgh, Ind.	30	5	4	
127	Pat Bartley	Evansville, Ind.	Chandler	Pat Bartley	Evansville, Ind.	13	3	2	
128	Kelley and Nester	Booneville, Ind.	Gough	Wm. Nester	Booneville, Ind.	8	2	1	
129			Howard						
130	W. H. Menden	Evansville, Ind.	De Forest	D. B. Hall	Chandler, Ind.	16	3	1	
131	Lander-Wooley Coal Co.	Evansville, Ind.	Big Vein.	Wm. Wooley	Booneville, Ind.	29	6	4	
132	Caledonia Coal Co.	Booneville, Ind.		Robert Lander	Booneville, Ind.	15	2	1	

I give below a brief notice of the mines visited during the year by myself and assistant.

CLAY COUNTY.

No. 1 MINE.

Located in the northwest part of the the city of Brazil. This mine has been worked steadily during the year. Electric machinery is used here to mine the coal, and seems to be a pronounced success. The only objection I found here was to the quality of oil used. Some improvement has been made in this direction during the year in this and other mines.

GART. NO. 3 MINE.

Located on a branch of the T. H. & I. Railroad, two miles northwest of Harmony. This mine was not in operation during the greater part of the year. On two occasions when visited, the water was so high that I could not get down the shaft. No inspection was made during the year.

GART. NO. 5 MINE.

In the town of Cardonia. This mine was in good condition on both of my visits. The force of men employed here has been greatly reduced on account of the available coal being worked out. I found the employes here using the best oil to be obtained, with the result that, though the circulation of air was weak in some places, there was no smoke to be seen and men were doing their work in comfort. The mine boss, Andrew Gilmour, is to be highly commended for his successful efforts in bringing about this result.

BRAZIL BLOCK NO. 8 MINE.

Located on the Coal Bluff Branch of the C. & I. C. Railroad, near the north line of Clay County. The lower vein at this mine is being worked with electric mining machines and is the largest producer of block coal in the State. Very little work has been done in the top vein this year. This has mostly been removing pillars preparatory to abandoning parts of the mine. During the year the electric plant installation has been perfected, a new air shaft has been sunk, and a 20-foot fan erected. On my last visit I found that though the amount of air circulating was greatly in excess of the minimum required by law, many of the working places were unfit to work in on account of powder smoke and the impure oil used by the employes. I learn that this has been remedied to some extent since then, but where it is necessary to blast coal at all hours during

the day, it is impossible to keep the air clear. This is the principal drawback to the successful use of machines, but it has not prevented this mine from working full time during the year.

BRAZIL BLOCK NO. 10 MINE.

Located one mile west of No. 8, has been closed during the greater part of the year. It was in good condition in the early part of the year. When last visited it had been but lately opened after being idle several months, and was in only fair condition. The object now is to remove the pillars and abandon that part of the mine which has been developed, and it will probably be finished early in 1897.

BRAZIL BLOCK NO. 11 MINE.

Lies southwest of No. 8. This is a new mine and has not been visited during the year. The mine boss, Robert J. Wallace, reports the air shaft completed and the mine in good condition.

All of the above mines are owned by the Brazil Block Coal Company, and are under the superintendence of J. H. McClelland, and P. J. Mooney, mining engineer for the company.

GLADSTONE MINE.

Located on the Coal Bluff branch of the C. & I. C. Railroad, on the line between Clay and Vigo Counties. It was in fair condition when examined early in the year. In the latter part of July the mine was flooded, and did not work again until November 19. On the last inspection it was found in bad condition, but a force of men are at work on repairs. This mine was developed without reference to surface conditions and quite an excavation has been made under a large creek that flows near the shaft. This is and will be a source of constant danger, but with the present force of pumps at the mine the water can probably be controlled.

BRIAR HILL MINE.

One mile northwest of Clay City. This mine has been in bad condition ever since I came into office. Lately, the greater part of the former works of the mine has been abandoned, and developments are being made in a new direction. The new part of the mine was in fair condition on my last visit, and later reports indicate an improvement.

HARRISON NO. 2 MINE.

Located three miles southeast of Clay City. In good condition when visited, as far as could be learned. Was not working on either of my visits.

BRAZIL BRICK AND PIPE CO. MINE.

One mile northwest of Brazil. Employs 12 men mining coal and clay for use in the works of the company. The mine was in fair condition when visited.

PRATT MINE.

One mile west of Perth on the Big Four Railroad. In good condition on my first visit. Found very bad oil being used when visited last, but fair current of air in all working places. Escape shaft has been repaired during the year and is now in good shape.

CRAWFORD No. 2.

Located one mile northeast of Center Point. This is the best mine in the block coal field. It has every natural advantage for drainage and haulage. The coal is of regular height and has a good roof. The mine is well planned and the ventilation is good. On my first visit I found that the oil being used by the miners was sending a cloud of smoke out of the shaft as if a fire was burning below. I called the attention of the officials of the company to the fact and they took steps to improve it. I had no reason to complain of the oil here on my next visit. The other mines of the company were also benefited by the action taken on this account. I have been informed that only the best of oil is being sold at the stores patronized by the miners of the company.

CRAWFORD No. 3 MINE.

Located two miles northeast of Ashersville, is a new mine. I found it in excellent condition on the only visit I made to it. It was opened during the latter part of the summer.

WORLD'S FAIR MINE.

Located one mile northeast of Brazil, was found in good condition on each visit. Much of the work now being done is in drawing pillars preparatory to abandoning the mine. Very little work was done here during the summer, the company holding their coal for better prices.

DIAMOND No. 3 MINE.

Located on northwest quarter section 7, township 13, range 7. This mine was in good condition in all respects on my last visit, though considerable trouble with faults in the coal has been met and a large part of the territory has been found not workable. This has necessitated a change in hauling and ventilating arrangements which kept the mine in bad condition for a time, but they are now completed.

EUREKA MINES.

East of Carbon, on the Big Four railroad. No. 1, after being worked with a small force for the greater part of the year was abandoned in the latter part of October, on account of the shaft buildings having been destroyed by fire. It will not be rebuilt, as the coal it would work can be reached from No. 2.

No. 2 was found in good condition on my last visit except in one quarter, which was being pushed to a connection with No. 1 mine. This has been completed since, and the ventilation is reported good. Some fears are felt of danger from water which has accumulated in the abandoned works of the old Chicago Mine. However, the best survey that can be made shows the two mines to be separated by a distance of 400 feet of solid strata, and also by a fault in the coal which was not passed through in the Chicago Mine, and no danger exists from any recorded part of the Chicago Mine. That is one of the few mines of which a map was filed on its abandonment, as the law requires.

FORTNER MINE.

One mile southwest of Turner, is a bituminous mine. There are so many openings that a complete system of ventilation of the mine is impossible. The coal lies very near the surface and natural ventilation gives all the air necessary.

EXCELSIOR MINE.

Located northwest of Perth, on the Coal Bluff Branch of the C. & I. C. railroad. This mine was idle during the greater part of the summer on account of water breaking in from the creek which runs near the shaft. It has recently been reopened and is being put in shape to work. It has not been inspected since it was flooded.

SUPERIOR MINE.

One-fourth of a mile west of Turner, on the T. H. & I. railroad. This mine is aired by a furnace and a fan, and has been found in excellent condition in all respects whenever it has been inspected. The vein is bituminous, of a good quality and has a good roof. It is owned and operated by P. Ehrlich, one of the oldest operators in the county.

MONARCH MINE.

Northwest of the city of Brazil, on the C. & I. C. railroad. It is operated in connection with the Monarch Sewer Pipe Works, and its product is all used by the company. About 10 men are employed mining coal and clay. The mine is in good condition, except that it has no second outlet. This will be constructed during the coming summer. There are probably not 5,000 square yards of excavation in the mine, but this could only be determined by a survey.

BRAZIL MINE.

Situated one mile north of the World's Fair. Three veins are worked at this mine. The middle vein has a bad roof, but no accidents have occurred from this cause during the year. The mine was in good condition when last inspected.

NICKEL-PLATE MINE.

Located one mile from the main line of the T. H. & I. Railroad on the Knightsville north branch. Two veins are being worked. This mine has been in operation several years, and most of the work now being done is in removing pillars preparatory to abandoning the mine. It was found in excellent condition on each of my visits during the year.

BURGER MINE.

At the north limits of Clay City. When visited was employing but four men under ground. I found all requirements of the law being complied with at that time. Ten men are reported as being employed under ground at the close of the year, but no inspection has been made since the force was increased to this number.

MCINTOSH No. 2.

One mile southeast of Brazil. This mine is nearly worked out and will probably be abandoned early in the year 1897. The coal has been greatly disturbed by horsebacks, but was kept in good condition during the time work was being carried on. The owners and superintendent, Mr. Joseph Tribble, are to be commended for the work done here.

FAIRVIEW MINE.

Located on the C. & I. C. Railroad, four miles northwest of Brazil. Two veins are worked, and I found the mine being operated in compliance with the provisions of the mining law on both of my visits during the year. The upper vein is very wet and has a bad roof, requiring constant care to keep it safe and ventilated, but no complaint reached me at any time of its condition.

NELLIE MINE.

One mile southeast of Brazil. A small force of men have been worked here during the year. The west side of the mine has been worked out and the east side will probably be finished during the present season. The mine was in fair condition on both of my visits.

SAN PEDRO MINE.

Located north of Staunton. This mine was inspected but once during the year, as it was idle after April 30. It was found in good condition when inspected.

LOUISE MINE.

One and one-half miles northwest of Center Point, was visited several times but inspected only once, as it was idle on the other occasions. The single entry plan on which this mine has been developed renders it very difficult to ventilate, as constant watch is necessary over a large number of doors. Making allowance for this drawback, the mine was in as good condition as could be expected. The new work that is being opened is on the double-entry plan, and when rooms are finished in the old part of the mine ventilation can be more easily provided.

BRIAR HILL MINE.

South of Asherville, on the Center Point branch of the T. H. & I. Railroad, was idle during the first quarter of the year. Shortly after it was reopened I visited the mine and found it in fair condition and a force of men at work repairing air-courses and timbering entries. Later my attention was called to the fact that men were being carried out of the mine overcome by foul gases. On September 16 I made a visit to the mine and found several entries so bad that I did not go half way to the faces. I made some suggestions to Mr. Hoffmann as to remedies to be applied,

and was gratified two weeks later to find that they had been carried out with good effect. Since then I have heard no complaints from that mine of the condition underground. I was later called to test the scales at this mine and found them badly out of order. This was the only case during the year where scales were not adjusted on my calling attention to their being out of order on my regular visit to the mine.

COLUMBIA No. 4.

One-half mile southwest of the above, is a new mine. A very bad roof is found over the coal in most parts of the mine. On my first visits the air-courses had not been arranged at the bottom of the shaft and places were very smoky. On a second visit I found that a good current of air was circulating and that an escape shaft had been sunk. An endeavor is being made to push entries through that part of the territory where bad roof is found, and it is to be hoped that the attempt will be successful, as the mine is well equipped to handle a large output of coal.

ABANDONED MINES.

In addition to the above the following mines have been worked out and abandoned in Clay County during the year: No. 6 mine of the Brazil Block Coal Co.; Gartside mine of Watson, Little & Co.; American Beauty and Columbia mines of Zeller, McClelland & Co. Each of those was visited one or more times during the year previous to abandonment.

DAVIESS COUNTY.

CABEL No. 4. MINE.

Owned by Cabel & Kauffman Coal Company. Operated by shaft. Located two miles south of Washington. This mine was inspected May 4 and found in good condition.

CABEL No. 9.

Owned by Cabel & Kauffman Coal Company. Located two miles southwest of Washington. When last inspected the mine was found in good condition, with the exception of some few minor repairs, which the company agreed to attend to at once.

BEDFORD COAL COMPANY MINE.

Located on the E. & R. Railroad, two miles east of Blankenship. This mine has been opened within the past year. The coal is three feet thick and of excellent quality. At my inspection, made November 25th, I found the ventilation in bad shape and ordered the necessary changes made to place the mine in compliance with the law.

WINKLEPLECK MINE.

Owned and operated by the Odon Coal Company. Located one mile northeast of Raglesville. Operated by shaft fifty feet deep. The coal is three feet thick and of good quality. At last inspection several changes were ordered to place the mine in compliance with the law.

STOY MINE.

Located one mile east of Raglesville, two miles from E. & R. Railroad. Owned by Abraham Stoy & Son. At last inspection the mine was found in good condition.

WILSON'S MINE.

Located near Washington, Ind. This mine is nearly worked out, and at the time of my last visit they were working but few men, and the most of those employed were drawing pillars preparatory to abandoning it.

MONTGOMERY MINE NO. 1.

Located at Montgomery, Ind., on the B. & O. S. W. R. R. The coal at this mine is underlaid with fire clay of a very soft nature, which heaves and fills the air courses and roadways so that the ventilation is hard to keep in good shape. At last inspection the mine was in good condition.

MONTGOMERY MINE NO. 2.

This mine has been idle since last April, and I did not examine it on my visit in June.

MUTUAL MINE.

Located at Clark Station, on the B. & O. S. W. R. R. The coal at this mine is composed of a vein of cannel coal three feet thick and bituminous one and one-half feet thick, running together. This is one of the best regulated mines in the State.

FOUNTAIN COUNTY.

No. 2 Mine of the Indiana Bituminous Coal Company is the only one in this county employing sufficient men to come within the provisions of the mining law of the State. It is located about one and one-half miles northwest of Silverwood, on a branch switch from the Clover Leaf railroad. The mine ran well during the whole year, the coal being of good quality. It lies very irregularly both as to thickness and level, which makes it inconvenient to work, being difficult to drain, and making heavy hauling for mules. Some heavy cuts have been made to level hauling roads in the mine and some of the under clay was sold for manufacturing purposes. I was informed that it was in demand for making buff building brick, and gave good results. This stratum of clay is about eight feet thick. There is a good roof overlying the coal and the mine is very well ventilated. An escape shaft has been provided during the year, and was in good condition at the time of my last inspection.

The Shipman mine has not been operated during the year and the Sturm mine has been worked out and abandoned.

GIBSON COUNTY.

Has but one mine employing more than ten men—the Oswalt mine, at the crossing of the E. & T. H. and Air Line railroads, one mile north of Princeton. I noted in my last annual report the completion of the shaft at this mine and hoped for a speedy development of the vein. In this I was disappointed, as it was not until about the 1st of August that they began making reports to me. On August 25th I was notified that a fatal explosion had occurred in the mine, and on investigation I found that the main entries were driven only about 250 feet on each side of the shaft, and cross entries were just being turned. An air shaft was under construction. I called attention to some provisions of the statute which were not being complied with and found on my next visit that they had been followed, with the exception that instead of a speaking tube from the top to the bottom of the shaft a telephone was being used. On a later visit by Mr. Epperson it was found that some of the working places were generating fire damp and the proper attention was not being given to keeping parallel entries equally advanced, thereby allowing the air to return before reaching the working faces. This was remedied when I visited the mine two weeks later. I learned on this occasion that it was the practice of miners to burn the gas out of their places, and called the attention of the superintendent to the danger of

the practice. He seemed to think, however, that there was no danger in firing a small amount of the gas. I found a sufficient amount of air circulating to carry out and dilute all explosive gases that could be given off by the coal or other strata, though there was only a small fan at the bottom of the shaft. A larger fan was being placed on the surface at that time and the superintendent reported to me after it was put in operation that a largely increased volume of air was in circulation. While talking of the time when the air shaft would likely be completed I made a calculation of the area excavated at that time and found it to be about 2,000 square yards. The air shaft was then being pushed as rapidly as possible and I thought would be down to the coal before 5,000 square yards had been excavated. In these circumstances I had no power to curtail the working force of the mine nor to enforce any safety rules I might recommend. In another part of this report I give a copy of evidence taken by the coroner in investigating an explosion here.

GREENE COUNTY.

ISLAND VALLEY MINE.

Located two miles southeast of Linton, on the I. & V. R. R. The coal is five feet thick and of excellent quality for steam and domestic purposes. Operated by a shaft fifty-two feet deep. The output at this place is about 300 tons daily. When last inspected several changes were ordered to put the ventilation in good condition. Sixty men are employed at this mine.

ISLAND No. 1 MINE.

Owned by Island Coal Company. Located one and one half miles south of Linton. Operated by a shaft sixty-six feet deep. This is a machine mine. They are working eleven Harrison machines, and they also have the latest improved machinery for hauling and screening the coal. The coal is five feet thick and of good quality. At last inspection the mine was in good condition.

ISLAND No. 2 MINE.

Located at Linton. Owned by Island Coal Company. Operated by a shaft ninety-five feet deep. This is a machine mine, one of the largest in the State. They work twenty-two Harrison machines. The capacity of this place is 1,200 tons daily. The coal is five feet thick and of excellent quality. They have a rope haulage at this place. At last inspection the mine was in good condition.

SUMMIT MINE.

Located one mile west of Linton on the I. & V. Branch R. R. Operated by a shaft ninety-five feet deep. This mine at present is working with one-half force, having lately started, as it is one of the mines affected by the bituminous strike. I have visited this mine three times during the past year and found the mine in good condition.

SOUTH LINTON MINE.

Located one mile south of Linton, on the I. & V. Branch R. R. The coal is five feet thick and of good quality. Operated by a shaft eighty-one feet deep. This mine is among the best ventilated in the State. I have made two inspections of it during the year and found no recommendations necessary.

TEMPLETON'S MINE.

Located three-fourths of a mile southwest of Linton. This mine heretofore has been working on a small scale, employing less than ten men; but during the past year they have put in machinery and built a switch and are now in a fair way of developing a large mine.

FLUHART MINE.

Located one and one-half miles southwest of Linton. This mine has been inspected three times during the past year and found in good condition, with the exception of the first visit when several changes were ordered to improve the ventilation.

KNOX COUNTY.

BICKNELL MINE.

Located at Bicknell. I have visited this mine twice during the past year, and at both inspections I found the mine in excellent condition.

EDWARDSPOET MINE.

Has been entirely remodeled during the year. Under the supervision of V. G. Brent a shaft was sunk and machinery erected to hoist the coal, the slope formerly used as a hoist way now being used only as an escape way. The capacity of the mine is thereby largely increased, and it is being developed rapidly; and I confidently expect that it will soon be one of the large mines of the State. It has the advantage of high coal, good top and bottom, and fair grades for haulage.

PROSPECT HILL MINE.

Located at Vincennes, Ind. This mine has been inspected twice during the year, and found in fair condition. They have been working less than ten men during a part of the year, but at present they are working something over that force, and are making preparations for putting down a manway or second outlet. The operators of Knox County have continued working their mines during the whole year, having paid the price demanded by the miners.

PARKE COUNTY.

COX No. 3 MINE.

Near Coxville on the C. & I. C. railroad. Only one visit was made to this mine during the year on account of its being idle from April 30th to the early part of December. The same is true of all bituminous mines in this county, they being affected by the strike noticed in another part of this report. At present the mine is being overhauled, and air courses are being changed, as many falls of roof occurred during the time the mine was idle, closing those that had been used. This is one of the best equipped mines in the State, two fans being used for ventilation. The coal is mined by machines driven by compressed air, and a screening and washing plant makes it possible to prepare coal for market to the best possible advantage.

OTTER CREEK MINE.

This is a block coal mine situated on a branch of the Big Four Railroad, about two miles northeast of Carbon. It is being worked out, preparatory to abandonment.

LYFORD No. 1 MINE.

During the first four months of 1895 this mine was operated regularly, and some very necessary improvements were made in the direction of better ventilation. A rope haulage system was also put in operation, and the mine was in fair condition on my last visit. Since the beginning of the strike on May 1st it has not been inspected. But the probabilities are that it is in bad condition, as it has a very bad roof. This is the worst feature of the mine, as it is dry and the coal is of good quality.

LYFORD No. 2 MINE.

This mine was in fair condition early in the year, but has not been in operation since May 1st.

CRAWFORD No. 1 MINE.

Two miles northeast of Carbon, is a block coal mine. Two veins are worked. Was inspected twice during the year and found in good condition on both occasions. It was operated very irregularly during the year, part of the time on account of poor car service on the part of the Big Four Railroad, but principally on account of dull trade.

MCINTOSH No. 1 MINE.

On the Coal Bluff Branch of the C. & I. C. Railroad, three-fourths of a mile north of No. 8 mine, in Clay County. The upper vein at this mine has been abandoned, and all work is now being done in the lower vein. The shaft buildings were burned during the fall, but have been rebuilt in good condition. The underground plan of the mine is good, and it ranks well for safety and ventilation, and coal can be handled with comparative ease.

PARKE No. 6 MINE.

One mile northwest of Rosedale. This mine was found in fair condition on the only visit made to it during the year. No work was done in the mine from May 1st to December 1st, and consequently the mine was not visited during that time.

PARKE No. 8 MINE.

One-half mile west of No. 6. The remarks made in regard to that mine apply to this, except that a small force of men were at work during November.

MECCA, NOS. 1 AND 2

Near Mecca on a branch of the C. & I. C. Railroad. Have good roof and coal of fair height, and of good quality. No. 1 lost considerable time during the year on account of differences between the operators and miners. Was found in good condition when last inspected, all the requirements of the law being complied with. No. 2 has been operated regularly with a small force of men, and is nearly worked out.

STANDARD MINE.

One-fourth mile west of McIntosh No. 2. Is reached by a switch from the C. & S. E. Railway. This is a new shaft and is sunk through two veins of block coal. On my last visit work was begun in the bottom vein to develop the mine. Both veins here are of good thickness and will be worked at the same time. Ventilation is provided for by a 12-foot diameter fan with an air way on one end of the shaft, a separate air shaft not being sunk yet. H. V. Sherburne is superintendent.

COLUMBIA No. 1 MINE.

Formerly known as Superior No. 1. Lies one-fourth mile north of the above. This mine is being operated in the upper vein of block coal, has a bad roof, lies very uneven and makes a great deal of water. This makes it very difficult to keep air courses open, and I have never found the mine up to the standard in this respect, though a great improvement has been made lately, and it was in fair condition on my last visit.

COLUMBIA No. 2 MINE.

One-half mile southwest of the above. During the present year the shaft has been sunk to the bottom vein of block coal and opened out in that. No work has been done in the upper vein since January of this year. It is reached by a switch from the C. & S. E. Railroad, and also from the Coal Bluff Branch of the C. & I. C. Road, the tower being arranged to load coal on opposite sides of the shaft for each road. Last year all coal was shipped over the Chicago & Southeastern Railroad, and it was not found satisfactory. Connection was made with the C. & I. C. during fall of 1896. The mine is in good condition.

OTHER MINES.

Parke No. 7 was abandoned in April, 1896, after having been inspected once this year.

Watson, Little & Co. began sinking a shaft about one mile northwest of Columbia No. 1 during the summer, but encountered a stratum of running sand which proved to be too heavy for the timbers they were using in the shaft, and work was suspended. The company fell into financial difficulties, and have not resumed operations. Drillings show a vein of good coal underlying a large territory in that vicinity, which will probably be developed in the near future.

PERRY COUNTY.

CANNELTON MINE.

Located three miles northeast of the City of Cannelton. The coal is hauled to the river at Cannelton by a small locomotive in hopper cars. The coal lies in the hills above water level, which gives good drainage. Ventilated by a furnace with good results. In excellent condition on both of my visits.

TROY MINE.

One-half mile from Troy, near the Ohio River. The coal is loaded directly into boats, and is consumed mostly by the river trade. The mine is ventilated by a furnace, which, when properly attended to, furnishes a sufficient amount of ventilation. The roof is of a massive sandstone, thirty feet thick, so that there is practically no danger from that source. No accidents of any kind have been reported from this mine during the last two years.

PIKE COUNTY.

HARTWELL MINE.

This mine is located near Augusta, on a branch of the Air Line Railroad. It was inspected twice during the year and found in good condition on both occasions. Reports have been very irregular and unsatisfactory since the appointment of G. C. Potter to succeed Thomas Small as superintendent.

AYRSHIRE MINE.

This mine is located near the Air Line Railroad, six miles east of Oakland City, and is the largest mine in the county. A coke plant of large capacity is located here, but has done very little work during the year. Has been visited twice during the year. On my last inspection I found that several brattices and stoppings had been removed for the purpose of making a survey of the old works, and had not been replaced. The mine boss, Mr. Jennings, reports these repaired and shows the mine in good condition, which, I think, is correct.

BLACKBURN MINE.

Located on the E. & I. at Blackburn Station. Was inspected but once during the year and found in excellent shape. It was closed down several months during the summer, and on my last visit was not in operation.

LITTLE'S MINE.

At Little's Station on the E. & I. Railroad. This mine has the most natural advantages of any in the State, in the way of good roof, easy grades for haulage, and good facilities for drainage. Under the efficient superintendence of Andrew Dodds advantage has been taken of all those conditions, with the result that it is a model mine. From my observation I think that the relations between the operator and workmen are entirely harmonious, and the town is a quiet and peaceable community, peopled entirely by the employes of the mine and their dependents.

PIKE COUNTY.

CARBON HILL MINE.

One mile west of Ayrshire on the Air Line Railroad. Has been developed during the year, and was visited but once. Found no recommendations necessary, as the safety of the workmen seemed to be assured as far as foresight could provide, and ventilation was good. The probabilities are that the capacity of this mine will be largely increased in the near future, as the proprietor, Mr. Wm. H. Jackson, of Oakland City, is an energetic business man with the push and means to make his undertaking a success.

SPENCER COUNTY.

The mines of this county have not been operated during the year to an extent that would bring them under the provisions of the mining law of the State. This is a disappointment, as I had expected the output to be increased from several of the mines of this county during the year.

SULLIVAN COUNTY.

CO-OPERATIVE MINE.

One-half mile southwest of Dugger, on the I. & I. S. R. R. Has been run on a very small scale during the year. A second outlet by a slope has been provided and the requirements of the law are being met in all respects. The mine was in fair condition when last inspected. It is now being worked under lease by a company of miners on the co-operative plan, about eight men being interested and doing all the work.

DUGGER MINE.

Has railroad facilities from both the I. & V. and I. & I. S. railroads. The operators paid the 60-cent rate for mining and operated the mine all year. I found it in fairly good condition on each of my inspections, and such recommendations as I found necessary to make were promptly and cheerfully complied with.

BUSH CREEK MINE.

Has not been in operation since May 1st, as it has been affected by the failure of the owners, Watson, Little & Co., of Chicago, and there is no immediate prospect of its resuming operations.

BUNKER HILL.

At Farnsworth, on the I. & I. S. Railroad. The mine was idle on account of the strike, which affected nearly all the mines in this county. When inspected after resuming work it was found in excellent condition. Its roof and bottom are of such a character that it is easily kept in good working condition, and under the care of Mr. Frank Smith it is well looked after.

TAR MINE.

Located at Gramerey Park, on a branch of the T. H. & I. R. R. Was idle for nearly three months on account of the strike mentioned in another part of this report. Since beginning operations its capacity has been greatly increased, and it is now producing about thirty car loads of coal daily. It is equipped with electric machines and they seem to be doing satisfactory work. Mr. A. D. Scott is in charge as superintendent.

JUMBO MINE.

Located at Jackson Hill. Since last report considerable improvements have been made here, and it is now in fair condition. On my last visit it was not thoroughly repaired after the idleness caused by the strike.

CURRYSVILLE MINE.

One mile north of Shelburn, on the E. & T. H. R. R. Use mining machines driven by compressed air. This mine is in very bad condition in spite of all efforts on my part to bring it up to the standard of mines in the State. While conditions are very unsatisfactory, they are not so bad as to justify closing the mine. There is some improvement since my last year's report, but there is room for a great deal more.

PHENIX MINES, NOS. 1 AND 2.

At Alum Cave, on a branch of the E. & T. H. This mine has been worked out near the shaft and there is some difficulty in carrying air into the working places. The coal from both mines is hoisted through the shaft at No. 1. The output is about thirty railroad cars per day. On my last visit the mine had been gone over carefully under instructions from this office and was in fair condition.

HARRISON MINE.

At Hymera, on the Farmersburg branch of the E. & T. H. The shaft here was burned as a result of trouble growing out of the strike of bituminous miners. Four miners were arrested for complicity in the burning. Two were released on preliminary examination, and the others were found not guilty by a jury in Sullivan Circuit Court. The trouble arose over an agreement made by miners and operators on the price to be paid for mining coal by machinery, the mine being equipped with electric machinery. A difference of opinion as to what was a fair price for machine mining, when the pick mining rate was 60 cents, existed here as at other machine mines in the bituminous district and may cause trouble in the future.

SHELburn MINE, Nos. 1 AND 2.

At Shelburn on the E. & T. H. railroad. These mines were in good condition at the time of each of the three inspections made during the year. This mine is one of the few in the State that generates fire-damp in dangerous quantities, but under the careful supervision of Mr. Thomas Thomas no accidents have been reported during the year from this cause.

VANDERBURGH COUNTY.

DIAMOND MINE.

Was inspected twice and found in fair condition on the first visit. Considerable improvement had been made, and on my second I considered no recommendations necessary.

UNION MINE.

This mine is operated by a company of miners, all of whom are at work about the mine in some capacity. The escape shaft spoken of in my last report has been completed and the mine is in good condition.

INGLESIDE MINE.

This mine was found in excellent condition on both of my visits and no recommendations were considered necessary.

FIRST AVENUE MINE.

This mine has changed ownership during the year, and the new proprietor has spent considerable money in improvements and seems to be determined to put the mine in first-class condition. This had not been accomplished at my last visit, but progress was being made in that direction.

SUNNYSIDE MINE.

Under the efficient and energetic management of Mr. Wm. Moody great improvements have been made in this mine and the underground work is being placed in splendid condition. Compressed air machines are used, and the coal is gotten out in good shape. Roads are dry and the ventilation leaves very little to be desired.

VERMILLION COUNTY.

FERN HILL MINE.

One mile southwest of Clinton, reached by a switch from the C. & E. I. Railroad. Is in splendid condition. On my first inspection I found a good current of air circulating, but so loaded with smoke from the lamps or the workmen as to be unfit to work in. I found that this had been remedied to a great extent on a subsequent visit, and later reports are that only good oil is being used in the mine. The second outlet to this mine is by a slope and is used altogether by men and mules entering and leaving the mine, none being hoisted on the cages at the main shaft.

INDIANA BITUMINOUS COAL COMPANY'S NO. 1 MINE.

Three-fourths mile south of the above, on the same railroad switch. Is one of the best equipped mines in the State for the rapid handling of coal, and is well developed underground. I found the mine in excellent condition when inspected, except that two pairs of entries had recently been started, and the proper doors and bridges had not been put in place to direct the air into them. When this is done there can be nothing further asked to make this a model mine.

BUCKEYE MINE.

One mile east of Fern Hill mine. This mine is being operated in the lower vein of coal with good success. During the year an air-shaft has been sunk and properly equipped. The roof over the coal is good, and all indications point to the development here of a large mine. Some fire-damp is given out by the coal, and two accidents have occurred from this cause, which are noted in their proper places. The mine is now in good condition for safety and ventilation.

TORREY NO. 4 MINE.

At Geneva. Has been greatly improved during the year and is now in good condition, except that some water is lying on the road to the escape shaft. A pump is kept at the escape shaft to dry this road, and it is usually kept in a condition to be available in case of accident. No further attempt has been made to develop the lower vein since my last report. This mine has been kept in operation during the entire year and is now producing about 500 tons per day from the upper vein, and this is being constantly increased.

HAZEL CREEK NO. 1 MINE.

Was abandoned early in the year.

VIGO COUNTY.

DIAMOND MINE NO. 2.

Two miles southwest of Fontanet. Was found in fair condition when inspected, but the fan was not throwing the amount of air it should. The mine boss agreed to remodel it and put a stairway in the escape shaft, but the strike of May 1 caused a suspension of work at the mine and it has not resumed operations since, and no inspection has been made to learn whether my suggestions have been followed. There is no immediate prospect of this mine being put in operation.

PEERLESS MINE.

One-half mile north of the crossing of the Big Four Railroad on the C. & I. C. Railroad. Has been operated very little and was not inspected during the year.

STAR MINE.

Is now being operated by a company of miners under a lease to take out the coal remaining in the mine. Pillars only.

UNION MINE.

Northeast of Fontanet. Has been driven into better roof than was found near the bottom of the shaft, and all places seemed to be safe and well ventilated on my last visit, and no improvements were recommended. The mine has recently begun operations, after having been idle since May 1.

VICTOR MINE.

On account of the strike this mine is not yet abandoned, but will be within three months according to my best information. It is all pillar work and dangerous, but has been worked very carefully, and no accidents have been reported from there since my last report.

BROADHURST MINE.

One mile southwest of Macksville. Has been operated on a small scale for several years, the product being hauled in wagons to the city of Terre Haute. It is now employing over twenty men and will probably increase the number. I found the mine in fair condition below, but no safety catches, signal bell at bottom, nor speaking tube. These have been provided and the mine is now in good shape.

EAGLE MINE.

On the Brazil Branch of the C. & E. I. Railroad, two miles south of Fontanet. Has been at work all year except when prevented by water. It is opened by a slope on the south side of Otter Creek and has been flooded twice this year. On my last visit the water was out but the mine was in bad condition, the air-courses having been closed by falls of roof while the mine had been idle. Efforts were being made to open new airways, with some prospects of success. I have not learned later what has been done. I visited the mine four times during the year in an endeavor to have the law complied with and had succeeded fairly well before the first flood.

GRUENHOLZ MINE.

One mile northwest of Macksville. Has been operated for several years with four or five men. The present proprietor has started to develop it, so that he can employ about thirty men. It was inspected but once during the year, and several improvements were recommended. When these are made the mine will be safe to work, and will probably be quite largely developed, as there is a good deal of coal in that vicinity.

NICKEL PLATE MINE.

One mile southwest of Eagle mine. The coal lies here nearly on a level with the valley up which the railroad switch runs. The mine is developed under the hills on each side, and is ventilated by two fans. A haulage plant has been placed on the west side of the mine during the year. The roof is bad on the east side, and very little work is being done there. Openings made to daylight in several places allow air to escape, and weakens the current, but it was in fair condition on my last visit.

RISHER'S MINE.

Located on property adjoining the Gruenholz mine on the east and north. There was a shaft sunk during the fall of 1896, and but little work has been done in the coal. I have no report from it yet, and on my last visit to that vicinity the shaft had not reached coal, so I did not inspect it. Coal will probably be shipped in considerable quantities from this mine in 1897. A switch from the Vandalia railroad is to be constructed to furnish shipping facilities.

PIPE WORKS MINE.

At the plant of the Terre Haute Brick and Pipe Works. Employs from eight to twelve men to furnish fuel for the works. It is worked on the double entry plan, and is aired by a steam jet. Was in fair shape when inspected.

GRANT MINE.

One-half mile south of the town of Grant, on the Brazil branch of the C. & E. I. railroad. The escape shaft has been repaired and made available for use during the year, air courses have also been cleaned out and brattices tightened, and the ventilation greatly improved. On the last inspection the mine was found in fair condition. Air has to be carried so far through old works that there will always be trouble with the ventilation. Compressed air machines are used for mining the coal here.

VIGO MINE.

Adjoining the Eagle mine on the east. Was badly ventilated on my first visit. It was improved by the construction of an outlet for air near the working face, and cleaning out air courses. The mine has not resumed operations since the inauguration of the bituminous miners' strike, May 1st.

RAY MINE.

East of Seeleyville on the T. H. & I. railroad. Has been operated during the whole year unaffected by the miners' strike. The price asked for by the organization was paid, and no trouble was had in securing miners. The air shaft at this mine has been completed, and the mine has since been kept at all times in first-class condition.

LOUGHNER MINE.

A new mine on the T. H. & I. railroad one-fourth mile west of Seeleyville. This mine has not been inspected since coal was reached. Some coal has been shipped and this will probably be a large mine as the company has 200 acres of coal adjoining their shaft.

Parke No. 10 mine and J. Ehrlich's Seeleyville mine have not been in operation at any time during the year.

ACCIDENTS.

In the following pages I give tables including all accidents reported to this office during the year, giving the date of the accident, name of the person injured, extent of the injury sustained, the cause of the accident, the mine and county in which the accident occurred. There has been some trouble in getting satisfactory reports from mine bosses, and I am of the opinion that some report injuries which others consider too trivial to mention. In order to make those tables of the greatest possible value all accidents should be reported with such a description of the injuries received as would enable the inspector to determine approximately, at least, the amount of time lost from work by injuries received while at work, and where an accident can be classified as serious the law should provide for immediate notification to the Inspector as is now done in case of fatal accidents, so that an immediate inspection of the mine and examination of the person injured may be made. In several cases where death has resulted from injuries received in accidents, the injured party has lingered from three days to a week before death, and in the meantime such changes had been made in the condition of the mine that an inspection of the place where the accident occurred threw no light on its cause.

The serious and fatal accidents are fully reported to the best of my knowledge, with one or two exceptions. No comment is made except in case of fatal accidents where personal investigation gave a knowledge of the facts more fully than was obtained from the reports made by persons in charge of the mines where they occurred.

Minor Accidents.

DATE.	NAME.	INJURY.	CAUSE OF INJURY.	MINE.	COUNTY.
Jan. 3.	James Lindsay	Head hurt	Kicked by a mule	Phenix No. 1	Sullivan.
" 4.	John Cook	Finger mangled	Climbing ladder	Gart No. 3	Clay.
" 6.	Arthur Hilliar	Arm hurt	Nail in old tracking	Gart No. 5	Clay.
" 8.	Reuben Yocum	Slightly bruised		Briar Hill	Clay.
" 8.	Theodore Thompson		Kicked by a mule	Dugger	Sullivan.
" 9.	John Bennett	Head and hand hurt	Fall of coal	Gart No. 5	Clay.
" 11.	Ott Powers	Face cut	Struck with shovel	Gart No. 8	Clay.
" 20.	Robert Davis	Slightly hurt	Falling slate	Nellie	Clay.
" 22.	Robert Foster	Leg slightly injured	Between mine cars	Diamond No. 3	Clay.
" 23.	Jacob Tucker	Shoulder bruised	Falling slate	Star	Sullivan.
" 25.	Thos. Jacobson	Shoulder dislocated	Falling slate	Gart No. 8	Clay.
" 27.	Pat Lauler	Arm hurt	Mine cars	Fluhart	Greene.
Feb. 13.	Pat Hart	Leg hurt	Fell on loose slate	Lyford No. 1	Parke.
" 17.	John Tipton	Bruised	Falling coal	San Pedro	Clay.
" 17.	Pete Bulger	Finger tips mashed	Mine car	Phenix No. 1	Sullivan.
" 18.	William Allen	Hand slightly hurt	Falling slate	Nellie	Clay.
" 20.	Mike Valuski	Back hurt	Falling slate	Lyford No. 1	Parke.
" 28.	Nelson Richard	Leg hurt and head cut	Fall of draw slate	Crawford No. 2	Clay.
" 28.	John Trowbridge		Mine car and mule	Cabel No. 9	Daviess.
Mar. 10.	A. Butterman	Leg hurt	Fall of coal	Superior	Clay.
" 12.	Wes Hillion	Hand hurt	Shovel caught in machine	Gart No. 8	Clay.
" 16.	Frank Mullen	Finger hurt	Spragging mine car	Star	Vigo.
" 18.	J. Gillian	Head cut	Draw slate fell	Excelsior	Clay.
" 20.	J. E. Quail	Arm hurt	Coupling mine cars	Dugger	Sullivan.
" 25.	Lewis Anstett	Burned	Powder	Ingleside	Vanderburgh.
" 28.	James Flockhart	Foot hurt	Between mine cars	Crawford No. 2	Clay.
Apr. 8.	Fred Burg	Slightly hurt	Falling slate	Briar Hill	Clay.
" 14.	Harvey Gatt	Right hand hurt	Mine cars	Dugger	Sullivan.
" 16.	M. Graham	Arm hurt	Between cars	Fern Hill	Vermillion.
" 21.	Mat Unity		Falling slate	Union	Vigo.
" 24.	M. F. Collins	Ankle strained	Falling coal	Island No. 1	Greene.
" 25.	Robert Boskill	Toe bruised	Mine cars	Gart No. 8	Clay.
" 27.	Jasper Lucas	Shoulder and back hurt	Falling coal	Crawford No. 2	Clay.
" 27.	James Charles, Sr		Mine car off track	Eureka No. 2	Clay.
" 27.	F. Beckerly	Scalp wound, 4 inches	Falling coal	Sunnyside No. 1	Vanderburgh.
" 28.	Andrew Petterson	Slightly hurt on foot	Falling draw slate	Star	Vigo.
" 29.	John Strouskia	Finger hurt	With slack shovel	Gart No. 8	Clay.
May 21.	Ed. Shattuck	Finger mashed		Diamond	Clay.
" 23.	Anthony Frank	Legs bruised	Falling draw slate	Cabel No. 9	Daviess.
June 2.	Christian Thorn	Squeezed slightly	Mine car	Cannelton	Perry.
" 12.	James Walker	Finger mashed	Mine car	South Linton	Greene.

Minor Accidents—Continued.

DATE.	NAME.	INJURY.	CAUSE OF INJURY.	MINE.	COUNTY.
June 12.	Henry Bettle	Slightly injured	Fell down shaft	Phenix	Sullivan.
" 16.	Emil Ostia	Hip bruised	Fall of draw slate	Cabel No. 9	Daviess.
" 19.	Tom Barr	Hip bruised	Fall of coal	Phenix	Sullivan.
" 23.	Thomas Wilson	Burned	Defective oil	Ingleside	Vanderburgh.
" 23.	Robert Dalzal	Foot mashed	Falling coal	Union	Vanderburgh.
July 3.	Albert Johnson	Foot bruised	Mine cars	Cannelton	Perry.
" 12.	Barney McVickers	Slightly hurt	Draw slate	Gart No. 5	Clay.
" 17.	D. Skelly	Ankle hurt	Mine cars	Pratt	Clay.
" 17.	Sam Genet	Foot hurt	Draw slate	Brazil Block No. 1	Clay.
" 17.	Wm. McCarrin	Hand bruised	Mining machine	Brazil Block No. 8	Clay.
" 22.	E. J. Graves	Shoulder bruised	Draw slate	Briar Hill	Clay.
" 28.	Joe Wilson	Shoulder bruised	Draw slate	Brazil Block No. 8	Clay.
" 28.	C. Riggs	Face and arm bruised	Mine cars	Pratt	Clay.
" 28.	James Rose	Slightly hurt	Falling coal	Island Valley	Greene.
" 28.	George Burge	Back injured	Falling draw slate	Dugger	Sullivan.
" 28.	Wm. Goodman	Arm hurt	Mine cars	Dugger	Sullivan.
" 28.	James Lawson	Body bruised	Falling coal	Dugger	Sullivan.
" 28.	John Cullers	Fingers hurt	In shaft	Dugger	Sullivan.
" 28.	Fred Spalding	Fingers hurt	Draw slate	Dugger	Sullivan.
Aug. 6.	William Phelps	Back hurt	Falling roof	Silverwood	Fountain.
" 6.	Berry St. John	Ankle hurt	Draw slate	Dugger	Sullivan.
" 12.	Dick Atehison	Leg hurt	Slate on pillar	American Beauty	Clay.
Aug. 18.	John Miller	Foot bruised	Falling slate	Brazil Block No. 1	Clay.
" 18.	Ed. Griffith	Foot bruised	Slate fell on entry	Dugger	Sullivan.
" 18.	Sam Marlow	Foot bruised	Slate fell on entry	Dugger	Sullivan.
Sept. 16.	Wm. Stevenson	Foot injured	Mine car	Crawford No. 2	Clay.
" 16.	J. Neidlinger	Head cut	Falling slate	Briar Hill	Clay.
" 19.	Ed. Buck	Knee hurt	Shot through pillar	Eureka No. 1	Clay.
" 25.	Henry Mullen	Foot hurt	Mine car	World's Fair	Clay.
Oct. 8.	Enos Pedot	Arm hurt	Fall of coal	Fairview	Clay.
" 12.	Tom Jones, Jr.	Foot hurt	Mine car	Crawford No. 1	Parke.
" 21.	Wm. Dudley	Fingers bruised	Mining machine	Brazil Block No. 8	Clay.
" 27.	Stm Yemm	Foot bruised	Falling coal	Crawford No. 2	Clay.
" —	Allen Hourst	Bruised	Shot through pillar	Edwardsport	Knox.
Nov. 6.	John Oehrin	Leg hurt	Falling slate	Brazil Block No. 8	Clay.
" 12.	Mike Moss	Finger cut	Mining mabhine	Brazil Block No. 8	Clay.
" 14.	James McAnulty	Slightly injured	Draw slate fell	Brazil Block No. 1	Clay.
" —	John Johnson	Shoulder hurt	Falling slate	Columbia No. 1	Parke.
Dec. 3.	Emmet Bosden	Thumb mashed	Mine cars	McIntosh No. 2	Clay.
" 7.	Geo. Williams	Bruised	Mine cars	Island No. 2	Greene.
" 15.	Geo. Williams	Bruised	Draw slate	Brazil Block No. 1	Clay.

" 15.	Fred Neece	Burned	Premature blast	Grant	Vigo.
" 17.	Wm. Lewis	Hip hurt	Falling slate	Fluhart	Greene.
" 18.	Joe Drake	Hand sprained	Falling coal	Phenix No. 1	Sullivan.
" 24.	Andrew Maxwell	Finger mashed	Falling coal	South Linton	Greene.
" —.	Nick Wools	Bruised	Falling coal	South Linton	Greene.
" —.	G. D. Stevens	Foot bruised	Dumping coal	Brazil Block No. 8	Clay.
" 29.	E. Rice	Leg hurt	Fall of coal	Island Valley	Greene.
" —.	Joe Ranes	Slightly hurt	Falling slate	Bunker Hill	Sullivan.
" —.	Paul Perrard	Head hurt	Falling slate	Brazil	Clay.
" —.	James Dalton	Head hurt	Falling cage	World's Fair	Clay.
" —.	James Dalton	Head hurt	Kicked by mule	Eureka No. 2	Clay.
" —.	Wm. Osborn	Eye injured	Fire from pick	Eureka No. 2	Clay.

Serious Accidents

DATE.	NAME.	INJURY.	CAUSE OF INJURY.	MINE.	COUNTY.
Jan. 8.	Wm. Handy	Struck on head	Shot through pillar	Bush Creek	Sullivan.
" 12.	Joseph Chad	Leg broken	Falling slate	Silverwood	Fountain.
" 15.	Frank Slack	Collar bone broken	Fall of coal	Gart No. 5	Clay.
" 16.	Isaac Womeldorf	Ankle mashed	Railroad cars	Fluhart	Greene.
" 17.	Jesse Davis	Leg broken		Lyford No. 1	Parke.
" 27.	Andrew Alzman	Shot in side	Through pillar	Bush Creek	Sullivan.
Feb. 3.	Henry Ruk	Foot mashed	Falling slate	Union	Vigo.
" 3.	Mike Miller	Hand mashed	Coal fell down shaft	Lyford No. 1	Parke.
" 8.	Wm. St. Clair	Leg broken in two places	Falling slate	B. B. No. 1	Clay.
" 10.	John Pittston	Leg broken	Fall of coal	Pratt	Clay.
" 10.	Mort Sheppard	Both arms broken	Caught in elevator	Jumbo	Sullivan.
" 14.	David Hermanson	Finger cut off		Diamond No. 3	Clay.
" 18.	Jos. Frankoner	Collar bone broken	Falling slate	Pratt	Clay.
" 21.	Charles Deal	Leg broken	Falling slate	Brazil Block No. 1	Clay.
Mar. 12.	Claude Peck	Leg broken	Falling slate	Superior No. 1	Parke.
" 24.	John Dunbar	Finger broken	Loading mine car	Dugger	Sullivan.
" 5.	George Dunbar	Wrist dislocated	Between mine ear and roof	Cabel No. 9	Daviess.
Apr. 8.	P. W. Jones	Hand mashed	Falling slate	Briar Block	Clay.
" 10.	John Lipp and two others	Slightly burned	Explosion of fire-damp	Buckeye	Vermillion.
" 24.	James Lyden	Hurt in back	Fall of rock	Shelburn	Sullivan.
" 28.	Wm. Epperson	Needle through foot		Island Valley	Greene.
May 7.	Chas. Harson	Collar bone broken	Mine cars	Fern Hill	Vermillion.
" —.	Enos Bright	Shoulder dislocated	Fuel car	Lyford No. 2	Parke.
June 20.	A. Bouvie	Seriously burt	Falling slate	Superior No. 1	Parke.
" —.	Sam Harvey	Leg broken	Mine cars	Torrey No. 4	Vermillion.
July 25.	Thomas Liddle	Leg mashed	Mine cars	Diamond No. 3	Clay.
Aug. 8.	S. A. Gantz	Badly bruised	Bar slipped and struck him	Brazil Block No. 1	Clay.
" 13.	Tom Jones	Leg broken	Falling slate	Gladstone	Clay.
" 13.	Elmer Davis	Badly bruised	Mine cars	Nellie	Clay.
" 18.	Fred Miller	Head cut	Falling slate	Brazil Block No. 1	Clay.
" 20.	Harvey Gatt	Arm broken	Mine cars	Dugger	Sullivan.
" 20.	W. Evans	Leg broken	Draw slate fell	Dugger	Sullivan.
" —.	Chas. Bradford	Leg broken	Falling slate	Nickel Plate	Vigo.
" —.	— Driver	Ankle mashed		Torrey No. 4	Vermillion.
" 25.	Frank Turber	Badly burned	Explosion of fire damp	Oswalt	Gibson.
Sept. 14.	Thos. Barrowman	Leg broken	Falling slate	Diamond No. 3	Clay.
" 15.	John McQuade	Badly bruised	Went back to a shot before it	Diamond No. 3	Clay.
" 15.	James Smith	Three ribs broken	exploded		
" 17.	Frank Vance	Arm broken	Falling slate	Brazil Block No. 8	Clay.
" 19.	George Steubel		Falling slate	Brazil Block No. 1	Clay.
" 28.	Henry Creon	Foot broken	Falling slate	World's Fair	Clay.

"	—	Wm. Vail	Hand mashed	Falling coal	Nickel Plate	Clay
"	—			Falling coal	Columbia No. 1	Parke
Oct.	6.	John Bedwell	Ankle broken	Falling slate	Island No. 2	Greene
"	7.	John Bennie	Ribs broken	Mine car	Island Valley	Greene
"	9.	Dan Jones	Leg broken	Falling slate	Louise	Clay
"	25.	David Suttie	Hand badly bruised	Falling coal	Gart No. 5	Clay
"	30.	John Nickelson	Arm mashed	Mine cars	Briar Hill	Clay
"	—	Lafe Singleton	Burned	Blast	First Avenue	Vanderburgh
Nov.	4.	F. Hamilton	Badly hurt	Crossing under cage	Fern Hill	Vermillion
"	18.	Marion Hasket	Badly bruised	Sbot through pillar	Nickel Plate	Vigo
"	—	Jabez Wilde	Leg broken	Cross-bar fell	Brazil Block No. 11	Clay
"	—				Columbia No. 1	Parke
Dec.	2.	Tom Moses	Hand mashed	Mine car	Fuhart	Greene
"	8.	Henry Pirtle	Hand mashed	Railroad car	Fuhart	Greene
"	16.	J. Prudo	Leg broken	Timber fell on him	Lyford No. 1	Parke
"	17.	Harvey Bilderback	Leg broken	Falling coal	Blackburn	Pike
"	26.	Frank Turber	Leg broken and burned	Explosion of gas	Oswalt	Gibson
"	29.	Chas Byers	Leg broken			
"	29.	Lawrence Byers	Cut in back	Falling slate	Brazil Block No. 11	Clay
"	26.	Arthur Colgate	Leg broken in two places			
"	26.	Wm. H. Grills	Severely burned			
"	26.	Dave Nolan	Severely burned	Explosion of fire damp	Oswalt	Gibson
"	26.	T. W. Trice, colored	Slightly burned			
"	26.	James Turner	Slightly burned			

Fatal Accidents.

DATE.	NAME.	Age.	NATIVITY.	Widow.	Orphans	CAUSE OF INJURY.	MINR.	COUNTY.
Jan. 11	Gabriel Datta		Austrian			Caught by cage in shaft.	Brazil Block No. 10	Clay.
Jan. 29	Chas. Doyle	64	Scotland	1	2	Falling slate	Superior	Clay.
Mar. 8	Matthew Hofman	71	Germany	1		Falling slate	Eagle	Vigo.
Mar. 17	Perry O. McCarty					Mine cars ran away	Old Pittsburgh	Sullivan.
Apr. 6	Andrew Ferguson	16	Indiana			Cage in shaft	Gart No. 5	Clay.
July 15	Frank Chevalier	40	France	1	4	Falling slate	Superior No. 1	Parke.
Aug. 25	Chas. Gostnell	28	Illinois	1		Explosion fire damp	Oswalt	Gibson.
Aug. 30	Robt. Barnes		Indiana			Explosion in sinking shaft	Buckeye	Vermillion.
Sept. 3	Peter Rance					Fell down shaft	Prospect Hill	Knox.
Sept. 3	Wm. D. Downs	21	United States			Fell down shaft	Broadhurst	Vigo.
Sept. 26	Wm. Bradshaw	26	England			Falling slate in room	Diamond No. 3	Clay.
Oct. 5	Raymond Cooper	22	Indiana			Squeezed by mine car	Montgomery	Davies.
Oct. 17	Jno. Schlatter	43	Pennsylvania	1	5	Drilling out dynamite	Standard	Parke.
Oct. 20	Jno. Pfeister	30	Indiana			Fall of slate	Nellie	Parke.
Nov. 7	Matzura	35	Austria	1	2	Fall of slate	Brazil Block No. 8	Clay.
Nov. 7	Chas. McClintock	30	Indiana	1	3	Shot through pillar	Nickel Plate	Vigo.
Nov. 14	Anton Krauss	32	Germany	1	2	Found dead under cage	Brazil Block No. 8	Clay.
Dec. 2	John Lynch	51	Scotland	1	3	Slate fell on entry	Columbia No. 1	Parke.
Dec. 4	Marion Noble	43	United States	1	3	Slate fell in room	Columbia No. 3	Clay.
Dec. 12	Oliver Vanness	28	Indiana			Slate fell on entry	Pratt	Clay.
Dec. 18	Henry Miller	45	United States	1		Caught by mine car	Nickel Plate	Clay.
Dec. 26	James Riall			1		Explosion of fire damp	Oswalt	Gibson.
Dec. 26	Jno. Ernst			1	2	Explosion of fire damp	Oswalt	Gibson.
Dec. 26	Jno. Holmes			1	2	Explosion of fire damp	Oswalt	Gibson.
Dec. 26	C. Poneleit			1		Explosion of fire damp	Oswalt	Gibson.
Dec. 26	R. Poneleit			1	4	Explosion of fire damp	Oswalt	Gibson.
Dec. 26	R. A. Maule			1		Explosion of fire damp	Oswalt	Gibson.
Dec. 26	Theodore Faber			1	1	Explosion of fire damp	Oswalt	Gibson.

In the following table is shown the number of accidents which occurred in each county during the year, whether minor, serious or fatal, divided as to their causes as given :

COUNTY.	Fall of Roof.	Fall of Coal.	Hurt by Mine Cars.	Explosion of Fire Damp.	Premature Blasts.	Caught by Cages.	Railroad Cars.	Kicked by Mules.	Fell Down Shaft.	Miscellaneous.	Totals.	
											Minor.	Serious. Fatal.
Clay	18 13	6 4	8 3	0 0	0 2	1 0	0 0	1 0	0 0	13 3	47 25	10
Daviess	2 0	0 0	1 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	3 0	1
Fountain	1 0	1 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	1 0	0
Gibson	0 0	0 0	0 0	9 8	0 0	0 0	0 0	0 0	0 0	0 0	0 0	9 8
Greene	2 1	4 0	3 2	0 0	0 0	0 0	2 0	0 0	0 0	1 0	9 6	0
Knox	0 0	0 0	0 0	0 0	1 0	0 0	0 0	0 0	0 0	0 0	1 0	1
Owen	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0
Parke	1 2	0 1	1 1	0 0	0 1	0 0	0 0	0 0	0 0	2 4	4 8	3
Perry	0 0	0 0	2 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	2 0	0
Pike	0 0	0 1	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	1
Sullivan	6 2	3 0	4 1	0 0	2 2	0 0	0 0	2 0	1 0	1 2	19 7	1
Vanderburgh	0 0	2 0	0 0	0 0	0 1	0 0	0 0	0 0	0 0	1 0	3 1	0
Vermillion	0 0	0 0	1 2	0 1	0 0	0 1	0 0	0 0	0 0	0 1	1 5	1
Vigo	2 1	0 0	1 0	0 0	1 1	0 0	0 0	0 0	0 0	0 0	4 3	3
Warrick	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0
Minor	32	15	21	0	4	1	0	3	1	17	94	
Serious	21	6	9	10	6	1	2	0	0	11	66	
Fatal	9	0	3	9	2	3	0	0	2	0	28	
Totals	62	21	33	19	12	5	2	3	3	28	188	

As minor and serious accidents are not reported until the end of the month in which they occur no investigation of such accidents is made, and my information in regard to them is confined to the facts contained in the report as given by the mine boss. I have investigated every fatal accident that has occurred in the State during the past year, with one exception - the case of John Pfiester at the Nellie mine. I was absent from home when that occurred, and when I returned the coroner had completed his investigation. An attempt to notify me had been made by Mr. Evans, and no blame can be attached to him under the statute providing a penalty for failure to notify the Inspector.

Of the deaths caused by falls of roof during the year nearly all were in the working places of the men injured and where they were charged with the duty of keeping the places safe. This is true in all but the case of John Lynch, who was killed by a fall of slate on an entry which was used as a hauling road and traveling way. Men who were fully competent to discharge the duties of their position as timber men testify that two days before the accident the stone which caught him appeared to be perfectly safe. While there might be a possibility of the operator of the mine being held liable in a damage suit in this case, it seems to me that all reasonable precautions had been taken to prevent the accident which occurred. All the accidents which occurred by mine cars might have been averted by the persons injured complying with the law which requires that no person shall ride on loaded cars.

With one exception the deaths occasioned by the explosion of gas occurred in the new mine of the Maule Coal Co., at Princeton. The explosions there being fully discussed in another part of this report need not be noticed further here. The death in Vermillion County was caused by an accumulation of explosive gas in an air shaft which was being sunk. It stands alone as far as my observation or reading goes. While the gas might have been expelled by continuing to run the fan a few minutes longer, there was no reason, so far as I know, to apprehend that such an accumulation should occur in that place.

One death and several serious accidents occurred by shots blowing through pillars. With a view to making persons in charge of mines more careful in this respect I have introduced a bill requiring maps of mines to be made and copies filed with the Inspector of Mines. This will cause mine bosses to be more careful in driving rooms and entries. Of those accidents that occurred in shafts, one was an unexplainable accident. A young boy who had recently begun work in the mine had got on the cage to come up at the end of his day's work when, by some means, he lost his balance and fell and was caught on the side of the shaft. The others were caused by a failure to observe the law in regard to signals and the number of men allowed to ride on a cage.

Of those who fell down shafts, one was a night man whose duty it was to hoist water from the shaft before the day turn came on. In arranging to do so he hoisted the cage too high, and intending to step on the cage he walked into the shaft. The other attempted to step on a cage ascending the shaft and missed it. Of all the twenty eight fatal accidents there could be a question of liability in but two.

The Inspector should be notified when any serious accident occurs, and I shall attempt to have an act to that effect passed by the Legislature. Some fatal accidents might have been prevented if the Inspector had been notified of non-fatal accidents which had occurred at the same places.

SMALL MINES.

I have tried during the year to collect statistics from small mines in the State and have sent blanks to all small operators whose addresses I have learned. I give below a list of those who have reported, with the men employed and coal produced. These are all who have responded out of over 200 who were requested to do so.

CLAY COUNTY.

	<i>Men.</i>	<i>Tons.</i>
Markland Coal Company.....Clay City.....	9	4,000

DAVIESS COUNTY.

Odon Coal Company.....Odon.....	7	1,600
George A. Denson.....Alfordsville.....	4	640
Union Coal Company.....Raglesville.....	9	840
J. M. Myers.....Epsom.....	8	900

FOUNTAIN COUNTY.

James Morgan.....Kingman.....	6	920
B. F. Lindley.....Coal Creek.....	2	186
Edward Perry.....Cates.....	3	2,000
Levi Bird.....Kingman.....	8	6,000
John W. Shuster.....Stone Bluff.....	2	480
Silverwood Coal Company.....Silverwood.....	..	2,600
J. S. Tiley.....Coal Creek.....	6	500

GIBSON COUNTY.

M. T. Berry.....Oakland City.....	8	3,000
-----------------------------------	---	-------

KNOX COUNTY.

R. C. Vance.....Edwardsport.....	2	750
George Weaver.....Wheatland.....	5	1,200
Herrington Coal Company.....Edwardsport.....	Just opened.	

MARTIN COUNTY.

		<i>Men.</i>	<i>Tons.</i>
Johnson & Chenoweth.....	Shoals.....	4	625
Philip Gammon.....	Shoals.....	3	320
Albert Payton.....	Short.....	4	200
Dr. S. H. Brittain.....	Loogootee.....	4	400
J. W. Strange.....	Loogootee.....	5	380
John T. McAuley.....	Loogootee.....	1	100
Hiram Davis.....	Loogootee.....	6	3,600

PARKE COUNTY.

N. C. Walker.....	Rockville.....	8	2,000
-------------------	----------------	---	-------

WARRICK COUNTY.

Albert Phillips.....	Boonville.....	1	280
Frank Haberstrook.....	Boonville.....	2	400
Andrew J. Bullock.....	Boonville.....	1	40
Henry Phillips.....	Yankeetown.....	1	350
N. W. Reynolds.....	Boonville.....	8	2,100
E. Whitmer.....	Boonville.....	1	320
Caledonia Coal Company.....	Boonville.....	12	12,735
DeForest Coal Company.....	Evansville.....	9	1,000
Wm. H. Stone.....	Boonville.....	6	2,000
Bartley, Day & Bro.....	Midway.....	8	3,000
Total.....		163	45,466

In addition to the above, several reported more men, and I have placed them in the list of large mines found in another part of this report. The thirty-four mines given in the above list report a total of 163 men and 45,466 tons of coal produced during the year. I think it is safe to add twice as much for those not reporting, which would bring the totals up to 489 men and 136,398 tons.

I have recommended the following amendments to the mining law of the State, and shall endeavor to have them passed through the Legislature:

1. Making provision for better communication between the workings and escape way.
2. Providing that the Inspector be immediately notified of all accidents in mines, as is now required in case of fatal accidents.
3. Providing for making maps of mines, and filing copies with the Inspector.
4. Providing for the examination of mine bosses, fire bosses and hoisting engineers at mines.
5. Providing for the use of a pure oil in mines.
6. Providing for inspection of mines employing less than ten men.

The passage of either of these laws will tend to greatly improve the conditions of mining in the State, and make the work of inspection more effective, and my experience convinces me that all are necessary.

ROBERT FISHER,
State Inspector of Mines.