

VOLUME IV

Adjutant General, Biennial Report, 1926
Attorney General, Biennial Report, 1925-1926
Railroad Commission, Annual Reports, 1925 and 1926
Printing Board, Biennial Report, 1926

State of Iowa
1926

REPORT OF THE

State Mine Inspector

FOR THE

Biennial Period Ending December 31, 1925

INSPECTORS

W. E. HOLLAND, Centerville, Iowa
R. T. RHYS, Ottumwa, Iowa
EDWARD SWEENEY, Des Moines, Iowa
J. R. FRANK, Secretary, Des Moines, Iowa

Published by
THE STATE OF IOWA
Des Moines

ION

5,026
0,944
7,661
3,631
7,956
2,277
1,008
1,241

160%

161%

164

135½

133¼

139½

137

574

457

79

930

252

605

173

9,613

tons

tons

tons

tons

tons

LETTER OF TRANSMITTAL

HON. JOHN HAMMILL, *Governor of Iowa.*

Sir: We have the honor to submit herewith, for your consideration and approval, our report of mining conditions in the State of Iowa for the biennial period covering the calendar years 1924 and 1925.

Very respectfully submitted,

W. E. HOLLAND,
R. T. RHYS,
EDWARD SWEENEY,
Iowa Mine Inspectors.

Des Moines, Iowa, April, 1926.

SUMMARY OF IOWA COAL PRODUCTION AND DISTRIBUTION

1925

Number of tons prepared lump coal produced.....	1,705,026
Number of tons of run of mine coal produced.....	2,330,944
Number of tons of slack coal produced.....	797,661
Total number of tons of coal produced.....	4,833,631
Average number of miners and loaders employed.....	7,956
Average number of all other underground employes.....	2,277
Average number of surface employes.....	1,008
Total number of employes.....	11,241
Average number of days miners and loaders were employed in shipping mines of Iowa.....	150%
Average number of days other underground employes were employed in shipping mines.....	161%
Average number of days surface employes were employed in shipping mines.....	164
Average number of days miners and loaders were employed in local or wagon mines.....	135½
Average number of days other underground employes were employed in local or wagon mines.....	133½
Average number of days surface employes were employed in local or wagon mines.....	139½
Number of kegs of powder used in the mines in 1925.....	233,137
Number of pounds of dynamite used in the mines in 1925.....	544,574
Number of pounds of permissible explosives used in 1925.....	11,457
Number of mining machines in operation in mines in 1925..	79
Number of horses and mules used in the mines in 1925.....	930
Number of days mines were closed down or partly closed because of strikes or disagreements with employes.....	252
Estimate of curtailment of output because of such disagreements.....	19,605
Number of days mines were idle because of lack of railroad cars.....	173
Estimate of loss of output because of lack of cars.....	29,613

DISTRIBUTION OF COAL PRODUCED IN 1925

Sold to local trade, not shipped.....	815,147 tons
Shipped to points within the state.....	1,418,710 tons
Shipped to points outside the state.....	190,442 tons
Sold to railroads.....	1,320,862 tons
Used at the mines for mine purposes.....	82,727 tons

MINE INSPECTION IN IOWA

State Inspectors—

District No. 1—W. E. HOLLAND, 509 E. Clark St., Centerville.

District No. 2—R. T. RHYE, Ottumwa.

District No. 3—EDWARD SWEENEY, Des Moines.

Secretary—J. R. FRANK, Des Moines

The coal producing counties of Iowa are divided into three inspection districts with an inspector living in each district. The duties of the inspectors are to inspect the different mines of the state, and to see that mining operations are conducted in conformity with the mining laws of the state, as regards safety to the employes therein, proper ventilation, etc.

A general office for the inspectors is maintained in the state house, Des Moines, wherein is kept a complete record of all matters pertaining to the coal industry of the state, including maps of all abandoned mines. A secretary elected by the inspectors has charge of all the books and general correspondence of the office, as the duties of the inspectors keep them almost constantly in the inspection field.

The mine inspectors are appointed by the governor for a term of four years. The terms of the present inspectors expire July 1, 1927.

STATE BOARD OF EXAMINERS

FRED NORWOOD, Des Moines.

B. H. SILVERS, Secretary, 3209 School Street, Des Moines.

J. RITTEB, President, Centerville, Iowa.

DAVID ANDERSON, Route 5, Albia, Monroe County.

JAMES MITCHELL, Sr., Rt. 3, Knoxville, Marion County.

The board of Examiners for mine inspectors, mine foremen and hoisting engineers is composed of five members: Two coal operators, two miners, and one engineer. An examination for state inspectors is held the first Monday in March of even numbered years in the office of the state mine inspectors in the state house. Examinations for mine foremen and hoisting engineers are held at various times during the year in sections of the state where coal mining is done. A fee of two dollars for registration to take the examination is required. To those passing the examination as mine foremen or hoisting engineers, an additional two dollars is required when certificate is issued by the board. The law requires that each certificate issued by the board shall be recorded in the office of the examining board and shall show the name, age, residence and years of experience of the person to whom it was issued.

The Board of Examiners are appointed by the State Executive Council for a period of two years. Terms of the present officers expire July 1, 1926. Compensation of members of the board \$5.00 per day and necessary expenses.

REPORT OF IOWA MINE INSPECTORS

Working conditions in the Iowa coal mines have not been as good the past two years as in former years. Competition in the sale of coal in this state has been very keen. Prior to the world war no coal was shipped into this territory from Kentucky; and now the most of competing coal comes from that state. Most of the coal from Kentucky finding its way into this territory comes from mines operating on a non-union basis, and that coupled with the cheap cost of other operations in the production of coal in that field enables the coal companies of that state especially, to get coal into Iowa on a favorable basis of competition. With this situation confronting Iowa many of the larger mines of the state have adopted a policy of closing down about April first and remaining closed while business is slack in the summer months, opening up again about August for the fall and winter trade. This has resulted in a decreased production by shipping mines and an increased production by wagon or local coal mines.

During the biennium there was an increase of 29 in the number of operating mines in the state, over the preceding biennium. This increase was in wagon or local mines almost entirely.

There has been a slight decrease in the number of employes in and around the mines since last report was made. This may be due in a measure to the use of mining machines and also to better equipment in mining operations.

There are at present 354 mines operating in the state as compared to 325 in 1923, an increase as stated above of 29 mines.

Coal is now mined in 23 counties of the state. A new mine is now being sunk near Eldora in Hardin county which will add another county to the producing list. This county was formerly classed as a coal producing county.

The mining operations of the state are more scattered now than in former years making the task of mine inspection a greater one, as more territory has to be covered than formerly.

Approximately fifteen million tons of coal are used in this state by the railroads, for domestic use and in manufacturing. Nearly two-thirds of this amount is produced in other states and shipped into Iowa. If the Iowa people would use nothing but Iowa coal it is estimated that from sixty to seventy million dollars would be kept in this state to make for a better Iowa.

Iowa coal will continue to be used, and while we may not expect peak production of former years, yet we may expect the industry, which is the second largest in the state, to continue around figures of production of the present year, for many years to come.

The following tables give the coal producing counties of the state, number of mines, the coal output and number of persons employed in the industry; also the distribution of Iowa coal mined, and many other statistics relative to the coal industry.

TONS OF COAL OF DIFFERENT SIZES MINED IN IOWA IN 1924-1925.
1924.

Districts	Number of tons of prepared lump coal produced	Number of tons of run of mine coal produced	Number of tons of slack coal produced	Total number of tons of coal produced
First District	964,173	830,654	92,101	1,886,928
Second District	431,743	1,152,990	280,529	1,865,262
Third District	886,742	432,650	473,379	1,792,700
Totals	2,282,658	2,416,293	846,000	5,544,950

1925.				
Districts	Number of tons of prepared lump coal produced	Number of tons of run of mine coal produced	Number of tons of slack coal produced	Total number of tons of coal produced
First District	674,274	600,390	62,068	1,336,732
Second District	281,319	1,222,449	270,003	1,773,771
Third District	749,433	438,106	465,579	1,653,118
Totals	1,705,026	2,300,944	797,651	4,833,621

COAL PRODUCTION IN IOWA

For Calendar Years 1924 and 1925

FIRST DISTRICT

Counties	1924		1925	
	Tons of coal of all grades produced	Average number of employes	Tons of coal of all grades produced	Average number of employes
Appanoose	805,271	3,128	583,852	3,067
Lucas	641,782	741	514,440	610
Monroe (Part)	346,028	541	221,342	456
Wayne	35,185	128	21,792	152
Taylor	14,425	50	15,616	64
Page	22,711	66	24,063	59
Adams	31,536	103	10,677	114
Totals	1,886,928	4,766	1,836,752	4,513

SECOND DISTRICT

Counties	1924	Average number of employes	1925	Average number of employes
Marion	827,316	1,272	965,274	1,106
Monroe (Part)	744,968	1,837	595,031	981
Jasper	112,112	245	51,069	219
Wapello	84,000	259	79,822	224
Mahaska	66,158	222	63,473	192
Keokuk	10,235	32	7,230	24
Van Buren	15,461	52	7,539	42
Jefferson	2,733	11	2,880	22
Davis	1,189	16	561	14
Totals	1,805,262	3,676	1,773,771	2,883

THIRD DISTRICT

Counties	1924	Average number of employes	1925	Average number of employes
Polk	735,128	1,628	658,533	1,569
Dallas	532,334	951	365,977	919
Boone	302,968	780	363,455	913
Warren	198,506	331	232,203	330
Webster	7,540	37	6,135	28
Guthrie	5,498	39	9,272	44
Greene	8,656	24	4,128	23
Story	1,700	11	2,425	19
Totals	1,792,700	3,811	1,673,108	3,845

TOTAL BY DISTRICTS AND YEARS

Districts	1924	Average number of employes	1925	Average number of employes
First District	1,886,928	4,766	1,836,752	4,513
Second District	1,865,262	3,676	1,773,771	2,883
Third District	1,792,700	3,811	1,673,108	3,845
Totals	5,544,950	12,563	4,833,621	11,241

REPORT IOWA MINE INSPECTORS

COAL PRODUCTION OF IOWA

Calendar Year 1924

Counties	Mines in County	Prepared Lump Coal	Run of Mine Coal	Slack Coal	Total Production
Monroe	21	118,751	805,274	70,971	1,000,996
Marion	32	207,704	304,061	195,491	827,319
Appanoose	86	774,612	20,659	30,659	805,271
Polk	24	320,824	204,092	201,212	735,128
Lucas	7	21,943	609,340	13,499	641,782
Dallas	6	352,199	104	189,124	532,324
Bonne	10	178,711	53,229	71,918	302,958
Warren	12	23,199	155,496	30,361	195,956
Jasper	14	32,030	60,949	19,124	112,112
Wapello	38	49,210	14,957	19,923	84,090
Mahaska	42	28,919	28,944	11,296	69,158
Wayne	7	33,143	2,040	35,183	69,158
Page	3	22,711	2,711	23,711	49,158
Adams	12	21,626	2,536	21,536	49,158
Taylor	4	14,425	14,425	14,425	49,158
Van Buren	12	8,501	2,003	2,337	13,461
Keokuk	7	1,685	7,398	1,297	10,235
Greene	3	2,469	5,909	664	8,656
Webster	4	7,540	7,540	7,540	15,080
Guthrie	6	5,498	5,498	5,498	10,996
Jefferson	1	2,733	2,733	2,733	5,466
Story	1	1,709	1,709	1,709	3,418
Davis	5	685	469	14	1,159
Totals	357	2,282,628	2,416,283	846,099	5,544,950

COAL PRODUCTION OF IOWA

Calendar Year 1925

Counties	Mines in County	Prepared Lump Coal	Run of Mine Coal	Slack Coal	Total Production
Marion	39	129,864	651,234	184,176	965,274
Monroe	17	95,498	648,689	71,795	816,973
Polk	23	257,808	236,272	166,953	660,953
Appanoose	92	505,004	11,546	17,242	523,792
Lucas	8	11,781	486,701	16,938	514,440
Dallas	6	222,451	3,154	170,372	395,977
Bonne	8	226,708	25,309	161,895	363,432
Warren	8	30,173	165,485	27,549	223,207
Wapello	36	48,922	12,478	19,332	79,832
Mahaska	39	23,729	20,981	8,755	53,475
Jasper	17	17,274	24,525	10,160	51,959
Page	3	24,003	24,003	24,003	48,006
Wayne	7	21,627	21,627	21,627	43,254
Adams	12	10,677	10,677	10,677	21,354
Taylor	4	10,646	10,646	10,646	21,292
Guthrie	6	9,272	9,272	9,272	18,544
Van Buren	10	4,601	1,063	1,825	7,529
Keokuk	5	917	4,865	1,496	7,230
Greene	3	3,728	6,135	6,135	12,273
Webster	3	7,540	7,540	7,540	15,080
Jefferson	1	3,423	3,423	3,423	6,846
Story	1	1,915	1,915	1,915	3,830
Davis	3	40	511	10	561
Totals	354	1,705,000	2,330,944	797,661	4,833,625

STATISTICS OF IOWA MINING

MINES, OUTPUT AND EMPLOYES

Number of Mines, Output of Coal, Number of Miners and Loaders, and Other Employes for the Calendar Years 1924 and 1925

District No. 1, 1924

Counties	Mines in County	Amount of Coal of All Grades Produced	Number of Miners and Loaders Employed	Number of Other Inside Employes	Number of Outside Employes	Total Number of Employes
Appanoose	86	805,271	2,493	393	232	3,138
Lucas	7	641,782	490	174	176	741
Monroe (Part)	7	346,028	382	119	40	541
Wayne	7	85,188	100	15	13	128
Taylor	4	14,425	42	3	5	50
Page	3	22,711	49	7	10	66
Adams	12	21,526	84	5	14	103
Totals	130	1,586,928	3,640	716	410	4,766

District No. 1, 1925

Counties	Mines in County	Amount of Coal of All Grades Produced	Number of Miners and Loaders Employed	Number of Other Inside Employes	Number of Outside Employes	Total Number of Employes
Appanoose	92	505,004	2,449	385	223	3,057
Lucas	8	514,440	413	135	62	610
Monroe (Part)	6	221,342	323	67	36	426
Wayne	7	21,792	125	15	13	153
Taylor	4	10,616	51	5	8	64
Page	3	24,003	47	6	6	59
Adams	12	10,677	91	9	14	114
Totals	132	1,328,759	3,499	692	362	4,513

District No. 2, 1924

Counties	Mines in County	Amount of Coal of All Grades Produced	Number of Miners and Loaders Employed	Number of Other Inside Employes	Number of Outside Employes	Total Number of Employes
Marion	39	827,316	892	260	120	1,272
Monroe (Part)	14	744,968	1,256	462	119	1,837
Wapello	38	54,090	388	46	46	480
Mahaska	42	69,158	381	27	44	452
Jasper	14	112,112	343	63	39	445
Van Buren	12	13,461	35	7	10	52
Keokuk	7	10,235	21	3	8	32
Jefferson	1	2,733	3	2	1	11
Davis	5	1,159	12	1	3	16
Totals	165	1,865,362	2,736	836	384	3,976

District No. 2, 1925

Counties	Mines in County	Amount of Coal of All Grades Produced	Number of Miners and Loaders Employed	Number of Other Inside Employes	Number of Outside Employes	Total Number of Employes
Marion	39	665,274	786	215	104	1,105
Monroe (Part)	11	595,081	687	219	75	981
Wapello	36	79,832	162	21	41	224
Mahaska	39	63,475	155	23	34	192
Jasper	17	51,959	189	56	43	279
Van Buren	10	7,529	21	1	10	42
Keokuk	5	7,230	16	3	5	24
Jefferson	4	2,880	15	3	4	22
Davis	3	561	11	1	2	14
Totals	164	1,773,771	2,023	542	318	2,883

MINES, OUTPUT AND EMPLOYES

Number of Mines, Output of Coal, Number of Miners and Other Employees for the Calendar Years 1924 and 1925

District No. 3, 1924

Counties	Mines in County	Amount of Coal of All Grades Produced	Number of Miners and Loaders Employed	Number of Other Inside Employees	Number of Outside Employees	Total Number of Employees
Polk	24	735,128	1,016	452	160	1,628
Dallas	6	592,334	507	268	86	961
Boone	10	302,968	500	225	55	780
Warren	12	196,996	238	53	40	331
Webster	4	7,540	27	8	5	37
Guthrie	6	5,498	32	1	6	39
Greene	3	8,556	24	6	4	34
Story	1	1,700	5	3	3	11
Totals	66	1,792,760	2,480	1,013	359	3,851

District No. 3, 1925

Counties	Mines in County	Amount of Coal of All Grades Produced	Number of Miners and Loaders Employed	Number of Other Inside Employees	Number of Outside Employees	Total Number of Employees
Polk	23	655,533	997	442	130	1,569
Dallas	6	295,077	560	275	81	916
Boone	8	303,435	568	281	64	913
Warren	8	232,208	221	71	38	330
Webster	3	6,138	18	6	4	28
Guthrie	6	9,272	35	2	7	44
Greene	3	4,128	17	2	3	22
Story	1	3,425	15	3	1	19
Totals	58	1,673,108	2,434	1,083	328	3,845

COAL PRODUCTION AND DISTRIBUTION IN IOWA BY COUNTIES

1924

Counties	Mines in county	Tons of coal of all grades produced	Sold to local trade, not shipped	Shipped to points within the state	Shipped to points outside the state	Sold to rail-roads	Used at the mines for mine purposes
Monroe	21	1,000,000	32,770	142,786	883,925	29,515	24,008
Marion	22	827,316	42,989	310,389	1,906	446,938	24,008
Appanoose	36	805,271	71,351	149,334	230,030	319,516	15,953
Polk	24	735,128	332,443	291,790	109,722	15,818	15,818
Lucas	6	641,782	4,523	11,000	605,259	20,161	20,161
Dallas	6	592,334	14,516	402,057	111,434	4,306	4,306
Boone	10	302,968	65,145	151,419	3,697	79,583	4,123
Warren	12	198,996	13,814	29,278	175	149,509	6,300
Jasper	14	112,112	28,289	26,455	50,636	6,743	6,743
Wapello	38	84,060	80,562	2,150	1,347	1,347	1,347
Mahaska	42	69,138	63,816	87	5,607	648	648
Wayne	7	35,185	14,347	5,000	5,000	11,000	2
Page	3	22,711	22,711	-----	-----	-----	-----
Adams	12	21,526	21,519	-----	-----	-----	18
Taylor	4	14,425	5,945	9,325	35	-----	10
Van Buren	12	13,461	9,212	4,189	-----	-----	69
Keokuk	7	10,235	9,673	-----	-----	-----	562
Greene	3	8,650	8,650	-----	-----	-----	-----
Webster	4	7,540	7,540	-----	-----	-----	-----
Guthrie	6	5,498	5,492	-----	-----	-----	36
Jefferson	1	2,733	2,431	-----	-----	-----	-----
Story	1	1,700	1,600	-----	-----	-----	200
Davis	5	1,189	1,189	-----	-----	-----	-----
Totals	357	5,544,950	858,511	1,535,148	290,753	2,764,020	131,536

1925

Counties	Mines in county	Tons of coal of all grades produced	Sold to local trade, not shipped	Shipped to points within the state	Shipped to points outside the state	Sold to rail-roads	Used at the mines for mine purposes
Marion	20	965,274	50,787	293,489	562	604,226	16,210
Monroe	17	816,372	25,331	109,945	195	631,034	27,118
Polk	23	658,533	313,885	272,568	60,825	11,820	11,820
Appanoose	32	583,852	70,467	160,521	186,894	137,666	4,568
Lucas	6	514,440	13,878	9,942	-----	483,926	16,623
Dallas	6	395,977	10,954	275,667	2,100	105,641	1,615
Boone	8	303,435	47,380	215,685	-----	97,129	2,842
Warren	8	232,208	31,679	65,165	586	141,045	3,728
Wapello	36	79,832	77,570	1,463	-----	975	975
Mahaska	39	69,475	55,784	591	-----	5,710	668
Jasper	17	51,959	28,734	7,500	-----	11,969	3,775
Page	3	24,958	23,063	1,000	-----	-----	10
Wayne	7	21,792	17,653	2,900	-----	1,100	161
Adams	12	10,677	10,677	-----	-----	-----	30
Taylor	4	10,640	7,380	3,102	105	-----	150
Guthrie	6	9,272	9,237	-----	-----	-----	15
Van Buren	10	7,530	4,264	3,137	-----	-----	138
Keokuk	5	7,250	6,840	-----	-----	-----	380
Webster	3	6,185	6,045	-----	-----	-----	90
Greene	3	4,128	3,928	-----	-----	-----	200
Story	1	3,425	3,425	-----	-----	-----	-----
Jefferson	4	2,880	2,679	-----	-----	-----	25
Davis	5	1,189	1,189	-----	-----	-----	61
Totals	354	4,833,631	815,147	1,418,710	190,442	1,320,862	92,727

DISTRIBUTION OF COAL PRODUCED IN IOWA

District No. 1, 1924

Counties	Tons of Coal All Grades Produced	Sold to Local Trade, Not Shipped	Shipped to Points Within the State	Shipped to Points Outside the State	Sold to Railroads	Used at Mines for Mine Purposes
Appanoose	865,271	71,351	146,334	250,080	319,816	13,963
Lucas	681,782	4,322	11,909	-----	665,289	20,161
Monroe (Part)	246,028	13,222	191,224	-----	226,090	2,975
Wayne	25,185	14,247	5,000	-----	5,000	-----
Taylor	14,425	5,945	9,325	-----	-----	30
Page	22,711	22,711	-----	-----	-----	-----
Adams	21,926	21,919	-----	-----	-----	-----
Totals	1,886,928	152,624	376,802	255,085	1,162,786	37,119

District No. 1, 1925

Appanoose	583,852	70,467	160,521	186,894	157,666	4,568
Lucas	514,440	13,838	9,942	-----	483,936	16,623
Monroe (Part)	221,542	12,879	50,663	28	148,945	2,782
Wayne	21,792	17,381	2,060	-----	1,100	-----
Taylor	10,646	7,389	9,102	-----	-----	161
Page	24,008	23,008	1,000	-----	-----	150
Adams	10,677	10,657	-----	-----	-----	-----
Totals	1,386,782	156,784	223,118	187,082	791,647	24,274

District No. 2, 1924

Counties	Tons of Coal All Grades Produced	Sold to Local Trade, Not Shipped	Shipped to Points Within the State	Shipped to Points Outside the State	Sold to Railroads	Used at Mines for Mine Purposes
Marion	227,316	42,980	310,380	1,906	446,628	24,008
Monroe (Part)	744,968	19,641	41,522	-----	627,233	26,546
Jasper	112,112	28,220	26,453	-----	59,686	6,743
Wapello	84,900	89,522	2,150	-----	-----	-----
Mahaaska	69,138	62,816	-----	-----	5,007	1,377
Keokuk	10,220	9,613	-----	-----	-----	618
Van Buren	12,461	9,212	4,189	-----	-----	262
Jefferson	2,782	2,451	-----	-----	-----	60
Davis	1,156	1,159	-----	-----	-----	6
Totals	1,860,262	256,813	384,811	1,906	1,160,116	60,684

District No. 2, 1925

Marion	965,274	50,787	293,489	562	604,226	16,210
Monroe (Part)	265,631	15,454	52,392	112	502,689	24,286
Jasper	51,939	28,734	7,200	-----	11,950	2,775
Wapello	79,822	77,370	1,463	-----	-----	-----
Mahaaska	66,475	56,784	951	-----	5,719	975
Keokuk	7,220	6,840	-----	-----	-----	362
Van Buren	7,229	4,264	5,137	-----	-----	280
Jefferson	2,829	2,679	-----	-----	-----	138
Davis	561	500	-----	-----	-----	25
Totals	1,773,771	242,410	358,572	674	1,124,575	46,643

DISTRIBUTION OF COAL PRODUCED IN IOWA

District No. 3, 1924

Counties	Tons of Coal All Grades Produced	Sold to Local Trade, Not Shipped	Shipped to Points Within the State	Shipped to Points Outside the State	Sold to Railroads	Used at Mines for Mine Purposes
Polk	735,128	322,441	291,790	-----	100,722	18,818
Dallas	582,324	14,516	402,467	-----	111,434	4,306
Boone	302,968	65,145	151,410	3,607	79,583	4,123
Warren	198,666	12,814	29,278	175	149,369	6,300
Webster	7,540	7,540	-----	-----	-----	-----
Guthrie	5,188	5,498	-----	-----	-----	-----
Greene	8,656	8,656	-----	-----	-----	-----
Story	1,700	1,500	-----	-----	-----	-----
Totals	1,792,700	449,119	873,535	3,782	441,118	33,783

District No. 3, 1925

Polk	658,532	313,885	272,563	-----	60,825	11,220
Dallas	395,977	10,954	275,667	2,100	105,641	1,615
Boone	363,435	47,780	215,085	-----	97,129	2,842
Warren	232,263	21,679	60,165	686	141,045	5,728
Webster	6,135	6,045	-----	-----	-----	-----
Guthrie	9,272	9,257	-----	-----	-----	-----
Greene	4,128	3,928	-----	-----	-----	-----
Story	3,425	3,425	-----	-----	-----	-----
Totals	1,673,108	416,953	827,020	2,686	404,640	21,810

AVERAGE DAYS OF EMPLOYMENT

1924

Counties	Miners and Loaders		Other Under-ground Employees		Surface Employees	
	Average days in shipping mines	Average days in local or wagon mines	Average days in local or wagon mines	Average days in shipping mines	Average days in local or wagon mines	Average days in shipping mines
Monroe	139%	129%	139%	183%	132%	100%
Marion	183	131	205%	146%	208	138%
Appanoose	100%	111%	100%	132%	110	139%
Polk	166%	180%	185%	109	197	187%
Lucas	292%	84%	200	94%	198%	18
Dallas	156%	160%	225%	302%	156%	169%
Boone	160%	103%	103%	97	120%	120%
Warren	178	129%	103%	175	168%	151%
Jasper	119%	148	143%	175	168%	151%
Wapello	115	130%	115	160%	115	172%
Mahaska	89	121%	89	140%	89	142
Wayne	164	145	175	151%	168	145
Page	309	113	300	154	300	113
Adams	149%	146%	188%	188%	146%	146%
Taylor	212	115	256	178	260	165
Van Buren	120%	120%	178	143%	143%	143%
Keokuk	128%	128%	161%	141%	141%	141%
Greene	139	139	140	139	139	139
Webster	142%	142%	142%	142%	142%	142%
Guthrie	110%	110%	130	116%	116%	116%
Jefferson	149	149	149	149	149	149
Story	240	240	240	240	240	240
Davis	77%	77%	55	55	70	70
Average days worked in entire state, 1924	164	136	174	151%	182%	143

1925

Marion	211	125%	220	74%	219%	161%
Monroe	168%	144%	196	155	199%	129%
Polk	163	151	188	130%	180	126%
Appanoose	25%	100%	100%	119%	16%	168%
Lucas	218	168%	150	222	170	112%
Dallas	152%	150	170	170	170	170
Boone	126%	190	183	180	133	190
Warren	168%	108%	188%	100	100	108%
Wapello	112%	112%	151	128%	128%	128%
Mahaska	190%	190%	155%	157	157	157
Jasper	28	167%	31	208%	59	151%
Page	225	214	225	185	225	190
Wayne	106	105	100	184	106	123%
Adams	144%	144%	188%	141%	141%	141%
Taylor	175	175	181%	226%	226%	226%
Guthrie	152	152	152	152	152	152
Van Buren	72%	72%	150	73%	73%	73%
Keokuk	143	152%	152%	147%	147%	147%
Webster	188%	188%	200	215	215	215
Greene	150	150	150	150	150	150
Story	140%	140%	140%	140%	140%	140%
Jefferson	120%	120%	145%	110%	110%	110%
Davis	46%	46%	20	50	50	50
Average days worked in entire state, 1925	150 9-11	135%	161%	133%	164	129%

LOCAL OR WAGON MINES

Mines, Output and Employes by Counties
1924

Counties	Wagon or local mines	Tons of coal of all kinds produced	Miners and loaders employed	Other underground employes	Surface employes	Total number of employes
Marion	34	36,355	86	10	23	118
Monroe	7	10,099	31	5	7	43
Polk	15	24,761	342	100	51	493
Appanoose	42	65,473	286	49	52	388
Lucas	4	1,994	19		4	23
Dallas						
Boone	4	15,024	43	11	5	59
Warren	9	6,721	43	6	12	61
Wapello	38	84,049	188	31	40	259
Mahaska	41	65,158	181	27	44	252
Jasper	13	25,292	50	7	18	75
Page	2	6,150	29	5	8	42
Wayne	12	13,731	42	3	7	52
Adams	12	21,536	84	5	14	103
Taylor	2	2,555	12		2	14
Guthrie	6	5,498	32	1	6	39
Van Buren	12	13,461	26	7	10	52
Keokuk	7	10,235	21	5	8	32
Webster	4	7,640	27	5	5	37
Greene	3	8,655	24	6	4	34
Story	1	1,700	5	3	3	11
Jefferson	1	2,733	8	2	1	11
Davis	5	1,189	12	1	1	16
Totals	299	619,944	1,508	287	297	2,212

1925

Marion	33	45,635	121	16	28	165
Monroe	8	16,130	47	9	13	69
Polk	15	188,682	313	86	37	435
Appanoose	48	92,310	434	53	54	541
Lucas	3	1,470	13		2	15
Dallas						
Boone	4	11,750	40	41	10	91
Warren	6	15,742	33	8	7	38
Wapello	35	79,882	162	21	41	234
Mahaska	39	63,475	125	23	34	192
Jasper	16	31,305	74	5	21	100
Page	1	4,100	29	2	2	34
Wayne	6	12,231	50	3	7	60
Adams	12	10,677	91	9	14	114
Taylor	3	4,061	21	2	5	28
Guthrie	6	9,272	35	2	7	44
Van Buren	10	7,539	36	1	10	42
Keokuk	5	7,220	16	3	5	24
Webster	3	6,135	18	3	4	28
Greene	3	4,138	17	3	3	23
Story	1	3,425	15	3	1	19
Jefferson	4	2,880	15	3	4	22
Davis	3	861	11	1	2	14
Totals	263	615,964	1,701	310	311	2,322

MINES, OUTPUT AND EMPLOYES BY COUNTIES

1924

Counties	Number of miners	Tons of coal of all grades produced	Miners and helpers employed	Other underground employes	Surface employes	Total number of employes
Monroe	21	1,000,006	1,638	581	150	2,378
Marion	32	827,316	892	200	120	1,272
Appanoose	26	805,271	2,493	383	252	3,138
Polk	24	735,128	1,016	492	100	1,628
Lucas	7	641,782	460	174	179	741
Dallas	6	532,334	597	298	88	901
Boone	10	392,968	500	228	55	789
Warren	12	198,886	238	53	40	331
Jasper	14	112,112	143	63	39	245
Wapello	28	84,090	188	31	40	259
Mahaska	42	69,158	181	27	44	252
Wayne	7	35,385	100	15	13	128
Page	3	22,711	49	7	10	66
Adams	12	21,526	84	5	14	103
Taylor	4	14,425	42	3	5	50
Van Buren	12	13,461	35	7	10	52
Keokuk	7	16,235	21	3	4	34
Greene	3	8,656	24	0	4	28
Webster	4	7,540	27	5	5	37
Guthrie	6	5,498	32	1	6	30
Jefferson	1	2,733	8	2	1	11
Story	1	1,700	5	8	3	11
Davis	5	1,159	12	1	3	16
Totals	357	5,544,950	8,815	2,585	1,153	12,553

1925

Marion	39	965,274	780	215	104	1,106
Monroe	17	816,373	1,010	316	111	1,437
Polk	23	658,533	997	442	130	1,569
Appanoose	22	558,552	2,449	385	223	3,057
Lucas	8	514,440	413	136	62	610
Dallas	6	395,977	563	275	81	719
Boone	8	363,455	568	281	64	913
Warren	8	232,206	221	71	38	330
Jasper	26	79,832	163	21	41	224
Wapello	29	63,475	136	23	34	192
Mahaska	39	43,475	136	45	45	279
Wayne	17	51,950	180	50	6	59
Page	3	24,003	47	6	6	59
Adams	7	21,792	125	15	13	153
Taylor	12	10,677	91	9	14	114
Guthrie	4	10,666	51	5	7	64
Van Buren	6	9,272	35	2	4	44
Keokuk	10	7,539	31	1	3	38
Webster	5	7,230	16	3	5	24
Greene	3	6,135	18	6	4	28
Story	3	4,128	17	3	3	23
Jefferson	1	3,425	15	3	1	19
Davis	4	2,880	15	3	4	22
Totals	354	4,833,631	7,956	2,277	1,008	11,241

POWDER, DYNAMITE, PERMISSIBLE EXPLOSIVES, MINING MACHINES, HORSES AND MULES, DAYS IDLE, ETC.

1924

Counties	Kegs of black powder used at mines	Pounds of dynamite used at mines	Pounds of permissible explosives used at mines	Number of mining machines in use	Number of horses and mules used at the mines	Days mines were closed down or partly closed down because of strikes or disagreements	Curtailment in tons produced because of such strikes or disagreements
Monroe	63,495	121,951		3	227		
Marion	49,791	50,723		6	107	127	47,100
Appanoose	21	2,911		14	231	474	81,453
Polk	36,545	40,550	30,495	21	113	23	2,190
Lucas	28,983	10,320		7	52		
Dallas	31,838	16,172		5	73	1	473
Boone	14,096	45,985		4	42	12	1,862
Warren	12,816	4,402	578		12		
Jasper	3,687	1,010		6	19	1	20
Wapello	5,178	3,295	500	1	30		
Mahaska	4,491	3,966	75	1	33		
Wayne		240			9	12	1,530
Page		2,650		3			
Adams		1,425			1		
Taylor		3,100					
Van Buren	1,012				5		
Keokuk	425	1,350			1		
Greene	138				1		
Webster							
Guthrie	5	60					
Jefferson	230	50			1		
Story	200	500					
Davis	88	200			2		
Totals	243,045	211,989	31,648	70	964	650	134,625

1925

Marion	57,566	360,476		3	107	3	3,750
Monroe	45,130	69,823		1	153		
Polk	34,290	24,749	10,453	20	123	5	1,535
Appanoose	31	2,515	4	23	238	233	8,740
Lucas	22,236	39,825		9	42	1	1,500
Dallas	20,151	5,788		5	87	3	1,280
Boone	22,137	17,800		9	41	2	500
Warren	15,335	6,018	1,000	5	21	5	2,900
Wapello	4,811	3,220		1	32		
Mahaska	3,701	3,000		2	45		
Jasper	2,245	700		7	26		
Page		3,200					
Wayne		225					
Adams		1,083			7		
Taylor		1,750					
Guthrie	27	190					
Van Buren	622	500			4		
Keokuk	383	1,100					
Webster		232			2		
Greene	143	6					
Story	12	600					
Jefferson	267	250			3		
Davis	22						
Totals	233,137	544,574	11,457	79	930	252	19,005

REPORT OF FIRST INSPECTION DISTRICT

W. E. Holland, Inspector

APPANOOSE COUNTY

Appanoose County is unique among the many coal producing counties of Iowa, in that the coal bed that underlies it is practically continuous over a considerable portion of the whole county and extends through quite a portion of Wayne county that joins it on the West, and also occupies a considerable territory in the adjacent portion of Missouri. A remarkable feature is the uniform persistence of the coal bed; it rarely varies more than a few inches either way from an average thickness of twenty-eight inches of clean coal. It is by far the most consistent and regular seam of coal underlying any of the counties of Iowa. Its geological classification is the upper portion of the Des Moines Stage, and is thicker than the same measures found in parts of Lucas and Monroe counties. Several layers of limestone rock occur at almost uniform distances in the strata underlying the seam of coal wherever it is found. These are known as "floating rock," "fifty-foot rock," "eighteen-foot rock" and the "cap" rock immediately above the coal, also the "bottom rock" that underlies the seam. While these stratas of rock are not of exactly the same thickness or at exactly the same distance above or below the coal in all sections of the field, the differences that have been noted in various parts of the field are only minor ones. The seam as a whole is remarkable in maintaining its characteristics practically unchanged wherever it is found. The seam is split by a clay parting of from one-half to two inches in thickness, and usually there also appears another band below this one known as the "dutchman." In spite of the fact that an average of over one million tons of coal have been mined yearly in this county for a number of years, the greater of its total tonnage remains untouched. It lies at a depth varying from a few feet to almost 300 feet. While the coal does not have the specific gravity that is required for use in a forced draft, it will on account of its high content of volatile matter and purity, give very satisfactory results if it is properly fired when these characteristics are known. This is amply borne out in the fact that thousands of tons are used each year by some of the trunk lines of railroads that pass through the county.

The most of the coal in the county is mined by the longwall

method, but it could be mined more safely and efficiently, and placed upon the market in a more marketable condition if it could be mined exclusively by machine. This method of mining gives much larger chunks and the coal is not so badly crushed by the weight in breaking it down, hence it ultimately reaches the consumer in a much better condition than coal that is mined by hand. Personally I believe that Appanoose county has a better and more lasting outlook for the future than any other single coal producing county in the state of Iowa. In 1925 Appanoose county gave employment to 3,057 men and boys in and around the mines.

MONROE COUNTY

(PART)

Monroe still maintains its distinction as the largest coal producing county in the state. Development work in this county is gradually moving into the north and west parts of the county. Some of the coal companies who formerly operated two and three mines have now reduced to one. One of its worst drawbacks is the poor quality of roof that covers portions of the coal in this county. In the slate that lies immediately over the coal in the most of the mines there are numerous lime streaks and pyrites of iron. With the moisture that is carried into the mine in the summer time with the air current there is a chemical action started when this comes in contact with the lime content in the slate, thus causing the slate to disintegrate and become loose, thereby producing one of the most prolific causes of accidents both fatal and non-fatal. As a result of these conditions large quantities of timber have to be used constantly both in the rooms and on the entries, thereby adding very materially to the cost of production. The coal in this county varies from three to eight feet in thickness and also varies considerable as to quality. Some of the coal is mixed with rock, and some is underlaid with "false bottom" properly called "bituminous shale" which in many cases shoots loose and comes with the coal, thus making an exceedingly difficult condition for both the miner and the company in the production of clean and marketable coal. This county is worked exclusively on the room and pillar system. The rooms being turned from 35- to 40-foot centers and driven from 150 to 200 feet and the pillars withdrawn whenever conditions will allow. The total recovery of coal will not exceed 50 per cent in most cases.

LUCAS COUNTY

Lucas county is increasing in the production of coal with each succeeding year. The conditions in this county are very much similar to Monroe county except that the coal strata is more undulating than Monroe. In some of the mines in this county the seam is seldom level. At times it will rise or fall from a few feet to as much as fifty or sixty feet before a change is encountered. This condition causes a tremendous amount of work to be done by the company, in the way of shooting down top, or shooting up bottom as the case may be in order to maintain a roadway that will enable them to haul the coal over with animals. Mechanical haulage is always employed as soon as practicable and over as large an area as possible in order to facilitate the handling of coal with safety and dispatch. Gasoline motors were tried at the No. 1 mine of the Central Iowa Fuel Company but they were discarded after giving them a fair trial and tail-rope haulage substituted in their place. Electric motors and tail-rope constitute the entire equipment of mechanical haulage now in the mines of this county. The Central Iowa Fuel Company are operating three mines at present that have a daily average output of approximately 3,000 tons. There is some talk of them putting down another mine in the near future. The Iowa and Nebraska Coal company started operations in this county about one and one-fourth miles southwest of Lucas. They found a fairly good piece of coal at a depth of 375 feet with splendid roof conditions but a considerable amount of water. Also after development work had gone on for some time it was discovered that the vein was split and part of it lying at various distances from five to thirty feet below the part they were working. A slope was sunk from the upper to the lower vein and work commenced upon it. Considerable development work was done in the lower vein until the water from the upper vein which had been allowed to accumulate in some of the abandoned workings broke into the lower vein and drowned them out. It also filled some of the workings of the upper level to such an extent that the company decided that they would shut it down temporarily. The mine was well equipped with the best machinery, fan, etc., but they were handicapped by the steam power and pumps being adequate to successfully handle the water in the mine.

WAYNE COUNTY

This county is practically the same as the description given of

Appanoose except that the vein is somewhat thinner than Appanoose county and there are more slips and irregularities in the vein. The Seymour Coal Company's mine is the only railroad mine in the county at present. Several small mines that operate in the winter season for local trade are the only other mines in the county.

PAGE COUNTY

This county has forged itself to the front in the coal producing counties of the southwestern part of the state in the last few years. The mines of the Pearson Coal Co. have increased from small local mines operating only in the winter season, to large producers now working more than 250 days per year. This company furnished the coal for the hospital for the Insane at Clarinda for some time but are now furnishing the local light and power plant there with entire satisfaction. The coal in this county averaged about 16 inches in thickness and is usually clean and hard. It is worked exclusively longwall as the conditions are admirably suited for the longwall system. The best of roof and working conditions prevail in this part of the state as is evidenced by the extremely low accident rate. One of the mines of this coal company has a railroad connection with the C. B. & Q. so that coal can be shipped if necessary. Another company, called the Evans Coal Co., have started operations there within the last two years.

TAYLOR COUNTY

This county is similar to Page county in working conditions, coal, etc. The only large producer in this county is the New Market Coal Co., located at New Market, on the Burlington railroad about nine miles east of Clarinda. They are at present furnishing the coal for the hospital for the Insane at Clarinda, which consumes on an average about fifty tons per day. This company also works practically steady during the entire year. One or two other small local mines constitute the entire number of mines in the county.

ADAMS COUNTY

This county has the largest number of mines of any of the three counties in the southwestern part of the state. None of them, however, are of as large a capacity as those mentioned in Page and Taylor counties. These are operated for local trade only, hence

the most of the work is done in the winter season. The most of the mines are located around Carbon where work has been prosecuted for a good many years. All the coal in this county is hoisted by the gin method only. The coal in this county is of practically the same quality and thickness as the other two counties mentioned above, and is a blessing to the community in the winter season, which would otherwise be dependent upon Eastern coal.

REPORT OF SECOND INSPECTION DISTRICT

R. T. Rhys, Inspector

The counties comprising the second inspection district are the same as those reported in the last biennial report, namely: Wapello, Davis, Van Buren, Jefferson, Keokuk, Mahaska, Jasper, Marion, and the part of Monroe that lies north of the main line of the Chicago, Burlington & Quincy railroad.

The total number of mines in the above counties in 1924, was 165, and the total coal production of the same for said year was 1,865,262 tons. The average number of men employed in and around said mines in 1924, was 3,976.

The total number of mines in the above counties in 1925, was 164, and the total coal production of the same for said year was 1,773,771 tons. The average number of men employed in and around said mines in 1925, was 2,883.

The lack of demand for Iowa coal that commenced in 1920, has prevailed more or less ever since. Some of the largest and the best mines in the district have been closed down practically throughout 1924, and all through 1925, because of a lack of market for their product at a price that would pay the cost of their operation. The long and continuous expense of maintaining these idle mines, and the financial losses their owners have suffered have been great and deplorable. The closing down of the mines have also caused hardship and loss to the men that were employed in and around them, and have injuriously affected business in general in the communities where the mines are located. At this writing the outlook for these idle mines to resume operation soon is not promising, and it is to be feared that the long idleness will totally ruin some if not all of them.

Although some mines, as already stated, are closed down, yet

more mines were in operation during this biennial period than in the history of the district, and the same is true in the state at large. A large number of them are local or wagon mines, and are operated by companies or individuals that have but small capital. The increase in this class of mines in the district have added not only more work for the inspector, but have also made his work more difficult and more unpleasant to perform, for the problems they often present to him are not as easily solved as they would if their owners had sufficient working capital. The mines of those who lack ample working capital, not only require good management on the part of their owners to maintain them in lawful condition and at the same time to keep them solvent, but they also require careful and delicate handling on the part of the inspector lest any order he may issue shall cause them, though not knowingly nor intentionally, to succumb prematurely, and result in their owners losing all their savings and the accomplishment of their years of hard toil. Also many of the above class of mines are opened in the vicinity of old and large abandoned mines that are full of water, and are, therefore, necessitating frequent and very close inspection for fear the workmen unknowingly may tap these old abandoned mines.

This department in its last biennial report estimated, on a conservative basis, that in the year 1923, the people of Iowa, exclusive of the railroads of the state, bought nearly twice the amount of coal from points outside the state as they bought of Iowa coal. In the biennial period ending December 31, 1925, covered by this report, it can be safely stated that the amount of coal bought from outside the state was nearly three times as much as was bought of Iowa coal.

The appointment by your Excellency, of a commission to investigate the cause of the above discrimination is very gratifying to the mining people of our state, and they hope that the findings and the recommendations of the commission will do as much to remove the prejudice and the erroneous impression that now prevails against Iowa coal, and also will bring about such action as will eliminate all discriminating freight rates that may be in favor of eastern coal into Iowa markets, thus rendering the coal industry of the state an incalculable good.

It is natural and proper that the mine operators of Iowa should expect the patronage of the people of our state, but for them to

expect our people to buy Iowa coal solely because it is a home product, regardless of any other consideration, is expecting of them probably too much. When the people of Iowa buy necessities they are no different from other people. Sentiment plays but a very little part in the transaction. In all probability, if the truth were known, comparatively few of our people buy Iowa coal because of sentiment for home product or because of a charitable feeling towards the operators and miners of our state. They buy coal and other commodities, and very likely will continue to buy them, where they think they receive the best service and the most value for their money. Before the mine operators of Iowa can reasonably expect those of our people that are not now buying Iowa coal, to buy it, they must be able to convince and to prove to them that they should use Iowa coal not simply because it is a home product, but because it is the best, the cleanest, and the most fuel value they can obtain anywhere, and not until they can accomplish the above task will they succeed to make any substantial increase in the sale of their product.

No operator or miner should make the error of ascribing the present ailment of the coal industry in our state to the erroneous notion that it is due to a decreased consumption of coal in the country at large, nor should he think that the industry is only slightly indisposed, and that it will again, as it has many times before, soon improve and regain its former vigor without subjecting it to any new adjustments or to any particular mining treatments. Whatever may be the matter with the coal industry in Iowa and in the United States at the present time, the records do not show that the cause of its trouble is due to a decreased consumption of coal either in our state or in the country at large, for no such decreased consumption has taken place.

The United States Bureau of Mines estimates the total production of bituminous coal in the United States for the year 1925 to be 523,072,000 tons, and this estimate can be relied upon to be approximately correct. The total production of bituminous coal in the United States in 1914, a year when the coal industry in this country was not materially affected one way or other by the world war, was 422,703,970 tons. From the above it can be readily seen that 100,368,030 tons more of bituminous coal were produced in this country in 1925, than were produced in 1914, or, a gain in 1925, of nearly twenty per cent. But considering Iowa only, we

find the above condition reversed. The total production of coal in Iowa in 1914, was 7,312,734 tons, but in 1925 it was only 4,833,631 tons—a decreased production in 1925 of 2,479,103 tons, or, of nearly thirty-four per cent.

In order to make it more plain that the cause of the present depression of the coal industry in our state is not due to any business depression, or to any decreased consumption of coal in the country at large, let us compare the total production of bituminous coal in the United States in the seven years immediately preceding the world war—1908-1914 inclusive—with that of the seven years succeeding the war—1919-1925 inclusive.

The total production of bituminous coal in the United States in the seven years immediately preceding the world war was 2,886,580,651 tons, and in the seven years after the war it was 3,443,632,707 tons. Thus we see that 557,052,056 tons more of bituminous coal were produced in this country in the seven years since the world war, than in the seven years immediately preceding it—an increased production in the seven years after the war of over sixteen per cent.

The above figures are significant for they plainly reveal that notwithstanding all the improvements that have been made in recent years, in the construction of power plants that have resulted in greater efficiency and economy in the combustion of coal, and also in the increased use of substitutes for coal, such as oil, gas, and electricity, nevertheless the increased consumption of coal in our country in the last seven years has been almost phenomenal, especially when we consider that the total production of bituminous coal in the above said period was nearly thirty-five per cent of the total of all the bituminous coal that has been produced in the United States in the last one hundred and five years, or, since the mining of bituminous coal began in 1820.

By comparing the total production of bituminous coal in the United States with the total production of coal in our state for the same periods as above, the opposite is shown.

The total production of coal in Iowa in the seven years immediately preceding the world war was 51,003,160 tons, and in the seven years after the war was 39,823,083 tons. The above figures show that Iowa mines produced 11,180,077 tons less coal in the seven years after the world war than they produced in the seven years immediately preceding the war—a decreased production in Iowa for the above said period of twenty-two per cent—while that

of the United States shows an increased production, as already stated of over sixteen per cent.

The depressions we have had in times past in the coal industry of our state were usually due to a general depression of business, and especially of the coal industry in the country at large, but as business improved the coal industry of our state would revive and enjoyed its full share of the returned prosperity of the country. Evidently this is not one of the above kind. It seems to have settled upon us, and to press the very life out of the industry in our state.

The cause of the present mining depression in our state is generally attributed to the enormous development of the coal industry in certain eastern states, to the lower rate of wages that some of these states are paying for mining, and also to the favorable freight rates they are enjoying from their respective coalfields to the Iowa and western markets. That all of the above things are true and can not be emphasized too strongly is not to be doubted, but to hold them solely responsible for our present depression would be misleading. We, in Iowa would be deceiving ourselves if we did not realize that our mining depression today is due, in part, or, at least the severity of it, to our failure to take due cognizance of the general progressive trend of coal mining that has been going on in our country for some time, and to adjust our mines and our mining methods to said trend. We have neglected to do the thing that we could and ought to have done to make our market less of an easy prey to our competitors, hence we are now paying the penalty for it. It is quite true that few of the most recent mines opened in our state are showing great improvement in construction and equipment over those mines that were opened at an earlier date, but gratifying as this progress is, it is no exaggeration to say that our competitors, on the whole, have made greater improvements and faster progress in modernizing their mines than we have done in Iowa.

No reputable mining man would seriously claim that mines and mining in Iowa have reached a state of perfection, that our present old fashion way of mining coal with hand pick is the most coal productive and the most economical mining method there is, that our generous manner of using black powder and dynamite to shoot the coal off the solid is the best lump coal producing system that can be devised, that a hand drilling machine can drill faster

and is far more efficient than an electric one, or that our present way of cleaning and preparing our coal for market is unsurpassed and can not be improved upon. If all the competitors of Iowa coal had held such a belief as above, and had faithfully practiced the same in the operation of their mines, then it could be stated with a great degree of certainty that the mining industry in Iowa today would be flourishing, and the total production of the state would not have likely shown a decrease, because if our competitors had adhered to inefficient methods in the operation of their mines they would not have been able to flood the Iowa market with coal as they are doing at the present time. Our competitors, however, have held no such notions as above. They have learned the value of engineering and directing talent, and are relying more and more for satisfactory results on the trained and technical engineer rather than on the driving force of the boss driver. They are equipping their mines with modern equipment to clean and to prepare their coal. They are discarding the hand pick for the mining machine and the hand shovel for the mechanical loader, and their efforts, on the whole, have been rewarded with increased production at a decreased cost of operation. It must be admitted that the coal fields of Iowa present many difficulties to carry on easy and successful mining with machinery. Also that probably not all of the methods and the mechanical equipment employed so successfully by our competitors, would be practical or successful in all the mines of our state, nevertheless, in spite of all the handicap of the Iowa coal fields, if the operators of our state are hoping to carry on mining on a fair size scale, or, are expecting to be able to compete more successfully with their eastern competitors, the most probable way for them to realize their hopes is not in the exclusive use of hand equipment and hand power, but in the increased installation and in the increased use in their mines of mechanical power and mechanical equipment and labor saving devices that are suitable to Iowa mines. It is evident from the figures already given in this report that our present methods and equipment have failed us, and that the longer we cling to them, or, the longer we delay or discourage the installation of practical machinery in our mines the more helpless we become. Mining machines and other mechanical mining equipment are here, and are here to stay, whether we adopt them or not, and the most inconsiderate mining man ought to realize that we in Iowa, in using hand equipment and hand

power to carry on mining, can no more hope to compete successfully against our competitors, who are using efficient mechanical equipment and power, than the ox-cart of the pioneer days could compete successfully with our modern railroad train in hauling freight.

MARKETING CLEAN COAL

Probably no one thing has contributed as much to the curtailment of the sale of Iowa coal as that of marketing it without the same being thoroughly cleaned. The complaint is not against the quality of our coal. The quality of it is as good today as that of the first ton we mined. It is superior in heat unit per pound, and lower in cost per ton than most coal that is shipped into our state. While it can be truthfully said, that on the whole Iowa coal is prepared and cleaned with greater care today than ever before, yet after all, the consumer feels justified in complaining against its uncleanliness. The tonnage of the few mines in our state that have modern equipment to clean and to prepare their coal is not large enough to give the production of our state a clean character. It is the larger tonnage of the poorly equipped mines that gives Iowa coal its unfavorable reputation of not being as clean as the trade demands. The degree of failure to make the coal clean is not due to the lack of effort on the part of the operators of these poorly equipped mines, but mostly of their poor method of cleaning, or, to their lack of an efficient cleaning equipment. The usual practice in most Iowa mines to dump the coal just as it comes from the mine into the railroad car, and then to try to clean it thoroughly is almost an impossible task. Genuine cleaning of the coal in such a place is so difficult to accomplish that it is too frequently imperfectly done. Also to attempt to clean the coal at such an unsuitable place is too slow and expensive a method for any fair size mine to practice, because to do so will inevitably retard the hoisting of coal and arrest, more or less, the whole operation of the mine, and thus add unduly to the cost of operation. Unfortunately nature has not blessed our state with clean veins of coal as liberally and extensively as it has blessed the states of some of our competitors, and this fact makes it more imperative upon all the mining people of our state to see that all the impurities left in the veins by nature are extracted and thrown out before the coal is placed on the market. If the competitors of Iowa coal, who, as a

rule, are carrying on mining in states that have comparatively clean veins of coal, deem it necessary to equip their mines with modern equipment to clean and to prepare their coal how much more essential it is for the operators of our state, who are carrying on mining in less favorable veins, to do the same? The efficiency of their competitors along this line must be met with equal, if not with more, efficiency on their part. The just and persistent demand of the consumer for clean coal must be met. No partial cleaning will suffice. It must be complete and thorough, and performed in the right way and in the right place, so when the coal enters the railroad car or wagon it shall be a finished product, properly prepared and faultlessly clean.

The above things are written not in a spirit of fault-finding but it is an attempt to show, in a feeble way, that happily we in Iowa have not yet reached the limit of our capabilities. As already alluded, we have barely started to modernize our mines with equipment and power that successful mining today requires, nor have we commenced to merger or to consolidate our many companies of small capital into fewer and stronger financial companies, so that mining and the marketing of our coal can be carried on more efficiently and economically. That these things can be done and will be done some of these days is not to be doubted, because the necessity for modernizing our mines, and for a larger working capital to construct, equip, and to operate them will become more keenly felt as the time goes on. The mines that can command the capital and are modernized will survive and prosper, but the ones that can not attract capital and have uneconomical equipment and methods will inevitably drop out of the competitive race.

REPORT OF THIRD INSPECTION DISTRICT

Edward Sweeney, Inspector.

POLK COUNTY

Coal mining in Polk county has been carried on continuously for about seventy-five years as the first records of mining done here show operations as early as 1850. The beds of coal that have been worked show an average thickness of about four and one-half feet, though the workable seams vary in different places from two to seven feet. The more important mines that have been operated

and those that are now operating have been in the immediate vicinity of Des Moines, but only those located within the city limits or close thereto do a local business, the others having railroad connections and doing a shipping business. The majority of mines in Polk County now being operated are within a radius of six miles of the center of Des Moines.

The first mining that we have a record of was done as early as 1850 on the west side of the Des Moines river about a mile above the Raccoon fork. About the same time drifts were worked in the same vein at a number of points along the river. On the corner of what is now known as Sixth Avenue and School Streets in Des Moines the old Rawson mine was worked for a number of years. On the east side of the Des Moines River mining was begun in an early day, and a number of mines that were large producers were operated in the territory now touched by the State Capitol grounds and the Rock Island tracks. All of northeast Des Moines which is now a closely built up residence district saw mining of coal in the early day. Much mining was done on the south side of the Raccoon river. The larger mines of the county are now operating about six miles north of Des Moines. Three big mines are operating near Carney, two northeast of Des Moines, one near Berwick and one southeast of the State Fair grounds. Two mines are operating in southwest Des Moines and one in west Des Moines. Besides these a number of mines are operating to the northwest of the city. A new mine has recently been opened near Herrold.

In connection with the mining that has been done in the county and the prospecting done for coal, it is of interest to note that Charles Rollin Keyes of the Iowa Geological Survey has said:

"In no case at present known is coal worked in Polk county at a greater depth than 100 feet, below the river level. The coal measures at this place are probably not less than three to four hundred feet in thickness, and there seems to be little doubt that prospecting to the depth mentioned would reveal the presence of coal in quantities even greater than the known supplies at present mined." All the above might indicate that there are localities in the county that have been prospected a number of years ago, and given up because no coal was found, that might yet reveal coal if prospected at a deeper depth. In fact this has been demonstrated in two or three instances.

At one time in its history Polk County mined nearly two million tons of coal, the most of which was shipped to points North and West. In recent years the tonnage has dropped until now there is less than a million tons mined and most of this is used right here at home. The special development of the coal industry in this county is due in a large measure to the excellent facilities for shipping afforded, there being no less than 17 lines of railway entering this district enabling the coal to be loaded at the mines directly on the cars and shipped to all parts of the state. Then add to this the local consumption which is greater than anywhere else in the state and which is bound to continue by reason of the many manufacturing establishments which are located here and the rapid growth of Des Moines as a city and business center.

It would be difficult to place a true estimate on the value of the coal industry to the people of the county and especially to the city of Des Moines. The mining industry means much to the farmers of Polk county by reason of the money received for royalties. It means much to the city of Des Moines because of the money paid to employes of the mining companies which finds its way into the trade channels of our city.

The coal mined in Polk county is a good bituminous product equal to that produced elsewhere in the United States. It stores well and is in demand as a furnace coal. It is claimed that it will store much better than the foreign coals which are shipped here each year.

Repeated analyses of the coal produced in Polk county shows it to be high in heat unit values which run from 11,000 to 13,000, B. T. U. to the pound. This puts Iowa coal on a level with many of the eastern coals shipped in here, which by reason of the high freight from other points, must sell for a higher price than the coal mined in Polk county. Many persons who have used the coals shipped in from other states have found that they can heat their homes at a much lower cost by using the Iowa coal, and they have also found that the Iowa coal properly cared for does not make any more smoke and dirt than the so-called smokeless coals shipped into this state.

DALLAS COUNTY

Dallas county now stands second in the production of coal in the Third District of Iowa. While coal has been mined in a small way for years along the Raccoon River, it was not until 1907 that any

real large operations in mining in this county were undertaken. Previous to 1907 the largest producing mine in the county was that of the Van Meter Coal & Mining Company at Van Meter. This and the mine at Dawson were the only shipping mines in the county.

Up to 1907 prospecting had been done mostly along the Racoon river and at shallow depths. In 1907 search was made for coal at a greater depth than formerly and this resulted in a fine vein of coal being discovered near the present site of Scandia at a depth of about 170 feet. This led to the sinking of the first shaft by the Scandia Coal Company and later to the sinking of the second shaft by the same company. Other mining companies then began deep prospecting resulting in the mine of the High Bridge Coal Company being opened and also the mine of the Phillips Coal Company near Phildir. Still later the Dallas Coal Company opened up a large mine north of Granger. Still later the Norwood-White Coal Company opened a large shipping mine at Moran. This was followed by the sinking of the Radiant and Shuler mines near Wauke. These latter are the deepest mines in the state, the shaft of the Shuler being 373 feet and that of the Radiant Coal Company 417 feet. All these mines have become big producers and have added much to the wealth of Dallas County which is already classed as one of the richest farming counties of the state. Other fields of coal in this county have been prospected and are just awaiting a favorable time for the beginning of mining operations.

The mine at Van Meter has long since been abandoned, and no mining of any kind is now conducted there. At Dawson the mine was shut down for some reason and although the field was not exhausted no mining has been done there for several years. It is probable that operations near there may be resumed at some future time.

It is quite certain that the small mines that were operating at shallow depths in former years near Linden, Madrid and Van Meter were operating in an entirely different seam from that now operated by the larger mining companies.

Nearly all Dallas county seems to be underlaid by the lower coal measures (Des Moines Formation), and it is to be hoped that coal prospecting in Dallas County will be continued until the coal measures in this field are entirely developed. Henry Hinds, in

writing of the coal deposits in Dallas county a good many years ago, and long before the larger mines had been opened, said: "The future of the coal industry of Dallas county lies in the hands of those who are willing to risk considerable capital in systematic prospecting." How true this has been proven is shown by the large operations now being conducted.

For the calendar year ending December 31, 1923, Dallas county produced 532,334 tons of coal, and the mining companies of the county gave employment to 951 miners and other employes. The fatal and non-fatal accidents occurring in the mines of Dallas County are listed elsewhere in this report.

BOONE COUNTY

Boone county is surrounded on all sides by coal counties and at one time was one of the leading counties producing coal in this state. Boone county was one of the first counties to assume prominence in the coal industry and mining has gone on steadily in the county for more than a third of a century. In the central part of the county where coal has been taken out for the greatest length of time, two principal seams have been opened up. In the southwestern part of the county around Angus several veins are known to exist.

The coal measures of Boone county extend north and south across the entire county, along the Des Moines river. The principal mining, however, is done in the vicinity of Fraser, Boonesboro and Ogden, in the north and central portion of the county. Some small mines have operated in the southern part of the county, but little mining is done there now. Formerly there was a great deal of coal mined in the vicinity of Angus, and while the vein there averages from four to six feet in thickness, there is usually a large volume of sand and water overlaying a thin strata of slate, making a bad roof, and the coal cannot be mined at a profit. Some coal has been mined near Moingona but there are no active operations there at this time.

A few years ago considerable prospecting was done in the search for coal horizons at a greater depth than had formerly been attempted and a new coal field was opened up near Ogden. The coal runs from three to five feet in thickness and is found at a depth of 270 feet. The Ogden Coal Company is now operating a mine north of Ogden, and The Black Diamond Coal Company is operating a

mine south of Ogden. The coal is of excellent quality, containing but little ash. Mining machines are being used in the mines here.

No new operation have been commenced in the county during this biennial period.

The most of the coal of this county is mined on the longwall system of mining and but few accidents have occurred in the mines of Boone County during the biennial period.

WEBSTER COUNTY

Webster County lies farthest north of the coal producing counties in Iowa. Coal was first mined in this county as early as 1860, so the mining of coal in this county has been continuous for a period of more than fifty years. The most of the coal mined has come from the vicinity of the Des Moines river south of Fort Dodge, and near the towns of Coalville, Lehigh, Kalo and Otho. Not a great deal of coal is mined in the county at the present time. Ten years ago the production of coal in the county was more than double what it is today.

Along the banks of the Des Moines river are exposed measures at various points and this would seem to indicate that there is yet a large acreage of undeveloped coal in the county.

The seam of coal found in this county varies from two and one-half to four feet in thickness, and in some places a greater thickness has been found. The quality is uniformly good, and the market facilities of the product now mined good, owing to the county being in the northern limit of the Iowa coal field.

Webster County has the distinction of being the only county in Iowa producing any cannel coal. This is found in the vicinity of Kalo and an analysis of coal from this section a few years ago shows it to have 39.04 per cent of Volatile matter, 39.22 per cent of Fixed Carbon, and 15.87 per cent Ash, giving it a fuel ratio just below one, or on the borderland between cannel and bituminous coals.

Webster is also the only county in the state producing commercial gypsum in paying quantities. A number of gypsum mines are now in operation in the vicinity of Fort Dodge and the business is quite extensive.

GUTHRIE COUNTY

But little that is new can be said of the coal industry of Guthrie County, since the last report was issued from this office. There is

but little change in the number of mines and tonnage of coal produced each year in this county. The operations in the county are all small and the mines are small local mines, supplying the locality in which the mine is located with coal during the fall and winter months. Most of the mines of the county begin active operations in September of each year and are fairly active until the coming of the summer months, when operations are abandoned until fall again.

But three to ten men are employed in each mine in this county and for the most part the gin method of hoisting coal is employed.

The mines of this county are worked on the longwall system of mining, and the natural conditions favor this system of mining. The coal thus mined is nearly all lumps and is of good quality, being very hard, bright and a free burner. I believe that with good railroad facilities this coal could be produced as cheaply as coal in any other part of the state. The coal in this county is found at a depth of fifty to one hundred feet. Most of the mines are now provided with the second opening and the conditions regarding sanitary conditions, general safety appliances, are generally acceptable. The probability is that in the near future much more coal will be mined in this county than is mined at the present time.

GREENE COUNTY

The output of coal from Greene County has not been large for many years. Up to the present the workable seams have been opened up in the eastern part of the county. At Grand Junction the Goodwin Brick and Tile Company have operated a mine for many years. The coal here is 18 inches in thickness but beneath the coal is an excellent bed of fire clay having a considerable thickness. It is used for the manufacturing of brick and tile. In fact the mining of the clay forms the principal work of the mine, the coal taken out in connection with it being used largely for fuel in the kilns. Eight miles south of Grand Junction at Rippey coal has been mined for many years, and mining operations in this vicinity are still carried on but the mines are small and the production is not large. The mines here are operated only during the fall and winter months.

In the southeastern part of the county coal has been mined extensively near the town of Angus. There were at one time more than a dozen mines in operation in this part of the county. Some

mining on a small scale is still done near here, but at the present time but few mines are operated in the entire county, and these are run as local mines. No shipping mines in this county.

WARREN COUNTY

For more than forty years coal has been mined in Warren County but mostly by small operations to supply the local trade. Once in a while a shipping mine would open and run for a short time, but not until recent years has coal been shipped from this county in any quantity. As far back as 1891 as many as twenty-five small mines were listed as supplying coal for local consumption. Later a shipping mine operated for a time near Summerset, and still later, within recent years the Spring Hill Coal Company opened a shipping mine at Spring Hill. This mine is still in operation and has proved a very good producer. Several local mines have been operated on Scotch Ridge near Carlisle. At present the McCall Brothers have opened up a splendid local mine near Hartford. This will likely be turned into a shipping mine soon as they have a splendid field of coal. About a year ago the Middle River Coal Company opened a shipping mine near Summerset, but they experienced so many faults that the mining became unprofitable and in March, 1924, the mine was abandoned. We hope in the future to see considerable coal mined in Warren County.

GYPSUM MINING INDUSTRY

A number of years ago the mining laws of Iowa were amended by the legislature to include the inspection of the gypsum mines of the state by the mine-inspection department. Since that time regular inspections of the gypsum mines as to safety and sanitary conditions have been made by this department, and reports of the same placed on file in the Mine Inspectors' Office.

In these inspections the gypsum mines of the state have been generally found in excellent condition. Where recommendations have been made, we have found the managers of the mines willing to comply with requests made. There has also been an excellent spirit of co-operation in carrying out the laws of the state relating to gypsum mining. We are also glad to note a desire on the part of the management of these mines to keep the mines in such condition that accidents may be reduced to a minimum.

Owing to the thickness of the gypsum rock the character of the roof is good thus lessening accidents occurring from falls of roof. No statistics as to gypsum mines, number of tons mined, and value of same is collected by this office, but these are collected and made a part of the work of the State Geological Department. But six mines reported production for the year 1921. Five of these mines operate in the vicinity of Ft. Dodge, in Webster County and one is operated near Centerville in Appanoose County.

The gypsum field is a limited one in this state, and yet for all that the industry is an important one. Statistics gathered by the State Geological Survey show that in 1921 350,247 tons of gypsum were produced and this had a value that year of \$2,922,700. There was a large increase over this amount in 1922 as the production for that year amounted to 536,905 tons with a value of \$4,146,182.

To those interested in the gypsum industry, production, uses and value, we would recommend their securing from the Iowa State Geological Survey, Des Moines, Volume 28 on the Gypsum Industry. This is an interesting document and gives almost a complete history of gypsum production and uses.

PRODUCTION OF GYPSUM IN 1923 AND 1924

	1923		1924	
	Tons	Value	Tons	Value
Crude gypsum mined.....	685,041		727,385	
Sold crude to cement mills.....	134,596	\$ 383,322	149,972	\$ 371,331
Agriculture and others.....	329	1,061	1,230	8,698
Total crude sold.....	134,925	\$ 384,383	151,202	\$ 380,029
Sold calcined as stucco.....	17,081	\$ 130,130	68,280	\$ 459,044
As other wall plaster.....	315,433	2,045,183	314,751	2,462,304
As plaster of Paris moulding, casting plaster	1,037	21,366	5,508	50,026
As Keene's cement, dental plaster, plate				
glass works.....	6,085	97,677	3,660	31,770
As plaster board and wall board.....	44,183	1,983,681	55,486	1,719,322
As tile and block and for other purposes.....	46,508	665,212	42,065	549,814
Total sold calcined.....	431,829	\$ 4,985,249	489,745	\$ 5,277,910
Total sold.....	566,754	\$ 5,369,632	640,947	\$ 5,657,939

Most of the plaster grouped under the head of Keene's Cement, etc., is sold to plate glass workers for bedding glass in moulding. Likewise much the greater part of the plaster sold in board form is made into wall board, which is the finished form, ready for

tinging or other details to make a complete wall. Most of the plaster used in making tile and blocks goes into partition tile, the value of which in 1924 was \$339,000. The rest was roof tile and special forms. Nearly a hundred thousand dollars worth of plaster was sold for miscellaneous uses in 1924. The same plants were in operation in 1924 as during the previous years.

These figures the courtesy of the Iowa State Geological Survey.

ACCIDENTS

In the following pages are included a classified list of accidents, both fatal and non-fatal, compiled from reports furnished this department by the operating coal companies of the state, except those non-fatal accidents where no time was lost by the injured person.

FATAL ACCIDENTS IN DISTRICT NO. 1 1924

Date and Hour of Accident	Name, Age, Nativity and Occupation	Married or Single	No. of Children	Cause of Death	Employing Company and County
Feb. 4, 1:00 p. m.	W. E. Harndon, 74, American, miner.	Married	1	Fall of slate	Central Iowa Fuel Co., Lucas
Oct. 24, 2:20 p. m.	John H. James, 31, American, miner.	Married	4	Fall of slate	Central Iowa Fuel Co., Lucas
Dec. 28, 12:20 p. m.	John T. Evans, 32, Welsh, miner.	Married	2	Fall of slate	Central Iowa Fuel Co., Lucas

FATAL ACCIDENTS IN DISTRICT NO. 1 1925

Date and Hour of Accident	Name, Age, Nativity and Occupation	Married or Single	No. of Children	Cause of Death	Employing Company and County
Jan. 17, 10:00 a. m.	John Kemansky, 37, Austriian, miner.	Single	1	Fall of slate	Central Iowa Fuel Co., No. 2, Lucas
Jan. 18, 9:00 a. m.	John Harwick, 35, Italian, timberman.	Married	4	Fall of slate	Central Iowa Fuel Co., No. 2, Lucas
Jan. 27, 11:30 p. m.	Chas. Stewart, 48, American, miner.	Single	1	Fall of coal	Ontererville Rock Coal Co., Appanoose
June 27, 5:00 a. m.	Dave Besse, 46, Welsh, timberman.	Married	4	Fall of slate	Central Iowa Fuel Co., No. 4, Lucas
Aug. 19, 11:30 a. m.	James White, 26, Scotch, driver.	Married	4	Run over by car.	Central Iowa Fuel Co., No. 2, Lucas
Dec. 22, 10:00 a. m.	Luther Howe, 50, American, miner.	Married	9	Fall of rock	Egypt Coal Co., Appanoose

NON-FATAL ACCIDENTS IN DISTRICT NO. 1

1924

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REPORT IOWA MINE INSPECTORS

Date and Hour of Accident	Name and Occupation	Cause of Accident	Nature of Injury	Employing Company and County
June 24, 5:00 p. m.	W. C. Huston, driver	Run over by car	Dislocated hip	Graham Coal Co., Monroe
June 25, 10:20 a. m.	J. B. Moyle, miner	Struck by pick	Foot injured	Graham Coal Co., Monroe
Aug. 27, 1:00 p. m.	W. C. Huston, driver	Fall of coal from car	Hand cut and mashed	Graham Coal Co., Monroe
Sept. 28, 1:30 p. m.	H. Bowdler, miner	Cutting coal	Eye injured	Graham Coal Co., Monroe
Sept. 28, 1:30 p. m.	Thos. Parker, miner	Fall of coal	Broken leg	Citizens' Coal Co., Appanoose
Sept. 29, 1:30 p. m.	Bin Thomas, ebunker	Moving coal	Mashed toe	Citizens' Coal Co., Appanoose
Oct. 1, 1:30 p. m.	Frank Redmond, miner	Lifting rock	Fingers mashed	Graham Coal Co., Monroe
Oct. 2, 2:00 p. m.	Arthur Jones, miner	Mining off shot	Struck in eye by sulphur	Graham Coal Co., Monroe
Oct. 12, 8:00 a. m.	Lewis Hughes, tracklayer	Fall of rock	Broken ankle	Egypt Coal Co., Appanoose
Oct. 13, 2:30 p. m.	Daniel H. Huston, driver	Caught between cars	Left arm broken	Graham Coal Co., Monroe
Oct. 19, 11:00 a. m.	James Fisher, driver	Caught between car and rib	Head and body bruised	Graham Coal Co., Monroe
Oct. 26, 2:30 p. m.	W. C. Huston, driver	Caught by car	Leg and ankle bruised	Graham Coal Co., Monroe
Oct. 27, 8:30 a. m.	O. C. Huston, miner	Struck by empty cage	Right cheek bone broken	Graham Coal Co., Monroe
Jan. 2, 9:00 a. m.	O. F. Berkey, miner	Sulphur in eye	Eye injured	Graham Coal Co., Monroe
Jan. 2, 9:00 p. m.	W. A. Stewart, miner	Struck by weighing pan	Spine injured	Graham Coal Co., Monroe
Jan. 6, 12:30 p. m.	Herbert Latham, miner	Fall of slate	Foot injured	Graham Coal Co., Monroe
Jan. 6, 12:00 noon	Joe Mathias, miner	Struck by coal	Eye injured	Graham Coal Co., Monroe
Jan. 17, 8:15 a. m.	Zephraim Brandibus, miner	Fall of coal	Leg broken	Liberty Coal Co., Appanoose
Jan. 18, 10:00 a. m.	Wm. Jones, timberman	Mule fell on him	Right knee injured	Hocking Coal Co., Monroe
Jan. 20, 12:00 noon	Jas. Anderson, miner	Pushing car	Right leg injured	Hocking Coal Co., Monroe
Jan. 26, 9:30 a. m.	Oscar Engstrom, miner	Fall of coal	Right foot injured	Graham Coal Co., Monroe
Feb. 4, 11:00 a. m.	John Ellison, miner	Black damp	Lungs affected	Graham Coal Co., Monroe
Feb. 11, 11:00 a. m.	Tom Keyer, miner	Caught by rock	Finger mashed	Graham Coal Co., Monroe
Feb. 15, 10:30 a. m.	A. C. Deaver, miner	Prying with bar	Back injured	Graham Coal Co., Monroe
Mar. 25, 8:30 a. m.	C. H. Davis, miner	Fall of blackjack	Back dislocated	Hocking Coal Co., Monroe
Mar. 27, 10:30 a. m.	O. C. Huston, weighman	Flying coal	Eye injured	Graham Coal Co., Monroe
Mar. 27, 10:30 a. m.	John R. Smith, weighman	Hiding dirt ear	Four toes broken	Graham Coal Co., Monroe
Oct. 30, 10:00 a. m.	John Faulkes, Jr., top man	Fell over oil can	Mouth cut	Graham Coal Co., Monroe
Oct. 30, 9:00 a. m.	F. G. Phelps, miner	Car ran over foot	Foot injured	Citizens' Coal Co., Appanoose
Nov. 9, 2:00 p. m.	David Johnstone, miner	Lifting car on track	Ruptured left side	Hocking Coal Co., No. 5, Monroe
Nov. 29, 11:45 a. m.	Raymond Rodgers, miner	Fall of coal	Legs bruised	Bennett Coal Co., Appanoose
Nov. 30, 11:30 a. m.	Ernest Ferguson, miner	Collision of cars	Hand bruised	Citizens' Coal Co., Appanoose
Dec. 5, 10:45 a. m.	Stanley Babbi, miner	Fall of coal	Eye broken	Moss & Colgan Coal Co., Appanoose
Dec. 6, 10:30 a. m.	E. Shaw, miner	Loading coal	Fingers cut	Hocking Coal Co., No. 5, Monroe
Dec. 10, 2:00 p. m.	W. C. Barton, miner	Mining coal	Left side injured	Graham Coal Co., Monroe
Dec. 22, 10:00 a. m.	John Boslen, miner	Fall of rock	Right arm broken	Egypt Coal Co., Appanoose
Dec. 24, 9:00 a. m.	W. K. Bates, miner	Loading coal	Left wrist injured	Graham Coal Co., Monroe
April 26, 9:30 a. m.	J. B. Williams, miner	Struck by coal	Eye injured	Hocking Coal Co., Monroe
April 27, 8:30 p. m.	Geo. Smith, trip rider	One finger cut off	One finger cut off	Hocking Coal Co., Monroe
May 8, 1:00 p. m.	Jno. Bokoller, miner	Moving coal	Thumb mashed	Hocking Coal Co., Monroe
May 14, 2:00 p. m.	J. B. Williams, miner	Struck by coal	Right eye injured	Hocking Coal Co., Monroe
May 14, 2:00 p. m.	O. Bennett, timberman	Struck by coal	Left eye injured	Hocking Coal Co., Monroe
May 22, 10:00 a. m.	Geo. Richardson, driver	Lifting car on track	Sprained back	Hocking Coal Co., Monroe
May 29, 2:00 p. m.	Wm. Whitehead, miner	Flying coal	Eye injured	Hocking Coal Co., Monroe
May 27, 2:00 p. m.	S. A. Manley, driver	Flying sulphur	Left eye injured	Graham Coal Co., Monroe
May 28, 2:45 p. m.	John Bernard, miner	Caught bet. mule and rib	Breast injured	Hocking Coal Co., Monroe
May 28, 7:30 a. m.	Wm. Reese, driver	Caught bet. car & timber	Thumb cut off	Hocking Coal Co., Monroe
May 28, 10:00 a. m.	Wm. White, driver	Mule ran away	Back hurt	Hocking Coal Co., Monroe
June 4, 10:30 a. m.	J. B. Williams, miner	Struck by coal	Leg eye injured	Hocking Coal Co., Monroe
June 13, 1:00 p. m.	Lias Williams, miner	Fall of coal	Great toe injured	Hocking Coal Co., Monroe
June 23, 10:40 a. m.	Robt. Lawson, spranger	Caught by trip	Pelvis bone broken	Hocking Coal Co., Monroe
July 2, 7:00 a. m.	Winston Kauslich, miner	Caught in mastrap	Left hand injured	Hocking Coal Co., Monroe
Mar. 11, 9:00 a. m.	Phil Walk, miner	Struck thumb with sledge	Thumb bruised	Hocking Coal Co., Monroe
Mar. 11, 3:15 p. m.	A. C. Huston, company man	Putting car on track	Back sprained	Graham Coal Co., Monroe
Mar. 13, 2:30 p. m.	Joe Whitehead, driver	Kicked by mule	Arm bruised	Hocking Coal Co., Monroe
Mar. 13, 4:00 p. m.	A. L. Van Pelt, blacksmith	Using blow torch	Thumb burned	Graham Coal Co., Monroe
Mar. 14, 2:00 p. m.	W. Mana, miner	Struck by coal	Right eye injured	Hocking Coal Co., Monroe
Mar. 18, 7:30 a. m.	Tom Stevens, miner	Fall of rock	Hand mashed	Graham Coal Co., Monroe
Mar. 19, 10:00 a. m.	Thos. Hockridge, miner	Struck by coal	Right eye bruised	Hocking Coal Co., Monroe
Mar. 24, 9:00 a. m.	C. Deskin, miner	Struck by car wheel	Ankle bruised	Hocking Coal Co., Monroe
Mar. 25, 1:00 p. m.	Thos. McManus, miner	Fall of coal	Great toe injured	Hocking Coal Co., Monroe
April 5, 1:00 p. m.	Wm. Anderson, miner	Struck by coal	Eye injured	Hocking Coal Co., Monroe
April 5, 1:00 p. m.	Jno. Turner, miner	Struck by coal	Right eye injured	Hocking Coal Co., Monroe
April 17, 2:00 p. m.	Jno. Underation, miner	Struck by coal	Left eye injured	Hocking Coal Co., Monroe
April 18, 8:00 a. m.	Thos. McManus, driver	Lifting car on track	Sprained back	Hocking Coal Co., Monroe
April 22, 11:45 a. m.	A. Quinn, miner	Loading coal	Back injured	Hocking Coal Co., Monroe
Apr. 23, 2:30 p. m.	Hugo Martin, fireman	Cleaning boiler flues	Left eye	Iowa Central Fuel Co., Linn
Sept. 23, 1:00 p. m.	Geo. Gay, miner	Struck by coal	Right eye injured	Hocking Coal Co., Monroe
Sept. 29, 10:20 a. m.	Otto Hazlett, cager	Caught by cage	Hand cut and bruised	Graham Coal Co., Monroe
Oct. 1, 10:45 a. m.	Hugh Christy, miner	Caught by rock	Little finger mashed	Graham Coal Co., Monroe
Oct. 3, 10:00 a. m.	H. Bates, miner	Struck by coal	Left eye injured	Hocking Coal Co., Monroe
Oct. 8, 9:00 a. m.	Peto Virello, miner	Cut hand on rock	Blood poison	Hocking Coal Co., Monroe
Oct. 8, 9:15 a. m.	Chas. Anderson, timberman	Notching timbers with axe	Left leg cut badly	Graham Coal Co., Monroe
Oct. 9, 2:00 p. m.	Jno. Bernard, miner	Lifting rock	Ruptured	Hocking Coal Co., Monroe
Oct. 19, 6:45 a. m.	F. C. Runtton, miner	Struck by pick	Arm badly cut	Graham Coal Co., Monroe
Oct. 19, 1:30 a. m.	Dale Rotton, miner	Putting coal on car	Third finger mashed	Graham Coal Co., Monroe
Oct. 20, 7:30 a. m.	A. L. Van Pelt, blacksmith	Shoeing pony	Finger cut by nail	Graham Coal Co., Monroe
Nov. 10, 1:00 p. m.	Iony Kauslich, miner	Car run over foot	Foot mashed	Hocking Coal Co., Monroe
Nov. 17, 9:00 a. m.	Chas. Lawson, miner	Fall of coal	Arm broken	Nunn Coal Co., Appanoose
Nov. 19, 2:00 p. m.	Geo. Stevenson, miner	Coal fell from car	Right foot injured	Hocking Coal Co., Monroe
Feb. 1, 8:15 a. m.	Otto Hazlett, driver	Lifting rails	Strained chest	Graham Coal Co., Monroe
Feb. 4, 9:30 a. m.	Elmer Atkin, driver	Car ran over hand	Fingers broken	Hocking Coal Co., Monroe
Feb. 6, 2:00 p. m.	W. B. Thomas, driver	Struck by car	Right knee hurt	Hocking Coal Co., Monroe
Feb. 12, 2:00 p. m.	John Howard, miner	Struck by pick	Left foot injured	Hocking Coal Co., Monroe
Feb. 12, 2:30 p. m.	F. C. Runtton, miner	Lifting coal on car	Right hand bruised	Hocking Coal Co., Monroe
Feb. 14, 2:00 p. m.	Wm. Whitehead, miner	Firing coal	Right eye bruised	Graham Coal Co., Monroe
Feb. 19, 3:00 p. m.	A. Carso, company man	Slipped on ties	Ankle sprained	Graham Coal Co., Monroe
Feb. 19, 10:00 a. m.	Nick Blizovitch, miner	Struck by coal	Loss of left eye	Hocking Coal Co., Monroe
Feb. 19, 10:00 a. m.	Joe Kauslich, miner	Fall of slate	Back hurt	Hocking Coal Co., Monroe

STATISTICS OF IOWA MINING

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NON-FATAL ACCIDENTS IN DISTRICT NO. 1—Continued

Date and Hour of Accident	Name and Occupation	Cause of Accident	Nature of Injury	Employing Company and County
Feb. 20, 2:30 p. m.	W. E. Welsh, driver	Car ran off track	Left arm broken	National C. M. Co., Appanoose
Feb. 20, 10:00 a. m.	C. Grison, blacksmith	Spark from fire	Left eye injured	National C. M. Co., Appanoose
Feb. 22, 10:30 a. m.	F. D. Wilson, miner	Flying coal	Right eye injured	Graham Coal Co., Monroe
Mar. 5, 3:30 p. m.	Robt. Halliday, miner	Struck by coal	Right eye injured	Graham Coal Co., Monroe
Mar. 6, 8:00 a. m.	Wm. Delshmitt, miner	Caught by crowbar	Thumb mashed	Hocking Coal Co., Monroe
Mar. 7, 12:00 noon	Fred Stevens, miner	Fall of dirt	Eye injured	Seymour Coal Co., Wayne
Mar. 8, 2:00 p. m.	Sam Smith, driver	Car ran off track	Foot bruised	Oriental Coal Co., Appanoose
Jan. 2, 9:30 a. m.	John Vitco, car trimmer	Fell from R. R. car	Left side and hip hurt	Seymour Coal Co., Wayne
Jan. 3, 10:00 a. m.	Wm. Irvin, miner	Fall of coal	Right shoulder broken	Central Iowa Fuel Co., No. 2, Lucas
Jan. 7, 1:50 p. m.	Tony Bottel, miner	Fall of coal	Body badly bruised	Sunshine Coal Co., Appanoose
Jan. 5, 2:00 p. m.	Joe Mathias, entry man	Struck in eye by coal	Eye injured	Hocking Coal Co., Monroe
Jan. 10, 2:00 p. m.	Vance Thompson, miner	Loading chunk of coal	Back sprained	Central Iowa Fuel Co., Lucas
Jan. 10, 3:00 p. m.	Jas. Long, miner	Sledge handle came off	Right hand injured	Central Iowa Fuel Co., Lucas
Jan. 10, 10:00 a. m.	Jack Cambrozzi, miner	Falling rock	Hand washed	Central Iowa Fuel Co., Lucas
Jan. 27, 9:45 a. m.	Jack Sparrow, loader	Fall of roof	Bruised back	Hocking Coal Co., Monroe
Jan. 18, 10:00 a. m.	Andrew Lebben, miner	Falling coal	Hand bruised	Hocking Coal Co., Monroe
Jan. 18, 10:30 a. m.	Ed. Williams, driver	Caught bet. car and rib.	Two ribs broken	Winnifred Coal Co., Appanoose
Jan. 19, 8:30 a. m.	Chas. Poole, empty puller	Fall of rock	Head bruised	Central Iowa Fuel Co., Lucas
Jan. 21, 4:00 p. m.	Thos. Lawson, shot firer	Windy shot	Gassed	Hocking Coal Co., Monroe
Jan. 21, 9:00 a. m.	Ed. Goster, miner	Fall of slate	Cut under chin	Hocking Coal Co., Monroe
Jan. 21, 10:30 a. m.	Howard Spencer, miner	Slipped and fell	Back sprained	Hocking Coal Co., Monroe
Jan. 25, 10:30 a. m.	Lester Wallace, electrician	Contact electric welder	Arm badly burned	Hocking Coal Co., Monroe
Jan. 30, 3:00 p. m.	Joe Martin, miner	Fall of slate	Right hip hurt	Hocking Coal Co., Monroe
Jan. 30, 11:00 a. m.	John Bernard, miner	Struck by coal	Left eye injured	Central Iowa Fuel Co., Lucas
July 3, 9:00 a. m.	Earl Mead, miner	Fall of coal	Broken thumb	Hocking Coal Co., Monroe
July 6,	J. M. Brown, miner	Loading car, slate	Badly injured hip	Central Iowa Fuel Co., Lucas
July 10, 9:30 a. m.	Sheiby McFarlow, driver	Caught in mule harness	Hand bruised	Central Iowa Fuel Co., Lucas
July 15, 2:30 p. m.	Joe Edmonds, driver	Ran into loaded car	Left leg injured	Hocking Coal Co., Monroe
July 18, 8:00 a. m.	T. W. Williams, miner	Fall of slate	Back of head injured	Hocking Coal Co., Monroe
July 19, 2:30 p. m.	O. Johnson, driver	Caught bet. car and rib.	Right hip injured	Hocking Coal Co., Monroe
July 20, 9:30 a. m.	Joe Kauslavick, miner	Cutting props with axe	Cut off little toe	Hocking Coal Co., Monroe
July 28, 9:00 a. m.	Pred Powell, miner	Fall of coal	Mashed foot	Hocking Coal Co., Monroe
Aug. 5, 12:00 noon	C. Johnson, driver	Mule fell down	Great toe injured	Hocking Coal Co., Monroe
Aug. 14, 1:30 p. m.	Glen Williams, driver	Caught bet. car and rib.	Hips injured	Central Iowa Fuel Co., Lucas
Aug. 14, 4:30 p. m.	Geo. McDowell, miner	Caught bet. car and rib.	Body bruised	Hocking Coal Co., Monroe
Aug. 27, 9:30 a. m.	W. Kauslie, miner	Struck by coal	Eye injured	Hocking Coal Co., Monroe
Aug. 30, 8:00 a. m.	C. Terrell, driver	Kicked by mule	Nose broken	Graham Coal Co., Monroe
Sept. 4, 9:30 a. m.	Ray Wilson, miner	Fall of slate	Great toe injured	Hocking Coal Co., Monroe
Sept. 4, 8:30 a. m.	Jake McFarlane, driver	Kicked by mule	Right knee injured	Hocking Coal Co., Monroe
Sept. 4, 9:15 a. m.	Ily Hutton, driver	Caught bet. car and mule	Hand and knee injured	Central Iowa Fuel Co., Lucas
Sept. 13, 3:00 p. m.	Tom Whitmarsh, miner	Struck by pick	Finger injured	Hocking Coal Co., Monroe

FATAL AND SERIOUS ACCIDENTS IN DISTRICT NO. 1
Classified by Cause of Accident and Occupation of Injured, 1924

Causes (U. S. Bureau of Mines Classification)	Fatal				Serious										Total					
	Miner	Miner	Miner	Total	Miner	Driver	Loader	Entryman	Company man	Blacksmith	Fireman	Trippler	Timberman	Spragger		Cueer	Car trimmer	Empty puller	Shot firer	Electrician
Falls of roof (rock, slate, etc.)																				
At working face																				
1 Falls of roof (rock, slate, etc.)																				
In room or chamber																				
Falls of roof (rock, slate, etc.)	2			2	7															7
On road or entry																				
2 Falls of face or pillar coal	1			1																
Fall of dirt or rock																				
Flying coal or sulphur																				
3 Mine cars and locomotives																				
(d) Run over by car																				
(e) Caught between car and rib																				
(f) Caught between car and timber																				
Putting car on track																				
Fall from railroad car																				
6 Explosives																				
Windy shot																				
8 Electricity																				
Contact with electric welder																				
9 Animals																				
Caught in mule harness																				
Mule fell down																				
Kicked by mule																				
Squeezed by mule																				
Shoeing foot																				
Mule ran away																				
12 Fall of person																				
13 Miscellaneous																				
Caught by cage																				
Sparks from fire																				

FATAL AND SERIOUS ACCIDENTS IN DISTRICT NO. 1—Continued
Classified by Cause of Accident and Occupation of Injured, 1924

Causes (U. S. Bureau of Mines Classification)	Fatal			Serious											Total				
	Miner	Miner	Total	Miner	Driver	Leader	Entryman	Company man	Blacksmith	Fireman	Triprider	Timberman	Spragger	Cager		Car trimmer	Empty puller	Shot firer	Electrician
14 Hand tools, etc.																			
Loading coal.....				3															
Loading rock.....					1														
Lifting car on track.....				2															
Struck with sledge.....																			
Using blow torch.....								1											
Cleaning boiler flues.....										1									
Notching timbers with axe.....												1							
Struck by pick.....				2															
Lifting rails.....					1														
Cutting props with axe.....				1															
Totals.....	3		2	56	20	1	1	2	3	1	1	2	1	1	1	1	1	1	1

FATAL AND SERIOUS ACCIDENTS IN DISTRICT NO. 1
Classified by Cause of Accident and Occupation of Injured, 1925

Causes (U. S. Bureau of Mines Classification)	Fatal				Serious							Total	
	Miner	Driver	Timberman	Total	Miner	Driver	Timberman	Topman	Weightman	Chucker	Weightboss		Tracklayer
1 Fall of roof (rock, slate, etc.)													
At working face.....	2			2	6								
In room or chamber.....	1			1	1								
2 Fall of roof (rock, slate, etc.)													
On road or entry.....			2	2							1		
3 Falls of face or pillar coal													
Flying coal, dirt, sulphur, steel, etc., causing eye injuries.....					4			1					
2-a Cage accidents													
Struck by empty cage.....					1								
3 Mine cars and locomotives													
(a) Switching and spragging.....													
(b) Coupling cars.....													
(c) Falling from trip.....													
(d) Run over by car or motor.....		1		1	1								
(e) Caught between car and rib.....					1						1		
(f) Caught between cars.....					1								
Miscellaneous													
Lifting or pushing cars.....					2								
Fall of coal from car.....						1							
4 Explosives and gases													
Overcome by black damp.....					1								
5 Loading cars.....					3					1			
6 Animals													
Mule fell on him.....								1					
7 Fall of person.....									1				
8 Hand tools													
Axes, bars, picks, nails, shovels, spikes, weighing pan, etc.....					4								
Totals.....	3	1	2	6	36	5	1	1	1	1	1	1	

FATAL ACCIDENTS IN DISTRICT NO. 2
1924

Date and Hour of Accident	Name, Age, Nativity and Occupation	Married or Single	No. of Children	Cause of Accident	Employing Company and County
Jan. 5, 3:00 p. m.	Stewart Patterson, 31, Amer, tracklayer	Married	1	Fall of slate	Pershing Coal Co., Marion
Jan. 16, 3:00 p. m.	Orvall Christy, 32, American, miner	Married	3	Fall of coal	Consolidated Coal Co., Monroe
Feb. 14, 2:15 p. m.	Lee Shillings, 22, American, miner	Single	2	Fall of slate	Dunreath Coal Co., Marion
Mar. 12, 2:30 p. m.	A. L. Cahill, 41, American, mine owner	Married	7	Fall of roof	Cahill Coal Co., Van Buren
April 14, 10:30 a. m.	Sam Paigentine, 23, Italian, miner	Single	1	Fall of slate	Pershing Coal Co., Marion
April 24, 9:30 a. m.	C. J. Erickson, 60, Swede, miner	Married	1	Fall of slate	Pershing Coal Co., Marion
May 20, 3:00 p. m.	Axel Bloom, 37, Swede, driver	Single	1	Fall of slate	Pershing Coal Co., Marion
June 15, 10:30 a. m.	James Fox, 65, American, miner	Married	2	Fall of slate	Consolidated Coal Co., Monroe
June 20, 3:30 p. m.	Geo. Jones, —, American, colored, driver	Married	1	Fall of slate	Red Rock Coal Co., Marion
Aug. 20, 3:30 p. m.	Alfonso Williams, 30, colored, driver	Married	1	Caught between cars	Consolidated Coal Co., Monroe
Dec. 8, 8:30 a. m.	Jas. Stevenson, 20, American, miner	Single	1	Fall of slate Dec. 8, 1923 Died May 26, 1924	Pershing Coal Co., Marion

REPORT IOWA MINE INSPECTORS

FATAL ACCIDENTS IN DISTRICT NO. 2
1925

Date and Hour of Accident	Name, Age, Nativity and Occupation	Married or Single	No. of Children	Cause of Death	Employing Company and County
Jan. 17, 10:00 a. m.	John Stacy, 68, English, miner	Married	2	Fell down shaft	Ottumwa Coal Co., Wapello
Jan. 14, 8:30 a. m.	Owen Bringman, 63, Amer., timberman	Married	3	Fall of slate	Consolidated C. C., No. 19, Monroe
Jan. 24, 9:25 a. m.	Matt Teasdale, 45, American, miner	Married	4	Fall of slate	Smoky Hollow Coal Co., No. 10, Monroe
Feb. 23, 9:30 a. m.	Louis Condusso, 32, Italian, miner	Married	2	Fall of slate	Consolidated Indiana C. C., Marion
Sept. 22, 11:20 a. m.	Milo B. McKeever, 42, Amer., miner	Married	1	Struck by bucket falling down shaft	Fairfield Coal Co., Jefferson
Sept. 29, 8:30 a. m.	Edgar West, 49, American, miner	Married	4	Fall of slate	Red Rock Coal Co., Marion
Sept. 30, 9:15 a. m.	Geo. Simpson, 24, Scotch, miner	Married	1	Fall of slate	Consolidated Indiana C. C., Marion
Nov. 4, 12:30 p. m.	Wm. H. Bolton, 22, American, driver	Married	2	Run over by car	W. A. Bolton & Co., Marion

STATISTICS OF IOWA MINING

NON-FATAL ACCIDENTS IN DISTRICT NO. 2, 1924

Date and Hour of Accident	Name and Occupation	Cause of Accident	Nature of Injury	Employing Company and County
Jan. 3, 11:00 a. m.	Wm. Boulger, miner	Blocking car	Mashed hand	Consolidation Coal Co., Monroe
Jan. 7, 8:00 a. m.	Wm. Clark, miner	Fall of slate	Cracked ribs	Consolidation Coal Co., Monroe
Jan. 8, 10:00 a. m.	Wm. Bryson, coupler	Coupling cars	Two fingers mashed	Consolidation Coal Co., Monroe
Jan. 9, 10:00 a. m.	A. Fraxia, miner	Fall of slate	Mashed left hand	Consolidation Coal Co., Monroe
Jan. 9, 10:00 a. m.	John Windgas, timberman	Fall of timbers	Bruised mouth	Consolidation Coal Co., Monroe
Jan. 9, 11:00 a. m.	Spencer Jones, driver	Pushing car on track	Bruised second finger	Consolidation Coal Co., Monroe
Jan. 15, 7:45 a. m.	T. C. Aboey, miner	Car ran over hand	Mashed two fingers	Consolidation Coal Co., Monroe
Jan. 15, 2:00 p. m.	James Brooks, miner	Picking slate	Eye bruised	Consolidation Coal Co., Monroe
Jan. 16, 3:00 p. m.	Clarence Smith, 3rd rail man	Putting down approach	Ran nail in knee cap, inf.	Consolidation Coal Co., Monroe
Jan. 16, 10:00 a. m.	J. E. Burke, miner	Fall of slate	Bruised hips	Consolidation Coal Co., Monroe
Jan. 17, 3:00 p. m.	Frank Catbrodt, entryman	Fall of slate	One rib broken	Equality Coal Co., Mahaska
Jan. 21, 10:30 a. m.	Lewis Reasby, miner	Pushing car	Wrenched back	Consolidation Coal Co., Monroe
Jan. 22, 2:00 p. m.	Oscar Anderson, driver	Coupling cars	Right hand bruised	Consolidation Coal Co., Monroe
Jan. 22, 9:00 a. m.	Dan Waits, miner	Seeing prop	Struck thumb with sledge	Consolidation Coal Co., Monroe
Jan. 23, 9:30 a. m.	Tom Garrington, driver	Caught bet. car and rib	Squeezed through hips	Consolidation Coal Co., Monroe
Jan. 23, 11:30 a. m.	Angelo Peno, timberman	Lifting timber	Back sprained	Consolidation Coal Co., Monroe
Jan. 2, 10:00 a. m.	H. E. Amspach, topman	Cog wheels on crab	Hand cut	Pershing Coal Co., Marion
Jan. 4, 1:15 p. m.	John King, miner	Fall of slate	Leg and back injured	Pershing Coal Co., Marion
Jan. 5, 10:00 a. m.	L. Zouttee, miner	Fall of slate	Left leg injured	Pershing Coal Co., Marion
Jan. 12, 9:00 a. m.	Elmer Pierce, driver	Caught bet. car and rib	Right knee injured	Pershing Coal Co., Marion
Jan. 14, 11:00 a. m.	Earl Kline, miner	Cutting leg holes sulphur	Right eye injured	Pershing Coal Co., Marion
Jan. 16, 10:00 a. m.	Dan Garrington, miner	Cutting, pick glanced	Right eye cut	Pershing Coal Co., Marion
Jan. 17, 3:30 p. m.	L. Pierce, miner	Fall of coal	Knee injured	Pershing Coal Co., Marion
Jan. 18, 9:00 a. m.	John Smead, miner	Sharpening cap	Struck pick in foot	Pershing Coal Co., Marion
Jan. 21, 2:30 p. m.	Dom. Dalerio, miner	Fall of chunk of coal	Thumb split open	Pershing Coal Co., Marion
Jan. 21, 10:00 a. m.	B. F. Jordan, engineer	Bumped knee	Knee injured	Pershing Coal Co., Marion
Jan. 22, 9:00 a. m.	Sam Lapp, trapper	Caught bet. car and rib	Tore ligaments of arm	Pershing Coal Co., Marion
Jan. 25, 1:00 p. m.	A. Graten, Sr., miner	Taking machine down	Foot injured	Pershing Coal Co., Marion
Jan. 28, 10:00 a. m.	F. Ellis, timberman	Fall of coal from car	Right leg injured	Consolidation Coal Co., Monroe
Jan. 28, 9:00 a. m.	W. L. Martin, miner	Fall of slate	Mashed third finger	Consolidation Coal Co., Monroe
Jan. 29, 9:30 a. m.	Ed. Deinhmatt, timberman	Fall of slate	Mashed left hand	Consolidation Coal Co., Monroe
Jan. 29, 9:00 a. m.	A. C. Hamm, miner	Flying coal	Bruised left eye	Consolidation Coal Co., Monroe
Jan. 4, 9:30 a. m.	Alva Gretten, timberman	Fall of slate	Back and hips bruised	Smoky Hollow Coal Co., Monroe
Jan. 7, 10:00 a. m.	Louis Passania, trapper	Run over by trip	Right foot bruised	Maple Coal Co., Monroe
Jan. 8, 10:00 a. m.	Elias Miller, miner	Fall of slate	Head cut and bruised	Maple Coal Co., Monroe
Jan. 10, 9:00 a. m.	C. A. Pettyjohn, entryman	Fall of timber	Left hand bruised	Gold Goose Coal Co., Monroe
Jan. 14, 11:00 a. m.	Lloyd Givin, driver	Struck by sulphur	Eye injured	Maple Coal Co., Monroe
Jan. 16, 10:00 a. m.	Otto Adenite, miner	Loading car	Back sprained	Smoky Hollow Coal Co., Monroe
Jan. 19, 3:30 p. m.	John Fall, driver	Spragging cars	Left hand bruised	Gold Goose Coal Co., Monroe
Jan. 30, 4:00 p. m.	David Crow, tracklayer	Laying track	Hand cut and bruised	Maple Coal Co., Monroe
Feb. 4, 11:00 a. m.	Virgie Spears, loader	Pulling down dirt	Left foot sprained	Consolidated Indiana Coal Co., Marion
Feb. 4, 10:00 a. m.	Walden Baskerville, miner	Fall of coal from car	One toe mashed	Consolidation Coal Co., Monroe
Feb. 4, 3:00 p. m.	Angelo Peno, timberman	Splitting block with axe	Consolidation Coal Co., Monroe	
Feb. 6, 8:00 a. m.	Robert Carey, company man	Caught hand bet. cars	Left hand mashed	Consolidation Coal Co., Monroe
Feb. 6, 3:30 p. m.	J. D. Tucker, miner	Fall of slate	Mashed little finger	Consolidation Coal Co., Monroe
Feb. 6, 10:30 a. m.	Lewis Bedford, driver	Run over by car	Right leg bruised	Consolidation Coal Co., Monroe
Feb. 7, 10:30 a. m.	Victor Anderson, miner	Struck by sulphur	Right eye injured	Consolidation Coal Co., Monroe
Feb. 9, 7:30 a. m.	Andy Rodenberg, company man	Stepped on nail	Bruised foot	Consolidation Coal Co., Monroe
Feb. 13, 1:00 p. m.	Spencer Jones, driver	Flying hand bet. cars	One finger mashed	Consolidation Coal Co., Monroe
Feb. 15, 11:15 a. m.	Pete Alexander, trackman	Prop fall on ankle	Ankle bruised	Consolidation Coal Co., Monroe
Feb. 19, 8:30 a. m.	Angelo Debrecco, miner	Fall of coal	Bruised forehead	Consolidation Coal Co., Monroe
Feb. 19, 1:00 p. m.	Leonard Carter, timberman	Fall of slate	Ankle bones broken	Consolidation Coal Co., Monroe
Feb. 19, 1:30 p. m.	Andy Pinovack, miner	Fall of slate	Wrenched back	Consolidation Coal Co., Monroe
Feb. 19, 1:30 p. m.	Robert Ewing, Jr., driver	Caught bet. car and rib	Bruised through chest	Consolidation Coal Co., Monroe
Feb. 21, 4:30 p. m.	Nathan Harberger, miner	Fall of slate	Wrenched back	Consolidation Coal Co., Monroe
Feb. 25, 10:00 a. m.	Clifton McFall, miner	Fall of slate	Broken back	Equality Coal Co., Mahaska
Feb. 14, 8:00 a. m.	Tudy Paulding, company man	Pulling rails	Two fingers mashed	Gold Goose Coal & Mining Co., Marion
Feb. 15, 9:15 a. m.	John P. Lynch, timberman	Fall of slate	Bruised shoulder	Consolidation Coal Co., Monroe
Feb. 20, 8:00 a. m.	Lewis Phillips, driver	Caught bet. cars	Bruised right leg	Consolidation Coal Co., Monroe
Feb. 20, 12:15 p. m.	Geo. Reavley, miner	Fall of slate	Bruised back and leg	Consolidation Coal Co., Monroe
Feb. 25, 10:00 a. m.	John Smith, timberman	Fall of slate	Bruised right knee	Consolidation Coal Co., Monroe
Feb. 25, 8:00 a. m.	M. A. Hatley, miner	Fall of coal from car	Bruised hips and back	Consolidation Coal Co., Monroe
Feb. 28, 7:00 a. m.	Jas. McGrail, miner	Caught bet. mule and tim	Bruised chest, fract. rib	Consolidation Coal Co., Monroe
Feb. 2, 11:00 a. m.	Ray Worthington, miner	Lifting slate	Hand mashed	Pershing Coal Co., Marion
Feb. 5, 12:30 p. m.	John Harding, timberman	Dropped bar on leg	Left ankle injured	Pershing Coal Co., Marion
Feb. 5, 12:30 p. m.	T. E. Davis, driver	Kicked by mule	Mouth cut, teeth loosened	Pershing Coal Co., Marion
Feb. 14, 11:00 a. m.	Jas. Campbell, driver	Coal fell from car	Left foot injured	Pershing Coal Co., Marion
Feb. 15, 3:20 p. m.	Geo. D. Hunt, miner	Pushing car	Wrenched back	Pershing Coal Co., Marion
Feb. 16, 10:30 a. m.	Henry Haney, miner	Flying coal	Right eye injured	Pershing Coal Co., Marion
Feb. 18, 2:30 p. m.	Vern Shupman, driver	Caught foot in talkchain	Left foot injured	Pershing Coal Co., Marion
Feb. 18, 10:30 a. m.	Jas. Red, nightman	Caught by motor	Right hand injured	Pershing Coal Co., Marion
Feb. 20, 9:30 a. m.	O. J. Erickson, miner	Fall of slate	Cut on face	Pershing Coal Co., Marion
Feb. 20, 9:30 a. m.	J. T. Paulsa, miner	Fall of slate	Left hand injured	Consolidation Coal Co., Monroe
Feb. 22, 2:00 p. m.	Wm. Owens, miner	Pushing car	Hit through chest	Pershing Coal Co., Marion
Feb. 18, 8:30 a. m.	Joe Nicoletto, miner	Fall of coal	Shoulder bruised	Maple Coal Co., Monroe
Mar. 1, 1:00 p. m.	Merle Bath, miner	Flying sulphur	Left eye injured	Gold Goose Coal & Mining Co., Marion
Mar. 3, 3:00 p. m.	Rocco Mediate, miner	Fall of slate	Head cut	Pershing Coal Co., Marion
Mar. 4, 3:40 p. m.	Joe Polito, miner	Fall of slate	Scalp wound	Pershing Coal Co., Marion
Mar. 7, 8:00 a. m.	Frank Blorton, miner	Fall of slate	Hand bruised	Pershing Coal Co., Marion
Mar. 7, 8:00 p. m.	Jas. B. Crawford, miner	Lifting rock	Back wrenched	Pershing Coal Co., Marion
Mar. 8, 9:00 a. m.	Emil Fenaglis, driver	Kicked by mule	Chest injured	Pershing Coal Co., Marion
Mar. 10, 1:00 p. m.	Walter McCauley, miner	Lifting car on cage	Sprained back	Gold Goose Coal & Mining Co., Marion
Mar. 11, 10:00 a. m.	Chas. Angore, dirtman	Fall of slate	Leg bruised	Smoky Hollow Coal Co., Monroe
Mar. 14, 10:00 a. m.	G. Vignaroli, miner	Fall of slate	Shoulder hurt	Pershing Coal Co., Marion
Mar. 15, 1:30 p. m.	Dave Howells, driver	Machine came loose	Right side face injured	Pershing Coal Co., Marion
Mar. 15, 2:00 p. m.	Mike Slachta, driver	Lifting car on track	Back hurt	Pershing Coal Co., Marion
Mar. 15, 1:30 p. m.	Nick Huffman, miner	Driving spikes	Rust flew in eye	Pershing Coal Co., Marion
Mar. 17, 1:00 p. m.	Clyde Brady, miner	Drilling	Wrenched wrist	Pershing Coal Co., Marion

NON-FATAL ACCIDENTS IN DISTRICT NO. 2, 1924—Continued

Date and Hour of Accident	Name and Occupation	Cause of Accident	Nature of Injury	Employing Company and County
Mar. 18, 1:00 p. m.	Otto Pierce, driver	Fall of slate	Cut gash on head	Pershing Coal Co., Marion
Mar. 19, 10:40 a. m.	Hugh Scott, miner	Fall of slate	Back and neck injured	Pershing Coal Co., Marion
Mar. 20, 9:30 p. m.	Earl Parker, miner	Loading coal	Left hand bruised	Pershing Coal Co., Marion
Mar. 20, 9:30 p. m.	Marion Mitchell, driver	Slipped from tailchain	Leg and back injured	Pershing Coal Co., Marion
Mar. 21, 3:30 p. m.	Rocco Mediate, miner	Rock rolled on foot	Foot injured	Pershing Coal Co., Marion
Mar. 21, 10:30 a. m.	Ed. Harding, miner	Flying sulphur	Right eye injured	Pershing Coal Co., Marion
Mar. 21, 10:30 a. m.	Andrew Morgan, timberman	Lifting car on track	Back injured	Smoky Hollow Coal Co., Monroe
Mar. 24, 8:00 p. m.	Ed. Broch, coupler	Jumped off car	Foot broken	Smoky Hollow Coal Co., Monroe
Mar. 25, 1:30 p. m.	Chas. Vickroy, miner	Pushing car	Back injured	Pershing Coal Co., Marion
Mar. 26, 9:00 a. m.	Thos. Braslin, loader	Fall of spar	Eye injured	Consolidated Indiana Coal Co., Marion
Mar. 7, 10:40 a. m.	Tom Pariah, cager	Pulling car	Sprained foot	Consolidation Coal Co., Monroe
Mar. 10, 10:30 a. m.	Howard Merrill, miner	Fall of slate	Back bruised	Consolidation Coal Co., Monroe
Mar. 16, 9:30 a. m.	Arthur Prader, trailer	Caught by motor	Foot bruised	Consolidation Coal Co., Monroe
Mar. 26, 2:30 p. m.	Geo. Foster, miner	Fall of coal	Broken foot	Consolidation Coal Co., Monroe
April 8, 10:00 a. m.	Richard Baker, miner	Fall of slate	Bruised right leg	Consolidation Coal Co., Monroe
April 10, 8:00 p. m.	Geo. Havelock, driver	Caught bet. car and mule	Leg cut and bruised	Smoky Hollow Coal Co., Monroe
April 14, 10:30 a. m.	Sam Piagentine, miner	Fall of slate	Hip injured	Pershing Coal Co., Marion
April 14, 10:30 a. m.	K. Ryerson, miner	Lifting coal	Back wrenched	Pershing Coal Co., Marion
April 16, 9:00 a. m.	Chas. Morris, Jr., miner	Lifting slate	Strained back	Consolidation Coal Co., Monroe
April 17, 9:00 a. m.	F. Pagan, trapper	Spraying cars	Fingers cut and bruised	Pershing Coal Co., Marion
April 24, 9:30 a. m.	C. J. Erickson, miner	Fall of slate	Left leg broken	Pershing Coal Co., Marion
April 24, 8:00 p. m.	Frank Urban, miner	Struck by hammer	Hand mashed	Smoky Hollow Coal Co., Monroe
April 25, 2:30 a. m.	Jas. Light, driver	Lifting car	Back strained	Gold Goose Coal Co., Marion
April 28, 10:45 a. m.	Alfred McKinney, driver	Coupling cars	Finger cut off	Consolidation Coal Co., Monroe
April 29, 11:30 a. m.	Ed. Robinson, driver	Fell from trip	Hip bruised	Consolidation Coal Co., Monroe
April 30, 8:00 p. m.	Frank Yousey, miner	Lifting car	Back sprained	Consolidation Coal Co., Monroe
April 28, 11:00 a. m.	Chas. Kusban, flat trimmer	Jumped off R. R. car	Foot twisted	Consolidated Indiana Coal Co., Marion
April 7, 8:45 p. m.	L. E. Aikeman, company man	Caught bet. cars	Head badly cut	Consolidation Coal Co., Monroe
April 15, 9:00 a. m.	Frank Mitchell, driver	Mule fell down	Left arm wrenched	Consolidation Coal Co., Monroe
April 18, 1:30 p. m.	Elnor Pryor, dirtman	Caught hand bet. cars	Right hand mashed	Consolidation Coal Co., Monroe
April 19, 10:30 a. m.	Leroy Garnett, miner	Loading coal	Finger mashed	Consolidation Coal Co., Monroe
April 19, 1:00 p. m.	Owen Briteman, timberman	Splicing cap	Hand cut	Consolidation Coal Co., Monroe
April 23, 8:30 p. m.	John H. Nichols, motorman	Clothes caught by motor	Broken pelvis bone	Consolidation Coal Co., Monroe
April 23, 9:00 a. m.	Andy Pivovack, miner	Fall of slate	Bruised foot	Consolidation Coal Co., Monroe
April 23, 9:00 a. m.	Chas. Harris, miner	Fall of prop	Bruised left ankle	Consolidation Coal Co., Monroe
April 28, 8:00 p. m.	Hiram Wright, miner	Stepped on nail	Nail in right foot	Consolidation Coal Co., Monroe
April 28, 8:00 p. m.	Arthur Reeves, miner	Fall of coal	One finger mashed	Consolidation Coal Co., Monroe
May 4, 2:15 p. m.	Harry Moore, section hand	Fell from motor car	Left leg broken	Pershing Coal Co., Marion
May 2, 10:00 a. m.	W. J. Pritchard, miner	Fall of coal from car	Right foot injured	Pershing Coal Co., Marion
May 8, 8:30 a. m.	Ed. Fryer, driver	Fall of slate	Face and head cut, hip hurt	Pershing Coal Co., Marion
May 15, 8:30 a. m.	Scott Hetherington, miner	Fall of slate	Head cut, shoulder hurt	Pershing Coal Co., Marion
May 16, 8:30 a. m.	Joe Sedlock, Jr., driver	Fall of slate	Hand mashed	Pershing Coal Co., Marion
May 16, 4:15 p. m.	Geo. Leggett, shot frer	Piece of flying coal	Leg broken	Pershing Coal Co., Marion
May 20, 3:00 p. m.	Sam Goring, driver	Kicked by mule	Left arm injured	Pershing Coal Co., Marion
May 21, 1:00 p. m.	A. Johnson, miner	Pushing empty car	Back sprained	Pershing Coal Co., Marion
May 23, 2:00 p. m.	Richard Barker, miner	Flying sulphur	Eye injured	Smoky Hollow Coal Co., Monroe
May 23, 8:30 p. m.	Frank Hault, driver	Lifting car on track	Left foot bruised	Consolidation Coal Co., Monroe
May 26, 9:00 a. m.	Jas. Kennedy, miner	Coal flew in eye	Left eye injured	Pershing Coal Co., Marion
May 28, 2:00 p. m.	Mike Konovich, miner	Coal flew in eye	Right eye infected	Consolidation Coal Co., Monroe
May 3, 7:30 a. m.	Joe Siarak, loader	Setting machine	Left wrist twisted	Consolidated Indiana Coal Co., Marion
May 16, 3:00 p. m.	Lawrence Patterson, loader	Fall of coal from car	Left arm injured	Consolidated Indiana Coal Co., Marion
May 21, 8:15 a. m.	R. O. Hivers, loader	Fall of slate	Back injured	Consolidated Indiana Coal Co., Marion
May 18, 1:00 p. m.	Herman Masters, miner	Cutting coal	Struck in eye by sulphur	Consolidation Coal Co., Monroe
May 17, 9:00 a. m.	Walter Bowers, miner	Driving rail back	Piece of steel in eye	Consolidation Coal Co., Monroe
June 3, 1:00 p. m.	Wm. Jones, miner	Fall of slate	Contusion of left instep	Consolidation Coal Co., Monroe
June 3, 2:00 p. m.	John McCoy, driver	Thrown from car	Left shoulder strained	Consolidation Coal Co., Monroe
June 3, 1:30 p. m.	Thos. Barker, bratticeman	Fall of slate	Right leg injured	Pershing Coal Co., Marion
June 10, 1:00 p. m.	Chas. Fratun, miner	Lifting rock	Back injured	Pershing Coal Co., Marion
June 25, 11:00 a. m.	Bret Vance, sectionman	Unbolting rock	Left leg injured	Pershing Coal Co., Marion
June 22, 8:00 a. m.	Gas Strum, miner	Fall of slate	Head and arm cut	Smoky Hollow Coal Co., Monroe
June 26, 9:00 a. m.	James Blackwell, miner	Lifting coal	Strained back	Consolidation Coal Co., Monroe
June 10, 9:30 a. m.	Frank Haselbuhn, flat trimmer	Fall of coal from R. E. car	Foot badly mashed	Consolidated Indiana Coal Co., Marion
June 6, 11:30 a. m.	Geo. L. Johnson, trailer	Lifting car	Two ligaments loose in back	Consolidation Coal Co., Monroe
June 19, 10:45 a. m.	Chas. Mitchell, asst. mine mgr.	Rn into by car	Contused left thigh	Consolidation Coal Co., Monroe
June 24, 3:30 p. m.	Wm. F. Craig, timberman	Falling timber	Mashed right foot	Consolidation Coal Co., Monroe
June 27, 1:30 p. m.	Walter Ward, miner	Fall of slate	Left foot bruised	Consolidation Coal Co., Monroe
June 30, 8:00 a. m.	Sam McKelvie, miner	Fall of slate	Left foot bruised	Consolidation Coal Co., Monroe
July 3, 2:00 p. m.	Earl Gray, fireman	Unloading coal	Knee bruised	Equality Coal Co., Mahaska
July 8, 12:00 noon	H. Jamison, miner	Fall of slate	Left leg injured	Pershing Coal Co., Marion
July 10, 10:30 a. m.	Wm. Love, night foreman	Lifting rails	Abdominal sprain	Pershing Coal Co., Marion
July 10, 1:00 p. m.	Chas. Patino, miner	Lifting rock	Strained back	Pershing Coal Co., Marion
July 14, 11:00 a. m.	James Blair, miner	Struck elbow against car	Elbow bruised	Consolidation Coal Co., Monroe
July 14, 3:00 p. m.	Richard Smith, miner	Piece of slate fell on finger	Middle finger injured	Pershing Coal Co., Marion
July 15, 2:00 p. m.	Jas. Montgomery, driver	Caught bet. car and rib	Foot bruised	Pershing Coal Co., Marion
July 19, 8:30 a. m.	Kenneth Clatt, cager	Fall of steel rail	Body bruised	Consolidated Indiana Coal Co., Marion
July 21, 8:30 a. m.	A. J. Red, carpenter	Fall of steel rail	Left foot injured	Pershing Coal Co., Marion
July 21, 9:00 p. m.	Ed. Gaviner, miner	Fall of slate	Leg injured	Consolidation Coal Co., Monroe
July 22, 9:00 a. m.	Frank Zapuder, miner	Fall of coal	Left thigh bruised	Consolidation Coal Co., Monroe
July 29, 5:00 p. m.	Chas. Mitchell, asst. mine mgr.	Rn into by car	Bruised left thigh	Consolidation Coal Co., Monroe
July 29, 3:40 p. m.	Alfonso Williams, driver	Caught bet. car and rib	Bruised hand	Consolidation Coal Co., Monroe
July 29, 10:00 a. m.	J. W. Watkins	Lifting coal	Bruised back and hip	Consolidation Coal Co., Monroe
July 31, 9:30 a. m.	Clark Wilson, miner	Caught by car	Bruised shoulder and hip	Consolidation Coal Co., Monroe
July 31, 10:30 a. m.	Emil Van Eisin, miner	Loading car	Strained side	Consolidation Coal Co., Monroe
July 31, 8:15 a. m.	Grover Nolte, miner	Fall of slate	Forehead cut	Consolidated Indiana Coal Co., Marion
July 3, 8:30 p. m.	J. E. Lake, motorman	Putting car on track	Ligaments of hand torn	Consolidation Coal Co., Monroe
July 7, 2:00 p. m.	Randall Owens, company man	Dropping empties	Strained left arm	Consolidation Coal Co., Monroe
July 7, 1:00 p. m.	Joe Ravera, miner	Piece of sulphur	Left eye injured	Consolidation Coal Co., Monroe
July 7, 9:00 a. m.	Mike Karpan, miner	Pushing car	Bruised chest	Consolidation Coal Co., Monroe
July 10, 2:00 p. m.	Wm. Bryson, trailer	Trolley pole flew off	Eyes badly burned	Consolidation Coal Co., Monroe

NON-FATAL ACCIDENTS IN DISTRICT NO. 2, 1924—Continued

Date and Hour of Accident	Name and Occupation	Cause of Accident	Nature of Injury	Employing Company and County
July 10, 2:00 p. m.	Prosper Heck, oiler	Coupling cars	Hand mashed	Consolidation Coal Co., Monroe
July 10, 8:00 a. m.	John Bellis, miner	Fall of slate	Left arch broken	Consolidation Coal Co., Monroe
July 14, 2:00 p. m.	Dominic Coretti, miner	Pushing loaded car	Back wrenched	Consolidation Coal Co., Monroe
July 14, 7:00 p. m.	Walker Carlson, top man	Falling timber	Mashed great toe	Consolidation Coal Co., Monroe
July 14, 11:00 a. m.	C. H. Smith, miner	Lifting chunk of coal	Wrenched back	Consolidation Coal Co., Monroe
July 15, 2:00 p. m.	Lewis Bedford, driver	Kicked by mule	Right hip bruised	Consolidation Coal Co., Monroe
July 15, 9:30 a. m.	Richard Baker, miner	Mining shot	Coal flew in eye	Consolidation Coal Co., Monroe
July 15, 9:30 a. m.	Antoine Chioti, timberman	Fall of slate	Brained head and chest	Consolidation Coal Co., Monroe
July 16, 11:00 a. m.	Walter Ferguson, miner	Lifting armature	Back strained	Consolidation Coal Co., Monroe
Aug. 1, 2:30 p. m.	Chas. Sampson, electrician	Loading car	Back sprained	Smoky Hollow Coal Co., Monroe
Aug. 2, 2:30 p. m.	D. J. Jones, miner	Fall of slate	Brained head and back	Consolidation Coal Co., Monroe
Aug. 4, 2:30 p. m.	Wm. McGrail, Sr., miner	Sharpening auger	Cut left thumb	Pershing Coal Co., Marion
Aug. 6, 2:30 p. m.	Chas. Vickroy, miner	Caught bet. mule and car	Arm broken	Pershing Coal Co., Marion
Aug. 6, 12:30 a. m.	John Balotto, night man	Fall of slate	Collar bone broken	Smoky Hollow Coal Co., Monroe
Aug. 7, 10:00 a. m.	John Anderson, miner	Caught bet. car and roof	Shoulder bruised	Consolidation Coal Co., Monroe
Aug. 8, 10:00 a. m.	Ivan Lewis, driver	Dropped timber	Large toe mashed	Pershing Coal Co., Marion
Aug. 9, 9:00 a. m.	Hugh Davies, topman	Fall of slate	Left foot bruised	Consolidation Coal Co., Monroe
Aug. 11, 3:00 p. m.	Joe Latris, miner	Lifting coal	Brained stomach	Consolidation Coal Co., Monroe
Aug. 12, 8:30 a. m.	John Karpan, miner	Pushing empty car	Left knee injured	Consolidation Coal Co., Marion
Aug. 15, 3:15 p. m.	L. A. Robinson, miner	Caught bet. cars	Brained side	Consolidation Coal Co., Marion
Aug. 19, 1:30 p. m.	Ray Eason, digger	Fall of slate	Left leg bruised	Pershing Coal Co., Marion
Aug. 20, 3:00 p. m.	Alfonso Williams, driver	Caught bet. cars	Foot bruised	Consolidation Coal Co., Monroe
Aug. 20, 12:30 a. m.	Ray Moss, night man	Lifting rail	Twisted knee cap	Pershing Coal Co., Marion
Aug. 22, 10:00 a. m.	John Smith, timberman	Lifting slate	Back sprained	Consolidation Coal Co., Monroe
Aug. 22, 9:30 a. m.	Rocco Romello, miner	Fall of slate	Ribs bruised	Smoky Hollow Coal Co., Monroe
Aug. 28, 7:00 a. m.	J. A. McCaskey, miner	Cutting steel from armature	Right eye injured	Consolidation Coal Co., Monroe
Aug. 29, 10:00 a. m.	Chas. Gardner, electrician	Sulphur in eye	Strained back	Consolidation Coal Co., Monroe
Aug. 27, 1:00 p. m.	Frank Essinger, miner	Putting car on cage	Leg wrenched	Consolidated Indiana Coal Co., Marion
Aug. 6, 10:00 a. m.	Kenneth Clatt, eng.	Fall of slate	Body bruised	Consolidated Indiana Coal Co., Marion
Aug. 11, 8:15 a. m.	Chas. Perry, roustabout	Lifting car on track	Mashed thumb and finger	Consolidated Indiana Coal Co., Marion
Aug. 13, 11:15 a. m.	Wm. Thomas, loader	Fall of coal	Brained ribs	Simpson Bros. Coal Co., Wapello
Aug. 15, 9:40 a. m.	Wm. Boden, driver	Loading coal on car	Left eye injured	Consolidated Indiana Coal Co., Marion
Aug. 19, 10:15 a. m.	Thomas Tones, miner	Kicked by mule	Right foot mashed	Consolidated Indiana Coal Co., Marion
Aug. 25, 3:00 p. m.	John Peterson, timberman	Lifting slate	Stomach bruised	Consolidated Indiana Coal Co., Marion
Aug. 29, 10:00 a. m.	John Cetina, loader	Caught bet. mule and car	Rupture	Pershing Coal Co., Marion
Aug. 30, 9:30 a. m.	Chas. Logue, driver	Fall of coal	Legs injured	Pershing Coal Co., Marion
Sept. 2, 2:50 p. m.	Dow Wolfe, miner	Caught bet. mule and car	Second finger bruised	Pershing Coal Co., Marion
Sept. 8, 9:00 a. m.	A. Rbbelhart, miner	Fall of slate		
Sept. 8, 9:00 a. m.	C. D. Rose, night man	Falling timbers	Right foot injured	Pershing Coal Co., Marion
Sept. 9, 10:00 a. m.	W. L. Carrington, miner	Fall of slate	One finger mashed	Pershing Coal Co., Marion
Sept. 9, 1:00 p. m.	John Key, miner	Fall of slate	Foot injured	Pershing Coal Co., Marion
Sept. 11, 1:30 p. m.	Wm. E. Owens, miner	Loading coal	Finger mashed	Pershing Coal Co., Marion
Sept. 12, 1:00 p. m.	Jas. Reid, motorman	Fell on nail	Right knee injured	Pershing Coal Co., Marion
Sept. 12, 9:00 a. m.	Willie Ledley, driver	Struck foot on tie	Right foot injured	Pershing Coal Co., Marion
Sept. 12, 2:00 p. m.	A. Piagentine, miner	Cutting coal	Left eye injured	Pershing Coal Co., Marion
Sept. 19, 7:30 a. m.	A. Pragentine, miner	Fall of slate	Right leg injured	Pershing Coal Co., Marion
Sept. 22, 8:00 a. m.	Louis Jones, miner	Fall of slate	Left shoulder bruised	Pershing Coal Co., Marion
Sept. 23, 3:00 p. m.	Jack Sparks, trailer	Struck by coal	Finger hurt	Pershing Coal Co., Marion
Sept. 24, 2:00 p. m.	Worth McGrader, miner	Coal fell from car	Foot bruised	Pershing Coal Co., Marion
Sept. 24, 7:30 a. m.	Harry Mavin, track layer	Kicked by mule	Left leg injured	Pershing Coal Co., Marion
Sept. 25, 7:30 a. m.	E. Cross, miner	Fall of slate	Injured head and hips	Pershing Coal Co., Marion
Sept. 27, 7:30 a. m.	Carl Coughlin, driver	Car jumped track	First finger bruised	Pershing Coal Co., Marion
Sept. 18, 9:00 a. m.	Geo. Nowatine, timberman	Pulling down slate	Left foot bruised	Consolidation Coal Co., Monroe
Sept. 11, 10:00 a. m.	Robt. Woods, miner	Fall of slate	Brained back	Consolidation Coal Co., Monroe
Sept. 12, 10:00 a. m.	Earl Jones, driver	Struck by sulphur	Brained eye	Smoky Hollow Coal Co., Monroe
Sept. 5, 10:00 a. m.	Wm. Thomas, loader	Pulling down coal	Thumb mashed	Consolidated Indiana Coal Co., Marion
Sept. 20, 2:00 p. m.	Clarence Lee, driver	Cutting coal	Left eye injured	Consolidated Indiana Coal Co., Marion
Sept. 29, 1:00 p. m.	Tom Jamieson, driver	Car jumped track	Knee bruised	Smoky Hollow Coal Co., Monroe
Sept. 6, 11:00 a. m.	Gus Abrassart, miner	Fall of slate	Back bruised	Consolidation Coal Co., Monroe
Sept. 3, 7:30 a. m.	Julian Jwanoski, miner	Lifting coal	Strained back	Consolidation Coal Co., Monroe
Sept. 9, 10:30 a. m.	Ben Nichols, miner	Flying coal	Brained left eye	Consolidation Coal Co., Monroe
Sept. 10, 7:15 a. m.	Clem Wilson, miner	Fall of slate	Head bruised	Consolidation Coal Co., Monroe
Sept. 23, 1:00 p. m.	Willie Farrom, coupler	Coupling cars	Hand injured	Consolidation Coal Co., Monroe
Sept. 23, 3:30 p. m.	John Windgas, timberman	Lifting rail	Mashed third finger	Consolidation Coal Co., Monroe
Sept. 26, 3:00 p. m.	Clem Wilson, miner	Chunking car	Brained knuckles	Consolidation Coal Co., Monroe
Sept. 26, 10:00 a. m.	E. H. Martin, miner	Falling coal	Finger mashed	Consolidation Coal Co., Monroe
Sept. 26, 9:00 a. m.	Joe Van Elsin, miner	Fall of slate	Brained left arm	Pershing Coal Co., Marion
Sept. 29, 9:00 a. m.	Clarence Lapp, miner	Falling coal	Left thumb mashed	Pershing Coal Co., Marion
Sept. 30, 10:00 a. m.	Steve Watkins, Jr., miner	Falling coal	Back injured	Consolidation Coal Co., Monroe
Sept. 25, 10:00 a. m.	Arcbie Carpenter, miner	Fall of slate	Hand mashed	Consolidation Coal Co., Monroe
Sept. 25, 2:30 p. m.	Simon Brandt, miner	Fall of slate	Brained back	Consolidation Coal Co., Monroe
Sept. 19, 2:00 p. m.	John C. Papsen, miner	Lifting coal	Strained back	Consolidation Coal Co., Monroe
Sept. 17, 9:30 a. m.	John Hirschok, miner	Fall of slate	Brained back	Consolidation Coal Co., Monroe
Sept. 6, 8:00 a. m.	W. L. Smith, miner	Fall of slate	Brained right foot	Consolidation Coal Co., Monroe
Sept. 15, 11:00 a. m.	Ernest Fuson, helper	Foot caught bet. cars	Brained right foot	Consolidation Coal Co., Monroe
Sept. 16, 9:00 a. m.	Wm. Gibbons, driver	Caught bet. cars	Brained left leg	Consolidation Coal Co., Monroe
Sept. 16, 11:00 a. m.	John Nichols, miner	Fall of slate	Head badly cut	Consolidation Coal Co., Monroe
Oct. 1, 2:30 p. m.	Richard Smith, miner	Fall of slate	Middle finger mashed	Pershing Coal Co., Marion
Oct. 1, 8:00 a. m.	Chas. Ferree, miner	Loading coal	One finger mashed	Pershing Coal Co., Marion
Oct. 1, 11:00 a. m.	George Bridges, miner	Breaking coal	Mashed finger	Pershing Coal Co., Marion
Oct. 2, 12:00 noon	George Leair, miner	Gabbling slate	Back strained	Pershing Coal Co., Marion
Oct. 3, 10:30 a. m.	H. C. Freeman, miner	Taking up bottom	Left eye injured	Pershing Coal Co., Marion
Oct. 3, 3:00 p. m.	Geo. Romanko, miner	Lifting rock	Ruptured	Pershing Coal Co., Marion
Oct. 8, 2:00 p. m.	Sam Lapp, miner	Lifting coal	Left hip sprained	Pershing Coal Co., Marion
Oct. 16, 9:00 a. m.	Oscar Holmes, miner	Fall of slate	Wrist injured	Pershing Coal Co., Marion
Oct. 28, 10:30 a. m.	Ed. Evans, miner	Using pick	Brained hand	Pershing Coal Co., Marion
Oct. 28, 2:30 a. m.	Sam Lapp, miner	Loading coal	Mashed finger	Pershing Coal Co., Marion

NON-FATAL ACCIDENTS IN DISTRICT NO. 2, 1924—Continued

Date and Hour of Accident	Name and Occupation	Cause of Accident	Nature of Injury	Employing Company and County
Oct. 28, 8:30 a. m.	Joe Sedlock, Jr., driver	Kicked by mule	Hand bruised	Pershing Coal Co., Marion
Oct. 22, 9:30 a. m.	Jack Vidar, miner	Lifting timbers	Wrenched back	Consolidation Coal Co., Monroe
Oct. 23, 1:00 p. m.	Walter Thomas, miner	Pushing car	Wrenched back	Consolidation Coal Co., Monroe
Oct. 24, 10:50 a. m.	A. I. Ball, driver	Coal flew in eye	Bruised eye	Consolidation Coal Co., Monroe
Oct. 3, 8:30 a. m.	John Olson, loader	Fall of slate	Wrenched back	Consolidation Coal Co., Monroe
Oct. 1, 2:30 p. m.	Fernal Dalley, timberman	Caught bet. car and rib	Bruised left leg	Consolidated Indiana Coal Co., Marion
Oct. 2, 1:00 p. m.	Albert Clover, miner	Fall of coal	Bruised right leg	Consolidation Coal Co., Monroe
Oct. 15, 1:30 p. m.	Joe Raver, miner	Fall of slate	Bruised shoulder	Consolidation Coal Co., Monroe
Oct. 17, 10:00 a. m.	Archie Davis, miner	Struck finger with sledge	Mashed first finger	Consolidation Coal Co., Monroe
Oct. 17, 10:30 a. m.	Ray Evans, driver	Fall of coal from car	Cut on head	Consolidation Coal Co., Monroe
Oct. 21, 8:00 a. m.	A. Gustafson, miner	Fall of slate	Left foot bruised	Consolidation Coal Co., Monroe
Oct. 21, 8:00 p. m.	Mike Mallick, miner	Fall of slate	Bruised right shoulder	Consolidation Coal Co., Monroe
Oct. 24, 3:00 p. m.	Albert Johnson, loader	Loading coal	Right thumb mashed	Consolidation Coal Co., Monroe
Oct. 29, 2:00 p. m.	Sam Rhodes, miner	Piece of steel from rail	Left eye bruised	Consolidated Indiana Coal Co., Marion
Oct. 24, 2:00 p. m.	Chas. Johnson, miner	Prop fell on leg	Bruised right leg	Consolidation Coal Co., Monroe
Nov. 5, 11:30 a. m.	C. R. Smith, driver	Lifting car on track	Wrenched back	Consolidated Indiana Coal Co., Marion
Nov. 6, 10:00 a. m.	Geo. Williams, miner	Car jumped track	Right heel mashed	Smoky Hollow Coal Co., Monroe
Nov. 7, 10:00 a. m.	Geo. Leggett, shot firer	Loading car	Two fingers bruised	Consolidated Indiana Coal Co., Marion
Nov. 7, 3:00 p. m.	Geo. Leggett, shot firer	Fall of slate	Left foot injured	Smoky Hollow Coal Co., Monroe
Nov. 10, 10:30 a. m.	Melvin Robinson, miner	Slipped and fell	Right knee injured	Pershing Coal Co., Marion
Nov. 10, 9:30 a. m.	Earl Coops, driver	Struck by pick	Left foot injured	Pershing Coal Co., Marion
Nov. 12, 2:30 p. m.	Gary Craven, miner	Caught by car	Left leg injured	Pershing Coal Co., Marion
Nov. 13, 12:00 p. m.	O. Ferre, miner	Fall of coal from car	Fractured right ankle	Consolidation Coal Co., Monroe
Nov. 15, 3:30 p. m.	A. Zanolli, miner	Fall of coal from car	Mashed two fingers	Consolidation Coal Co., Monroe
Nov. 15, 9:00 a. m.	Jas. Kennedy, miner	Fall of slate	Left hip injured	Pershing Coal Co., Marion
Nov. 17, 8:15 a. m.	H. C. Freeman, miner	Flying coal	Left eye injured	Pershing Coal Co., Marion
Nov. 18, 1:00 p. m.	Gary Heston, driver	Spragging car	Right hand injured	Pershing Coal Co., Marion
Nov. 20, 10:30 a. m.	John Porter, miner	Caught bet. cars	Left finger injured	Pershing Coal Co., Marion
Nov. 17, 9:00 a. m.	Ona Davis, loader	Flying coal	Left eye injured	Pershing Coal Co., Marion
Nov. 14, 2:00 p. m.	Steve Morris, timberman	Caught bet. cars	Right hand mashed	Pershing Coal Co., Marion
Nov. 19, 3:00 p. m.	Francis Silk, driver	Kicked by sulphur	Right eye injured	Consolidated Indiana Coal Co., Marion
Nov. 21, 10:45 a. m.	Raymond Stokes, trapper	Kicked by mule	Bruised left leg	Consolidation Coal Co., Monroe
Nov. 23, 9:00 a. m.	Raymond Stokes, trapper	Caught by car	Right hand mashed	Consolidation Coal Co., Monroe
Nov. 24, 4:00 p. m.	Mack Coleman, loader	Lifting coal	Right hand mashed	Consolidation Coal Co., Monroe
Nov. 25, 1:30 p. m.	Arthur Orcutt, loader	Pushing car	Ruptured	Consolidated Indiana Coal Co., Marion
Nov. 25, 9:00 a. m.	Geo. Nowatine, timberman	Struck by sulphur	Sprained wrist	Pershing Coal Co., Marion
Nov. 25, 12:15 p. m.	Sam Connor, miner	Making timbers	Left eye injured	Consolidated Indiana Coal Co., Marion
Nov. 25, 1:00 p. m.	John Roeker, driver	Fall of slate	Cut finger on left hand	Consolidation Coal Co., Monroe
Nov. 26, 10:00 a. m.	John Croton, miner	Struck in eye with coal	Broken leg	Red Rock Coal Co., Marion
Nov. 28, 9:00 a. m.	Emery Hill, miner	Struck by coal	Left eye injured	Consolidation Coal Co., Monroe
		Fall of slate	Head and back injured	Pershing Coal Co., Marion
Nov. 25, 10:00 a. m.	Walter Rowley, driver	Car jumped track	Chest bruised	Smoky Hollow Coal Co., Monroe
Nov. 12, 10:00 a. m.	R. Coope, loader	Lifting coal	Severe strain	Consolidated Indiana Coal Co., Marion
Nov. 14, 8:00 a. m.	Jas. Slack, loader	Shovelling coal	Wrenched back	Consolidated Indiana Coal Co., Marion
Nov. 14, 10:00 a. m.	Francis Bateman, driver	Fall of slate	Head and foot cut	Smoky Hollow Coal Co., Monroe
Nov. 14, 10:00 a. m.	Wm. Morgan, driver	Run over by car	Shoulder and chest bruised	Smoky Hollow Coal Co., Monroe
Nov. 5, 1:00 p. m.	Chester Person, driver	Coupling cars	Second finger mashed	Consolidation Coal Co., Monroe
Nov. 5, 2:30 p. m.	Julius Lambie, miner	Struck by mule	Second finger injured	Consolidation Coal Co., Monroe
Nov. 6, 12:30 p. m.	Wm. Harger, miner	Spragging car	Finger mashed	Consolidation Coal Co., Monroe
Nov. 7, 8:45 a. m.	Chas. C. Adell, miner	Fall of slate	Bruised back and leg	Consolidation Coal Co., Monroe
Nov. 6, 10:00 a. m.	A. B. Ball, miner	Fall of coal	Foot bruised	Consolidation Coal Co., Monroe
Nov. 20, 3:00 p. m.	Ed. Bell, miner	Lifting car	Strained back	Consolidation Coal Co., Monroe
Nov. 18, 3:30 p. m.	L. E. Aikeman, trailer	Caught bet. cars	Broken pelvis bone, hip dislocated	Consolidation Coal Co., Monroe
Dec. 2, 9:00 a. m.	Ray Garrington, Sr., miner	Fall of props	Instep foot injured	Pershing Coal Co., Marion
Dec. 7, 9:30 p. m.	Natale Schimmlazi, nightman	Lifting timbers	Left shoulder injured	Pershing Coal Co., Marion
Dec. 7, 9:00 p. m.	Alfred Johnson, timberman	Lifting timbers	Back strained	Consolidation Coal Co., Monroe
Dec. 9, 10:00 a. m.	John X. Togo, miner	Lifting rail	Back strained	Consolidation Coal Co., Monroe
Dec. 12, 12:30 p. m.	B. J. Huff, miner	Cutting coal	Eye injured by coal	Pershing Coal Co., Marion
Dec. 15, 1:30 p. m.	Irwin Cooper, construction work	Struck by 2x1	Left arm bruised	Consolidation Coal Co., Monroe
Dec. 15, 9:30 a. m.	W. H. Brown, miner	Fall of slate	Bruised back	Consolidation Coal Co., Monroe
Dec. 17, 9:00 a. m.	H. A. Neifert, miner	Lifting slate	Severe strain of rectum	Pershing Coal Co., Marion
Dec. 19, 8:30 a. m.	Ed. Robinson, driver	Car ran over foot	Bruised instep	Consolidation Coal Co., Monroe
Dec. 20, 9:00 a. m.	Burdette Brown, miner	Coupling cars	Middle finger mashed	Consolidation Coal Co., Monroe
Dec. 20, 9:30 a. m.	Alfred Mackinney, driver	Struck by mule	Left eye bruised	Consolidation Coal Co., Monroe
Dec. 23, 6:30 a. m.	Chas. Dalton, miner	Moving coal	Left forefinger mashed	Pershing Coal Co., Marion
Dec. 23, 11:00 a. m.	W. E. Owens, miner	Glennig slate	Left middle finger mashed	Pershing Coal Co., Marion
Dec. 24, 11:00 a. m.	Thos. Coghlan, miner	Foot caught by car	Right foot injured	Pershing Coal Co., Marion
Dec. 26, 8:15 a. m.	Henry Smith, miner	Fall of slate	Right hand injured	Pershing Coal Co., Marion
Dec. 29, 5:30 a. m.	Lloyd Davis, engineer	Struck by crank, Corliss engine	Left arm and elbow injured	Pershing Coal Co., Marion
Dec. 31, 3:00 p. m.	H. O. Bacon, miner	Drilling hole	Sulphur injured eye	Smoky Hollow Coal Co., Monroe
Dec. 2, 2:00 p. m.	Clyde Crawford, loader	Mining coal	Coal flew in right eye	Consolidated Indiana Coal Co., Marion
Dec. 5, 11:30 a. m.	Henry Turner, loader	Struck by coal	Left eye injured	Consolidated Indiana Coal Co., Marion
Dec. 10, 11:00 a. m.	David Johnson, loader	Lifting slate	Back sprained	Consolidated Indiana Coal Co., Marion
Dec. 15, 2:00 p. m.	Archie Jones, docker	Jumped from flat car	Injured heels	Consolidated Indiana Coal Co., Marion
Dec. 22, 10:00 a. m.	Richard Coope, loader	Fall of slate	Second finger mashed	Consolidated Indiana Coal Co., Marion
Dec. 5, 10:00 a. m.	Leonard Carter, timberman	Fall of slate	Bruised arm and hand	Consolidation Coal Co., Monroe
Dec. 5, 3:30 p. m.	Ona Hogg, miner	Flying sulphur	Bruised right eye	Consolidation Coal Co., Monroe
Dec. 12, 3:30 p. m.	Andy Smith, miner	Struck against iron rail	Bruised right knee	Consolidation Coal Co., Monroe
Dec. 19, 9:00 a. m.	Leamon Smith, miner	Struck against rib	Bruised left knee	Consolidation Coal Co., Monroe
Dec. 24, 2:30 p. m.	Morgan Harris, coupler	Coupling cars	Two fingers mashed	Consolidation Coal Co., Monroe
Dec. 29, 9:30 a. m.	John Denchok, miner	Lifting car	Back strained	Consolidation Coal Co., Monroe
Dec. 5, 1:30 p. m.	Sam Harris, timberman	Fall of timber	Cracked skull	Consolidation Coal Co., Monroe
Dec. 2, 11:00 a. m.	John Hagg, driver	Car jumped track	Foot caught by, sprained	Black Diamond Mine, Marion
Dec. 15, 11:00 a. m.	Thos. Wilkinson, miner	Lifting slate	Two toes mashed	Black Diamond Mine, Marion
Dec. 19, 4:30 p. m.	Sam Bradford, shot firer	Premature shot	Right arm broken	Equality Coal Co., Mahaska
Dec. 20, 3:45 p. m.	Wm. Warner, trapper	Run over by car	Foot broken	Black Diamond Mine, Marion

NON-FATAL ACCIDENTS IN DISTRICT NO. 2, 1925

Date and Hour of Accident	Name and Occupation	Cause of Accident	Nature of Injury	Employing Company and County
Jan. 1, 9:00 a. m.	Taimo J. Mitter, roustabout.	Bar fell on foot.	Great toe mashed.	Consolidated Indiana Coal Co., Marion
Jan. 3, 4:00 p. m.	Aubrey Moore, miner.	Caught by chunk of coal.	Little finger mashed.	Consolidation Coal Co., Monroe
Jan. 8, 10:00 a. m.	Gus Saylor, loader.	Fall of coal.	Left foot mashed.	Consolidated Indiana Coal Co., Marion
Jan. 8, 3:00 p. m.	A. L. Maddy, miner.	Fall of coal.	Strained wrist.	Consolidated Indiana Coal Co., Marion
Jan. 8, 2:00 p. m.	Andy Pincovack, miner.	Hit by pick while mining.	Shoulder and chest bruised.	Consolidated Indiana Coal Co., Marion
Jan. 9, 11:30 a. m.	W. A. McLaughlin, miner.	Fall of slate.	Ruptured.	Consolidated Indiana Coal Co., Marion
Jan. 10, 10:00 a. m.	Worth Kirfman, loader.	Lifting slate.	Shoulder bruised.	Consolidation Coal Co., Monroe
Jan. 14, 8:30 a. m.	Bringman Owen, timberman.	Fall of slate.	Broken back and leg.	Consolidation Coal Co., Monroe
Jan. 15, 10:30 a. m.	Ollie Ferres, miner.	Fall of slate.	Right arm injured.	Pershing Coal Co., Marion
Jan. 20, 8:00 a. m.	J. Kridelbaugh, miner.	Caught by coal.	One finger mashed.	Pershing Coal Co., Marion
Jan. 21, 7:30 a. m.	John Urban, miner.	Fall of slate.	Foot bruised.	Smoky Hollow Coal Co., Monroe
Jan. 22, 7:30 a. m.	Ed. Bridges, miner.	Mule ran away.	Bruised back and shoulder.	Consolidation Coal Co., Monroe
Jan. 28, 7:30 a. m.	Lloyd Morgan, timberman.	Fall of slate.	Leg bruised.	Smoky Hollow Coal Co., Monroe
Jan. 29, 7:30 a. m.	Wm. Wilson, miner.	Fall of slate.	Knee injured.	Smoky Hollow Coal Co., Monroe
Jan. 29, 12:30 p. m.	Wm. Zaring, miner.	Fall of slate.	Head and side bruised.	Consolidation Coal Co., Monroe
Feb. 2, 10:00 a. m.	Amos Vickroy, miner.	Caught bet. car and coal.	Hand mashed.	Pershing Coal Co., Marion
Feb. 4, 2:00 p. m.	T. T. Benbone, miner.	Cutting coal.	Sulphur in eye.	Pershing Coal Co., Marion
Feb. 6, 7:45 a. m.	Dan Williamson, miner.	Loading car.	Strained self.	Pershing Coal Co., Marion
Feb. 5, 10:45 a. m.	Dan Williamson, Sr., miner.	Fall of slate.	Back injured.	Pershing Coal Co., Marion
Feb. 6, 7:30 a. m.	Wm. Jones, driver.	Caught bet. timber and car.	Leg bruised.	Consolidated Indiana Coal Co., Marion
Feb. 7, 7:30 a. m.	David Smith, driver.	Lifting coal.	Ruptured.	Consolidated Indiana Coal Co., Marion
Feb. 7, 12:30 p. m.	Justice Brown, miner.	Lifting coal.	Out in palm of hand.	Smoky Hollow Coal Co., Monroe
Feb. 10, 12:00 noon	Ray Vanderhoist, loader.	Fall of coal.	Leg bruised.	Consolidated Indiana Coal Co., Marion
Feb. 11, 7:30 a. m.	James Bates, driver.	Car jumped track.	Right leg bruised.	Gold Goose Coal & Mining Co., Marion
Feb. 12, 7:35 a. m.	Marion F. Mitchell, driver.	Caught bet. car and rib.	Finger mashed.	Consolidation Coal Co., Monroe
Feb. 15, 7:30 a. m.	Arthur Carter, miner.	Lifting car and tim.	Thumb mashed.	Pershing Coal Co., Marion
Feb. 18, 7:30 a. m.	Wm. Gibbons, driver.	Squeezed by mule.	Strained right arm.	Consolidation Coal Co., Monroe
Feb. 21, 10:00 a. m.	Clyde Crawford, loader.	Struck by coal.	Eye injured.	Consolidated Indiana Coal Co., Marion
Feb. 25, 2:00 p. m.	W. G. Jones, miner.	Fall of chunk of coal.	Foot mashed.	Consolidated Indiana Coal Co., Marion
Mar. 2, 10:00 a. m.	Richard Olson, loader.	Struck by coal.	Hand injured.	Pershing Coal Co., Marion
Mar. 2, 3:00 p. m.	E. W. Pierce, driver.	Caught in trapdoor.	Foot bruised.	Consolidated Indiana Coal Co., Marion
Mar. 2, 3:00 a. m.	Walter Roberts, miner.	Struck by coal.	Bruised leg.	Consolidation Coal Co., Monroe
Mar. 4, 3:00 p. m.	Martin Wood, loader.	Struck by sulphur.	Eye injured.	Consolidation Coal Co., Monroe
Mar. 5, 11:00 a. m.	Wm. Thomas, loader.	Caught by coal.	Two fingers mashed.	Consolidated Indiana Coal Co., Marion
Mar. 7, 11:00 a. m.	O. J. Doud, loader.	Lifting coal.	Sprained left side.	Consolidated Indiana Coal Co., Marion
Mar. 9, 9:30 a. m.	Logan Hanshaw, miner.	Fall of slate.	Leg broken.	Consolidated Indiana Coal Co., Marion
Mar. 13, 3:00 p. m.	Roy Kerr, miner.	Lifting coal.	Strained thru stomach.	Wm. McIntosh Coal Co., Wapello
Mar. 17, 1:30 p. m.	Doc. Prentice, timberman.	Fall of slate.	Elbow mashed.	Pershing Coal Co., Marion
Mar. 17, 8:30 a. m.	H. W. Miller, driver.	Squeezed by mule.	Ribs broken.	Consolidation Coal Co., Monroe
Mar. 19, 8:00 a. m.	Frank Kellogg, miner.	Fall of slate.	Back and knee injured.	Consolidation Coal Co., Monroe
Mar. 20, 12:00 noon	J. M. Brady, miner.	Lifting slate.	Little finger mashed.	Pershing Coal Co., Marion
Mar. 20, 2:00 p. m.	John King, miner.	Slate flew in eye.	Right eye injured.	Pershing Coal Co., Marion
Mar. 22, 11:00 a. m.	J. L. Williams, miner.	Fall of coal.	Big toe mashed.	Consolidation Coal Co., Monroe
Mar. 25, 10:00 a. m.	Lawrence Carter, dirtman.	Car ran over foot.	Foot bruised.	Consolidation Coal Co., Monroe
Mar. 23, 8:30 a. m.	Carl Chidester, loader.	Pushing car.	Back wrenched.	Consolidated Indiana Coal Co., Marion
Mar. 26, 1:00 p. m.	C. C. Crawford, loader.	Struck by sulphur.	Eye injured.	Consolidated Indiana Coal Co., Marion
Mar. 31, 10:00 a. m.	H. A. Niefert, miner.	Fall of slate.	Head and back injured.	Pershing Coal Co., Marion
Mar. 31, 11:00 a. m.	Robert Cunion, loader.	Fall of coal.	Hand bruised.	Consolidated Indiana Coal Co., Marion
Mar. 31, 3:00 p. m.	Claude Hopkin, loader.	Struck by sulphur.	Eye injured.	Consolidated Indiana Coal Co., Marion
April 2, 11:00 a. m.	James Kennedy, miner.	Fall of slate.	Leg broken.	Smoky Hollow Coal Co., Monroe
April 2, 7:30 a. m.	Don Cerretti, miner.	Lifting coal.	Back strained.	Consolidation Coal Co., Monroe
April 3, 8:30 a. m.	Geo. Leair, miner.	Fall of slate.	Back and hips injured.	Pershing Coal Co., Marion
April 4, 1:00 p. m.	Monroe Doty, loader.	Fall of slate.	Arm bruised.	Consolidated Indiana Coal Co., Marion
April 6, 7:30 a. m.	C. H. Ross, miner.	Fell off keg.	Back hurt.	Consolidation Coal Co., Monroe
April 6, 7:30 a. m.	Jake Brown, Jr., miner.	Hit head against roof.	Head bruised.	Consolidation Coal Co., Monroe
April 8, 7:30 p. m.	John Wingas, nightman.	Fell down.	Twisted ankle.	Consolidation Coal Co., Monroe
April 9, 7:30 a. m.	Bapt. Pezzetti, loader.	Lifting coal.	Back strained.	Consolidated Indiana Coal Co., Marion
April 9, 11:00 a. m.	Jac. Slack, loader.	Fall of coal.	Hand injured.	Consolidated Indiana Coal Co., Marion
April 9, 10:00 a. m.	John Pregar, Jr., miner.	Fall of slate.	Right leg injured.	Pershing Coal Co., Marion
April 9, 7:20 a. m.	Chester Penson, driver.	Caught by ear.	Foot bruised.	Consolidation Coal Co., Monroe
April 10, 8:45 p. m.	Grover Nolte, roustabout.	Chocking car.	Check cut.	Consolidated Indiana Coal Co., Marion
April 10, 10:00 a. m.	Dewey Stewart, laborer.	Struck by sulphur.	Eye injured.	Consolidated Indiana Coal Co., Marion
April 10, 7:30 a. m.	Frank Antonosky, miner.	Fall of coal.	Finger mashed.	Consolidation Coal Co., Monroe
April 6, 11:00 a. m.	John Chamberlain, miner.	Fall of slate.	Smoky Hollow Coal Co., Monroe	
April 13, 11:00 a. m.	E. Ward, loader.	Fall of slate.	Foot bruised.	Consolidated Indiana Coal Co., Marion
April 13, 1:20 p. m.	Chas. Eksell, loader.	Fall of slate.	Head and back hurt.	Consolidated Indiana Coal Co., Marion
April 15, 8:00 a. m.	Edwin Jeffries, loader.	Fall of slate.	Right shoulder injured.	Consolidated Indiana Coal Co., Marion
April 14, 10:00 a. m.	Mike Hudan, miner.	Lifting coal.	Back strained.	Gold Goose Coal & Mining Co., Marion
April 15, 2:00 p. m.	John Thomas, driver.	Caught by car.	Finger cut off.	Smoky Hollow Coal Co., Monroe
April 15, 9:00 a. m.	David Jefferson, loader.	Fall of slate.	Leg broken, shoulder dislocated.	Consolidated Indiana Coal Co., Marion
April 15, 7:30 a. m.	Arthur Larson, miner.	Struck by sulphur.	Eye injured.	Consolidation Coal Co., Monroe
April 16, 4:00 p. m.	Nels Larson, roustabout.	Fell on pit car.	Body bruised.	Consolidated Indiana Coal Co., Marion
April 16, 2:30 p. m.	Don Ballard, miner.	Slipped on coal.	Sprained ankle.	Pershing Coal Co., Marion
April 16, 1:00 p. m.	Frank Pratt, Sr., miner.	Fall of slate.	Leg broken.	Pershing Coal Co., Marion
April 20, 8:30 a. m.	Ira Hays, loader.	Lifting coal.	Strained side.	Consolidated Indiana Coal Co., Marion
April 20, 10:00 a. m.	Chas. Logne, driver.	Squeezed by mule.	Back hurt.	Consolidated Indiana Coal Co., Marion
April 20, 9:00 a. m.	Carl Anderson, loader.	Lifting slate.	Back strained.	Consolidated Indiana Coal Co., Marion
April 21, 7:30 a. m.	Axel F. Sampson, miner.	Lifting coal.	Sprained back.	Consolidation Coal Co., Monroe
April 21, 10:00 a. m.	Alt. Hort, loader.	Struck by coal.	Eye injured.	Consolidated Indiana Coal Co., Marion
April 22, 10:00 a. m.	Tom Jenkins, miner.	Fall of slate.	Broken leg.	Pershing Coal Co., Marion
April 22, 10:00 a. m.	Phillip Jenkins, miner.	Fall of slate.	Arm cut off at elbow.	Red Rock Coal Co., Marion
April 22, 7:45 a. m.	Frank Lear, miner.	Fall of slate.	Head and back injured.	Pershing Coal Co., Marion
April 22, 7:30 a. m.	Emil Riehey, miner.	Lifting coal.	Back hurt.	Consolidation Coal Co., Monroe
April 25, 1:30 p. m.	Andrew Mascagno, inside laborer.	Carrying timbers.	Strained side.	Consolidated Indiana Coal Co., Marion
April 27, 2:00 p. m.	Frank Crawford, loader.	Struck by coal.	Eye injured.	Consolidated Indiana Coal Co., Marion
April 28, 7:45 a. m.	J. W. Cunion, loader.	Fall of slate.	Eye injured.	Consolidated Indiana Coal Co., Marion
April 28, 2:30 p. m.	Hershel Durham, loader.	Struck by sulphur.	Eye injured.	Consolidated Indiana Coal Co., Marion

NON-FATAL ACCIDENTS IN DISTRICT NO. 2, 1925—Continued

Date and Hour of Accident	Name and Occupation	Cause of Accident	Nature of Injury	Employing Company and County
April 28, 10:30 a. m.	George Israel, miner	Struck by sulphur	Eye injured	Pershing Coal Co., Marion
April 28, 9:30 a. m.	W. H. Johnston, miner	Fall of slate	Knee and back hurt	Pershing Coal Co., Marion
April 29, 5:30 p. m.	David Howells, miner	Struck by coal	Eye injured	Pershing Coal Co., Marion
May 4, 10:30 a. m.	Rock Marvelli, miner	Struck by sulphur	Eye injured	Pershing Coal Co., Marion
May 5, 10:00 a. m.	Jas. Crumblom, miner	Fall of coal	Arm bruised	Consolidation Coal Co., Monroe
May 5, 1:00 p. m.	Edwin Jeffries, loader	Struck by sulphur	Eye injured	Consolidated Indiana Coal Co., Marion
May 7, 9:00 a. m.	Harry Holmes, miner	Fall of slate	Hand injured	Pershing Coal Co., Marion
May 7, 9:25 a. m.	Joe Sedlock, Jr., driver	Caught by car	One finger broken	Pershing Coal Co., Marion
May 9, 11:15 a. m.	W. Deskin, miner	Lifting	Ruptured left side	Pershing Coal Co., Marion
May 9, 11:15 a. m.	Louis Lennie, track layer	Car jumped track	Right arm injured	Consolidated Indiana Coal Co., Marion
May 11, 8:00 a. m.	A. Vickray, miner	Fall of slate	Left foot injured	Pershing Coal Co., Marion
May 13, 10:30 a. m.	Francis Bateman, driver	Kicked by mule	Leg broken	Pershing Coal Co., Marion
May 18, 3:00 p. m.	Wm. Courtney, miner	Loading coal	Finger mashed	Smoky Hollow Coal Co., Monroe
May 18, 3:00 p. m.	E. Romeo, miner	Mining coal	Eye injured	Pershing Coal Co., Marion
May 18, 8:00 a. m.	I. Desplanque, miner	Pushing car	Injured side	Pershing Coal Co., Marion
May 18, 9:00 a. m.	Jas. E. Huff, miner	Putting in cut	Right ear hurt	Pershing Coal Co., Marion
May 20, 9:00 a. m.	Gomer Jones, loader	Pulling block for driver	Mashed hand	Consolidated Indiana Coal Co., Marion
May 22, 10:00 a. m.	Ira Hays, loader	Fall of coal	Side injured	Consolidated Indiana Coal Co., Marion
May 26, 11:00 a. m.	Worth Kirkman, loader	Fall of slate	Left leg injured	Pershing Coal Co., Marion
May 28, 10:30 a. m.	Jas. B. Crawford, miner	Mining coal	Right hand bruised	Pershing Coal Co., Marion
June 5, 7:30 a. m.	John Maon, Sr., miner	Fall of slate	Head cut	Pershing Coal Co., Marion
June 9, 2:30 p. m.	Jas. Provenzano, miner	Lifting car	Internal injury	Pershing Coal Co., Marion
June 9, 2:30 p. m.	Wm. Brock, driver	Car jumped track	Thumb mashed	Smoky Hollow Coal Co., Monroe
June 10, 1:30 p. m.	Joe Tonda, miner	Coal fell on foot	Foot injured	Pershing Coal Co., Marion
June 10, 11:00 a. m.	Andrew Pico, miner	Fall of slate	Right foot injured	Pershing Coal Co., Marion
June 11, 7:30 a. m.	E. C. Swartz, miner	Fall of slate	Head injured	Pershing Coal Co., Marion
June 12, 8:00 a. m.	Blarence Meade, timberman	Fell over car	Ruptured	Pershing Coal Co., Marion
June 15, 8:00 a. m.	Edgar Burton, miner	Lifting coal	Internal injury	Pershing Coal Co., Marion
June 16, 2:00 p. m.	Chas. Sivak, miner	Mining coal	Left hand bruised	Consolidation Coal Co., Monroe
June 16, 2:00 p. m.	John Porter, miner	Flying sulphur	Right eye injured	Pershing Coal Co., Marion
June 17, 2:00 p. m.	Ona Davis, loader	Fall of slate	Right foot injured	Consolidated Indiana Coal Co., Marion
June 19, 12:20 p. m.	Riley Irvin, company man	Fall of bar from tippie	Right foot injured	Pershing Coal Co., Marion
June 20, 7:45 a. m.	Oscar Nelson, miner	Spragging car	Finger mashed	Pershing Coal Co., Marion
June 20, 8:30 p. m.	H. A. Nefert, miner	Fall of coal from car	Left foot injured	Pershing Coal Co., Marion
June 21, 9:15 a. m.	Phillip Mihalovich, mining	Mining coal	Knee bruised, infection	Consolidation Coal Co., Monroe
June 22, 9:15 a. m.	Walter Beardsley, miper	Wedging down coal	Hand injured	Pershing Coal Co., Marion
June 24, 10:30 a. m.	Marsh Erb, top man	Broken wire cable	Right knee injured	Pershing Coal Co., Marion
June 24, 10:00 a. m.	Frank Provenzano, miner	Lifting coal	Hand injured	Consolidation Coal Co., Monroe
June 24, 3:30 p. m.	Emil Vaneisin, miner	Caught in door	Foot injured	Consolidated Indiana Coal Co., Marion
June 30, 2:00 p. m.	Sam Mitchell, loader	Fall of chunk of coal	Out over right eye	Consolidated Indiana Coal Co., Marion
July 1, 10:00 a. m.	Geo. McLoud, loader	Fall of slate		
July 2, 10:00 a. m.	Pete Travili, miner	Lifting coal	Back strained	Pershing Coal Co., Marion
July 5, 10:00 a. m.	John Chilin, timberman	Fall of slate	Leg broken	Consolidated Indiana Coal Co., Marion
July 8, 10:00 a. m.	A. Rhuehart, miner	Fall of slate	Right foot injured	Pershing Coal Co., Marion
July 9, 9:00 a. m.	W. A. Thompson, miner	Setting prop	Strained back	Consolidation Coal Co., Monroe
July 9, 7:30 a. m.	Chas. Dooley, Sr., miner	Shoveling coal	Back strained	Pershing Coal Co., Marion
July 9, 8:00 a. m.	Joe Kline, Sr., miner	Loading coal	Back strained	Consolidation Coal Co., Monroe
July 10, 10:00 a. m.	Ray Clark, miner	Spragging car	Left side strained	Consolidation Coal Co., Monroe
July 10, 8:00 a. m.	John Anderson, miner	Fall of timber	Bruised back	Consolidation Coal Co., Monroe
July 13, 2:00 p. m.	Phillip Lafama, miner	Loading coal	Right knee bruised	Consolidation Coal Co., Monroe
July 13, 9:00 a. m.	John Bottomly, miner	Pushing empty car	Left knee sprained	Consolidation Coal Co., Monroe
July 13, 9:00 a. m.	Geo. Scott, blacksmith	Car door fell on foot	Foot bruised	Smoky Hollow Coal Co., Monroe
July 14, 1:30 p. m.	Ralph Gutch, night motorman	Loading coal	Left hand injured	Consolidation Coal Co., Monroe
July 14, 2:00 p. m.	John Lapp, miner	Fall of slate	Left knee injured	Pershing Coal Co., Marion
July 14, 12:30 p. m.	Geo. Matkovich, loader	Fall of slate	Right foot injured	Consolidated Indiana Coal Co., Marion
July 15, 5:00 p. m.	Walt. McCauley, top man	Cutting off bolt	Left knee bruised	Gold Goose Coal & Mining Co., Marion
July 15, 10:45 a. m.	John Hughes, miner	Fall of slate	Scalp wound	Pershing Coal Co., Marion
July 16, 1:30 p. m.	Arthur Ryerson, driver	Struck by dirt	Right eye injured	Pershing Coal Co., Marion
July 16, 12:30 p. m.	H. Noonan, miner	Spragging car	Middle finger mashed	Pershing Coal Co., Marion
July 16, 9:30 a. m.	Henry Rice, miner	Fall of slate	Back and foot bruised	Consolidation Coal Co., Monroe
July 17, 9:00 a. m.	Robert McKelvie, miner	Dropped chunk of coal	Right foot injured	Consolidation Coal Co., Monroe
July 18, 9:30 a. m.	T. E. Davis, driver	Struck by top coal	Wound on head	Pershing Coal Co., Marion
July 21, 10:30 a. m.	Glen Anderson, miner	Fall of slate	Fractured leg	Consolidated Indiana Coal Co., Marion
July 21, 10:30 a. m.	Axel Anderson, loader	Fall of slate	Back and ankle injured	Consolidated Indiana Coal Co., Marion
July 25, 12:30 p. m.	John Howard, miner	Fall of slate	Legs and back bruised	Consolidation Coal Co., Monroe
July 28, 7:40 a. m.	C. R. Smith, driver	Caught by car	Foot injured	Consolidated Indiana Coal Co., Marion
Aug. 1, 10:00 a. m.	John Elibeck, timberman	Fall of slate	Back bruised	Smoky Hollow Coal Co., Monroe
Aug. 3, 3:30 p. m.	Jas. Tobin, miner	Struck by pick	Foot injured	Consolidation Coal Co., Monroe
Aug. 5, 1:30 p. m.	Chas. Long, miner	Chunk of coal fell	Right foot mashed	Pershing Coal Co., Marion
Aug. 4, 10:00 p. m.	Harry Bolden, miner	Fall of slate	Bruised back and leg	Consolidation Coal Co., Monroe
Aug. 4, 3:00 a. m.	Raymond Stokes, miner	Loading coal	Left arm bruised	Consolidation Coal Co., Monroe
Aug. 4, 3:00 a. m.	Nels Holmes, miner	Fall of slate	Scalp wound	Pershing Coal Co., Marion
Aug. 5, 2:00 p. m.	James Roay, loader	Fall of slate	Back and head cut	Consolidated Indiana Coal Co., Marion
Aug. 5, 10:00 p. m.	Walter Ward, miner	Fall of slate	Left ankle fractured	Consolidation Coal Co., Monroe
Aug. 5, 10:00 p. m.	John Windgas, nightman	Fall of slate	Fractured 6th, 7th and 8th ribs	Consolidation Coal Co., Monroe
Aug. 6, 11:00 a. m.	Wm. Pyle, miner	Fall of slate	Right foot injured	Pershing Coal Co., Marion
Aug. 10, 10:00 a. m.	S. Ranaud, miner	Fall of slate	Hand injured	Pershing Coal Co., Marion
Aug. 10, 11:40 a. m.	Alva Gretten, driver	Fell off car	Leg broken	Smoky Hollow Coal Co., Monroe
Aug. 13, 8:00 p. m.	A. I. Ball, night driver	Caught by car	Bruised finger	Consolidation Coal Co., Monroe
Aug. 13, 9:00 a. m.	Dan Smith, miner	Lifting coal	Back sprained	Pershing Coal Co., Marion
Aug. 14, 8:00 a. m.	Thos. H. Jones, miner	Cutting coal	Left eye injured	Pershing Coal Co., Marion
Aug. 14, 8:00 a. m.	W. McCruider, miner	Fall of slate	Hurt through back	Pershing Coal Co., Marion
Aug. 17, 1:30 p. m.	Wesley Clark, miner	Fall of slate	Bruised head and leg	Consolidation Coal Co., Monroe
Aug. 17, 1:00 p. m.	John Polick, miner	Lifting coal	Finger injured	Pershing Coal Co., Marion
Aug. 17, 9:00 a. m.	Russ Angel, miner	Shoveling dirt	Back strained	Smoky Hollow Coal Co., Monroe
Aug. 17, 9:00 a. m.	John Smith, miner	Run over by car	Head injured	Gold Goose Coal & Mining Co., Marion
Aug. 18, 11:00 a. m.	Jas. Sullivan, timberman	Fall of prop	Finger mashed	Pershing Coal Co., Marion
Aug. 18, 10:00 a. m.	Thos. Coghlan, miner	Fall of slate	Back and head injured	Pershing Coal Co., Marion
Aug. 18, 10:00 a. m.	Dick Davis, miner	Loading coal	Back injured	Pershing Coal Co., Marion

NON-FATAL ACCIDENTS IN DISTRICT NO. 2, 1925—Continued

Date and Hour of Accident	Name and Occupation	Cause of Accident	Nature of Injury	Employing Company and County
Aug. 18, 10:00 a. m.	Jos. Slack, loader	Lifting coal	Breast injured	Consolidated Indiana Coal Co., Marion
Aug. 19, 1:30 p. m.	Chas. Wise, loader	Fall of slate	Back and shoulder bruised	Consolidated Indiana Coal Co., Marion
Aug. 21, 10:00 a. m.	Ed. Luke, timberman	Cut with axe	Cut big toe	Consolidated Indiana Coal Co., Marion
Aug. 25, 11:00 a. m.	Dave Ross, miner	Loading rock	Left wrist broken	Gold Goose Coal & Mining Co., Marion
Aug. 28, 2:00 p. m.	Steve Rudek, miner	Falling coal	Big toe mashed	Consolidation Coal Co., Monroe
Aug. 29, 11:00 a. m.	Joe Isaacson, driver	Ran into another driver	Bruised arm and body	Consolidation Coal Co., Monroe
Aug. 31, 9:00 a. m.	C. Nicholson, electrician	Run over by car	Left leg bruised	Consolidation Coal Co., Monroe
Sept. 4, 9:00 a. m.	John H. Smith, top foreman	Caught by cage	Broken rib	Pershing Coal Co., Marion
Sept. 4, 10:00 a. m.	N. F. French, miner	Loading car	Thumb cut off	Consolidation Coal Co., Monroe
Sept. 4, 10:00 a. m.	C. Bridges, driver	Loading car	Bruised hand	Consolidation Coal Co., Monroe
Sept. 4, 8:30 a. m.	Hugh Davis, topman	Striking car	Finger mashed	Pershing Coal Co., Marion
Sept. 5, 11:30 a. m.	Ludwig Johnson, miner	Flying coal	Right hand injured	Pershing Coal Co., Marion
Sept. 5, 7:15 a. m.	Clyde Christy, trip rider	Fell from trip	Right eye bruised	Consolidation Coal Co., Monroe
Sept. 5, 2:30 p. m.	C. J. Howe, miner	Fall of coal	Hip dislocated	Lockman Coal Co., Monroe
Sept. 9, 10:30 a. m.	Ben Nichols, miner	Flying coal	Leg injured	Consolidated Indiana Coal Co., Marion
Sept. 10, 3:00 p. m.	Chas. Pundin, miner	Fall of slate	Eye injured	Consolidation Coal Co., Monroe
Sept. 11, 9:30 a. m.	Oede Oliver, driver	Pulling timber	Bruised hand	Consolidation Coal Co., Monroe
Sept. 12, 9:30 a. m.	Malcolm McKenzie, miner	Cutting coal	Leg bruised	Consolidation Coal Co., Monroe
Sept. 12, 9:30 a. m.	Elbio Zagnoll, miner	Cutting coal	Left eye injured	Pershing Coal Co., Marion
Sept. 14, 8:00 a. m.	John Thompson, timberman	Taking down slate	Finger mashed	Pershing Coal Co., Marion
Sept. 16, 11:30 a. m.	Joe Ball, timberman	Loading coal	Indirect inguinal hernia	Pershing Coal Co., Marion
Sept. 16, 8:00 a. m.	Pat. McGarvey, miner	Falling prop	Back and ankle bruised	Consolidation Coal Co., Monroe
Sept. 16, 9:00 a. m.	Lee Mewley, miner	Lifting car	Back bruised	Consolidation Coal Co., Monroe
Sept. 17, 1:30 p. m.	Clarence Stice, driver	Fall of slate	Right arm sprained	Gold Goose Coal & Mining Co., Marion
Sept. 17, 10:00 a. m.	Robert Jones, miner	Fall of slate	Right hand bruised	Pershing Coal Co., Marion
Sept. 17, 3:15 p. m.	David McRoberts, miner	Loading coal	Bruised left hand	Consolidated Indiana Coal Co., Marion
Sept. 18, 2:00 p. m.	Wm. Thomas, loader	Scaffolding fell	Back wrenched	Consolidated Indiana Coal Co., Marion
Sept. 18, 2:00 p. m.	Tom Roe, construction	Operating drill	Bones in heel broken	Consolidation Coal Co., Monroe
Sept. 18, 9:30 a. m.	Pearl Pettyjohn, miner	Flying sulphur	Hand hurt	Pershing Coal Co., Marion
Sept. 19, 1:00 p. m.	Baptist Pozzetto, loader	Loading car	Right eye injured	Consolidation Coal Co., Monroe
Sept. 21, 8:00 p. m.	Gerald Brooks, miner	Loading car	Left foot injured	Consolidated Indiana Coal Co., Marion
Sept. 21, 1:00 p. m.	Nick Huffman, miner	Flying sulphur	Left eye injured	Pershing Coal Co., Marion
Sept. 23, 1:00 p. m.	E. R. Williams, miner	Flying coal	Right ear bruised	Consolidation Coal Co., Monroe
Sept. 24, 10:00 a. m.	Jas. Vaughn, miner	Short on wire	Right elbow bruised	Gold Goose Coal & Mining Co., Marion
Oct. 3, 10:30 a. m.	Chester Bucknell, elec. helper	Stepped off motor	Both eyes burned	Consolidation Coal Co., Monroe
Oct. 5, 10:30 a. m.	Wm. Stokes, mine foreman	Loading coal	Bruised right ankle	Consolidation Coal Co., Monroe
Oct. 5, 10:00 a. m.	Andrew Fico, miner	Ran into car	Back sprained	Pershing Coal Co., Marion
Oct. 6, 8:30 a. m.	John Heaton, driver	Loading coal	Right knee injured	Pershing Coal Co., Marion
Oct. 6, 8:30 a. m.	Jules Zoutie, miner	Loading coal	Right knee injured	Pershing Coal Co., Marion
Oct. 7, 10:30 a. m.	Ed. Gordon, driver	Fall of coal from car	Left leg injured	Pershing Coal Co., Marion
Oct. 8, 2:30 p. m.	Joe Sedlock, Jr., driver	Mule kicked dirt in eye	Right eye injured	Pershing Coal Co., Marion
Oct. 9, 10:30 a. m.	Barney Pedrigno, miner	Lifting car	Strained back	Consolidation Coal Co., Monroe
Oct. 9, 10:30 a. m.	W. I. Evans, driver	Foot crushed	Foot crushed	Smoky Hollow Coal Co., Monroe
Oct. 12, 2:00 p. m.	Joe Buonanno, miner	Lifting slate	Slight rupture	Consolidation Coal Co., Monroe
Oct. 12, 10:00 a. m.	Wm. Sackee, motorman	Flying coal	Eye injured	Consolidated Indiana Coal Co., Marion
Oct. 15, 3:30 p. m.	Lawrence Carter, night man	Caught by car	Finger mashed	Consolidation Coal Co., Monroe
Oct. 16, 1:30 p. m.	Wm. Norris, driver	Spraying cars	Mashed finger	Pershing Coal Co., Marion
Oct. 19, 2:00 p. m.	H. Dixon, miner	Fall of slate	Leg bruised	Smoky Hollow Coal Co., Monroe
Oct. 20, 2:00 p. m.	GEO. NOVATINE, timberman	Making wedges	Mashed fingers	Consolidation Coal Co., Monroe
Oct. 21, 8:30 a. m.	Warner Bingham, miner	Lifting coal	Left foot bruised	Consolidation Coal Co., Monroe
Oct. 22, 11:20 a. m.	Tom Parish, nightman	Caught by car	One finger broken	Consolidation Coal Co., Monroe
Oct. 22, 3:00 p. m.	Jas. Ellsworth, miner	Mining coal	Bruised right eye	Consolidation Coal Co., Monroe
Oct. 26, 1:00 p. m.	Gregorio Dennis, day man	Coupling cars	Two fingers broken	Consolidation Coal Co., Monroe
Oct. 26, 7:45 a. m.	Fred Lewis, day man	Coupling cars	Bruised arm	Consolidation Coal Co., Monroe
Oct. 27, 12:30 p. m.	Harry Wood, driver	Kicked by mule	Bruised leg	Consolidated Indiana Coal Co., Marion
Oct. 28, 2:00 p. m.	J. H. Dowd, loader	Sulphur in eye	Eye injured	Consolidated Indiana Coal Co., Marion
Oct. 29, 2:00 p. m.	John Norland, loader	Sulphur in eye	Eye injured	Consolidated Indiana Coal Co., Marion
Oct. 29, 2:00 p. m.	John Tooley, crusherman	Fell on edge of car	Broken ribs	Consolidation Coal Co., Monroe
Oct. 30, 10:30 p. m.	Isaac Brooks, nightman	Lifting bar	Rupture	Pershing Coal Co., Marion
Oct. 31, 10:45 a. m.	Jack Kerr, miner	Loading coal	Elbow injured	Pershing Coal Co., Marion
Oct. 31, 3:30 p. m.	Geo. Novatine, timberman	Making wedges	Knee cut by axe	Consolidation Coal Co., Monroe
Nov. 2, 10:00 a. m.	M. A. Halsey, miner	Lifting coal	Finger bruised	Consolidation Coal Co., Monroe
Nov. 3, 11:00 a. m.	William Laws, driver	Collision with another car	Hips bruised	Consolidated Indiana Coal Co., Marion
Nov. 4, 1:30 p. m.	John Myster, timberman	Falling timber	Elbow bruised	Gold Goose Coal & Mining Co., Marion
Nov. 4, 8:00 a. m.	Ernest Pusch, dayman	Coupling cars	Left wrist fractured	Consolidation Coal Co., Monroe
Nov. 5, 11:30 a. m.	John Gasparovich, loader	Lifting coal	Strained back	Consolidated Indiana Coal Co., Marion
Nov. 7, 7:30 a. m.	Olle Ezwart, bridleman	Fall of slate	Foot crushed	Consolidated Indiana Coal Co., Marion
Nov. 7, 9:00 a. m.	John Hlad, triprider	Blocking car	Hand crushed	Pershing Coal Co., Marion
Nov. 9, 2:30 p. m.	A. J. Johnson, miner	Caught foot on pipe	Rib fractured	Consolidation Coal Co., Monroe
Nov. 7, 10:00 a. m.	Jas. Sullivan, timberman	Setting timber	Right hand injured	Pershing Coal Co., Marion
Nov. 7, 10:30 a. m.	J. E. Luke, motorman	Lifting empty car	Wrenched back	Consolidation Coal Co., Monroe
Nov. 9, 8:30 a. m.	John Day, Jr., trailer	Coupling cars	One finger mashed	Consolidation Coal Co., Monroe
Nov. 10, 8:00 a. m.	Emery Hill, miner	Fall of slate	Bruised muscles of stomach	Superior Coal Co., Monroe
Nov. 9, 12:00 noon	John Klohoot, miner	Loading dirt	Back sprained	Gold Goose Coal & Mining Co., Marion
Nov. 13, 8:30 a. m.	Milo Scott, loader	Fall of coal	Left leg injured	Consolidated Indiana Coal Co., Marion
Nov. 16, 9:00 a. m.	Joe Clobra, miner	Loading rock	Body strained	Gold Goose Coal & Mining Co., Marion
Nov. 16, 12:00 noon	S. P. Foster, driver	Caught by car	Heel bruised	Gold Goose Coal & Mining Co., Marion
Nov. 16, 7:30 a. m.	John Harris, driver	Fall of slate	Wrist strained	Consolidation Coal Co., Monroe
Nov. 16, 10:30 a. m.	Wm. Gibbons, driver	Caught by car	Bruised foot	Consolidation Coal Co., Monroe
Nov. 17, 2:30 p. m.	Morton E. Wood, loader	Lifting car	Sprained back	Consolidated Indiana Coal Co., Marion
Nov. 18, 1:00 p. m.	W. H. Washington, miner	Fall of coal	Foot mashed	Superior Coal Co., Monroe
Nov. 18, 8:00 a. m.	Albert Leary, miner	Lifting coal	Back injured	Pershing Coal Co., Marion
Nov. 18, 1:30 p. m.	Walker Thomas, miner	Lifting coal	Sprained back	Consolidation Coal Co., Monroe
Nov. 22, 10:00 a. m.	John Bunch, driver	Conveyor belt pulley	Right arm broken	Consolidation Coal Co., Monroe
Nov. 23, 11:30 a. m.	Dennis Ranebetti, miner	Fall of slate	Finger mashed	Consolidation Coal Co., Monroe
Nov. 24, 9:30 a. m.	Tom Hurst, driver	Kicked by mule	Bruised leg	Consolidation Coal Co., Monroe
Nov. 25, 9:00 a. m.	Jas. Provenzano, miner	Fall of prop.	Left hand injured	Pershing Coal Co., Marion

NON-FATAL ACCIDENTS IN DISTRICT NO. 2, 1925—Continued

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REPORT IOWA MINE INSPECTORS

Date and Hour of Accident	Name and Occupation	Cause of Accident	Nature of Injury	Employing Company and County
Nov. 25, 2:00 p. m.	Tony Milla, miner	Mining coal	Sulphur in eye	Pershing Coal Co., Marion
Nov. 25, 1:30 p. m.	Chas. Thomas, loader	Lifting coal	Back sprained	Consolidated Indiana Coal Co., Marion
Nov. 25, 9:00 a. m.	Albert Kaulavich, loader	Struck leg with pick	Leg injured	Consolidated Indiana Coal Co., Marion
Nov. 27, 2:00 p. m.	Gray S. Owens, blacksmith	Emery dust in eye	Eye injured	Consolidated Indiana Coal Co., Marion
Nov. 28, 7:30 a. m.	Wm. Love, asst. foreman	Caught by gears of motor	Arm and shoulder injured	Pershing Coal Co., Marion
Nov. 28, 1:00 p. m.	Harold Israel, miner	Opening powder keg	Thumb injured	Pershing Coal Co., Marion
Nov. 30, 12:30 p. m.	T. B. Reid, motorman	Det. motor and car	Right hand injured	Pershing Coal Co., Marion
Nov. 30, 9:30 a. m.	Jas. Brady, miner	Bumped by shovel	Left shin injured	Pershing Coal Co., Marion
Nov. 30, 9:30 a. m.	Henry Graves, miner	Pulling timber	Cut right leg	Superior Coal Co., Monroe
Nov. 30, 9:30 a. m.	Ivan Crawford, loader	Fall of coal	Right foot injured	Consolidated Indiana Coal Co., Marion
Dec. 2, 9:30 a. m.	John McCoy, driver	Chain caught in catch	Bruised foot	Consolidation Coal Co., Monroe
Dec. 2, 1:00 p. m.	H. Donkerslaet, miner	Fall of coal	Right ankle injured	Pershing Coal Co., Marion
Dec. 4, 11:00 a. m.	E. H. Wolfe, driver	Caught bet. car and rib	Right hip injured	Pershing Coal Co., Marion
Dec. 5, 2:30 p. m.	Andy Pearson, timberman	Caught bet. cars	Legs bruised	Consolidated Indiana Coal Co., Marion
Dec. 5, 12:00 noon	Elmer Clroyd, loader	Fall of slate	Left leg broken	Consolidated Indiana Coal Co., Marion
Dec. 7, 2:30 p. m.	Walter Bowers, miner	Coupling cars	Finger mashed	Superior Coal Co., Monroe
Dec. 8, 11:00 a. m.	Lawrence Patterson, loader	Dropped coal	Finger mashed	Consolidated Indiana Coal Co., Marion
Dec. 9, 1:00 p. m.	Jas. Walker, miner	Struck himself with pick handle	Testicles injured	Roberts Bros. Coal Co., Mahaska
Dec. 11, 10:00 a. m.	D. E. Mitchell, loader	Sulphur in eye	Eye injured	Consolidated Indiana Coal Co., Marion
Dec. 14, 3:00 p. m.	Pete Duga, miner	Fall of slate	Head cut	Smoky Hollow Coal Co., Monroe
Dec. 14, 3:15 p. m.	Doc Prentice, timberman	Fall off overcast	Bruised back	Superior Coal Co., Monroe
Dec. 14, 10:30 p. m.	Tom Garrison, driver	Swel from car	Bruised shoulder and hand	Superior Coal Co., Monroe
Dec. 14, 10:30 p. m.	Art Frazier, motorman	Third rail ran through bottom of car	Contusion of abdomen	Superior Coal Co., Monroe
Dec. 15, 3:30 p. m.	Wm. Milburn, trapper	Lifting empty car	Right foot bruised	Superior Coal Co., Monroe
Dec. 15, 8:00 a. m.	Jasper Spolur, loader	Lifting car on track	Back sprained	Consolidated Indiana Coal Co., Marion
Dec. 15, 9:00 a. m.	Chas. Ekseel, loader	Sulphur in eye	Eye injured	Consolidated Indiana Coal Co., Marion
Dec. 16, 8:00 a. m.	David Howells, miner	Fall of slate	Hurt thru back	Pershing Coal Co., Marion
Dec. 18, 1:00 p. m.	Wm. Hicks, tracklayer	Hit with track spike	Eye cut	Red Rock Coal Co., Marion
Dec. 21, 11:00 a. m.	John Dursky, topman	Caught by rope	Finger torn	Evans & Dursky Coal Co., Mahaska
Dec. 21, 8:00 a. m.	Lee Cooper, engineer	Throwing lever	Strained back	Smoky Hollow Coal Co., Monroe
Dec. 21, 12:00 noon	Dave Wilson, driver	Caught by car	Right knee bruised	Gold Goose Coal & Mining Co., Marion
Dec. 21, 10:30 a. m.	Luzanna Brennan, mine	Fall of coal	Left arm and head cut	Superior Coal Co., Monroe
Dec. 23, 8:30 a. m.	Albert Phillips, loader	Fall of slate	Right knee bruised	Consolidated Indiana Coal Co., Marion
Dec. 23, 1:00 p. m.	J. H. Bond, loader	Loading coal	Wrenched back	Consolidated Indiana Coal Co., Marion
Dec. 28, 2:00 p. m.	Walter Kerr, miner	Fall of coal	Right ankle bruised	Superior Coal Co., Monroe
Dec. 28, 7:30 a. m.	Peter Alexander, miner	Loading coal	Mashed two fingers	Superior Coal Co., Monroe
Dec. 31, 2:00 p. m.	John Chelene, loader	Pushing empty car	Injured left knee	Consolidated Indiana Coal Co., Marion

FATAL AND SERIOUS ACCIDENTS IN DISTRICT NO. 2
Classified by Cause of Accident and Occupation of Injured, 1924

CAUSES U. S. Bureau of Mines Classification	Total					Serious												Total									
	Miners	Drivers	Tracklayer	Owner	Total	Miners	Drivers	Timberman	Conger	Electrician	Trapper	Coupler	Company man	Other	Nightman	Trawler	Motorman		Asst. mine mgr.	Srd rail man	Top man	Engineer	Tracklayer	Carpenter	Entryman	Shot fire	
Falls of roof (rock, slate, etc.)					22																						22
1 Falls of roof (rock, slate, etc.)					60																						60
In room or chamber	5		1		6																						
Falls of roof (rock, slate, etc.)					4																						4
On road or entry	2	1		1	4																						
2 Falls of face or pillar coal, flying coal, dirt, steel, etc., causing eye injuries					26																						26
Miscellaneous:																											
Fall of coal from R. B. car														1													1
3 Mine cars and locomotives:																											
(a) Switching or spragging					2																						2
(b) Coupling cars					1																						1
(c) Falling from trip					1																						1
(d) Run over by car or motor					1	5	10																				16
(e) Caught bet. car and rib						5																					5
(f) Caught bet. car and roof						1																					1
(g) Runaway car on trip											1																1
(h) Miscellaneous:																											
Caught bet. mule and car, lifting cars, pushing cars, caught between cars, etc.					15	10					1						1	4	1		1	1	1				41
4 Loading coal cars resulting in minor injuries					48	1	6																				55
6 Explosives																											1
Piece of flying coal																											1
Slipped and fell down																											1
Premature shot																											1

STATISTICS OF IOWA MINING

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FATAL AND SERIOUS ACCIDENTS IN DISTRICT NO. 2
Classified by Cause of Accident and Occupation of Injured, 1924—Continued

CAUSES (U. S. Bureau of Mines Classification)	Total		Serious											Total										
	Miner	Driver	Timberman	Total	Miners	Drivers	Loaders	Timberman	Company man	Motorman	Trallers	Trip rider	Tracklayer		Trapper	Bratticemen	Electricians	Mine foreman	Top man	Blacksmith	Nightman	Engineer	Asst. foreman	
6 Falls of timbers.....				2	1			3	3															6
7 Fall of persons.....				2	1			3	3															10
7 Mining machines, etc.																								10
Broken wire cable.....																								1
Caught by cage.....																								1
Conveyor on belt pulley.....																								1
Caught by rope.....																								1
Throwing lever on engine.....																								1
8 Hand tools, axes, bars, picks, nails, powder keg, shovels, spikes, etc.				7	1	1	2	2				1					1				1			16
Total.....	6	1	1	8	163	34	58	14	12	5	1	2	2	1	1	2	1	5	2	2	1	1		303

FATAL ACCIDENTS IN DISTRICT NO. 3, 1924

Date and Hour of Accident	Name, Age, Nativity and Occupation	Married or Single	No. of Children	Cause of Death	Employing Company and County
Feb. 13, 11:00 a. m.	Frank Jures, 23, Slavish, driver.....	Married	2	Run over by car.....	Radiant Coal Co., Dallas
Aug. 18, 2:00 p. m.	James Clemens, 45, American, driver.....	Married		Fell under mine car.....	Des Moines Ice & Fuel Co., No. 4, Polk
Sept. 2, 10:30 a. m.	Earl Caylor, American, miner.....			Overcome by black damp, fell to bottom of shaft.....	Carson & Wells Mine, Warren
Nov. 12, 10:30 a. m.	Edmond Clarkson, 45, American, miner.....	Married	3	Run over by car.....	Radiant Coal Co., Dallas

FATAL ACCIDENTS IN DISTRICT NO. 3, 1925

Date and Hour of Accident	Name, Age, Nativity and Occupation	Married or Single	No. of Children	Cause of Death	Employing Company and County
Jan. 15, 1:00 p. m.	Thos. Hoggarth, 63, English, miner.....	Married	2	Fall of slate.....	Radiant Coal Mining Co., Dallas
Feb. 20, 1:00 p. m.	John Berg, 61, Swede, timberman.....	Married	5	Fall of slate.....	Boone Coal Co., No. 2, Boone
Mar. 27, 10:15 p. m.	John Duick, 38, Austrian, miner.....	Married	5	Fall of slate.....	Dallas Coal Co., Dallas
Aug. 5, 12:05 p. m.	Wm. Raisbeck, 49, English, entryman.....	Single		Fall of slate.....	Great Western Coal Co., Warren
Nov. 11, 2:20 a. m.	Wm. Schminkey, 42, American, machine runner.....	Single		Electrocuted.....	Independent Coal Co., Polk

NON-FATAL ACCIDENTS IN DISTRICT NO. 3, 1924

Date and Hour of Accident	Name and Occupation	Cause of Accident	Nature of Injury	Employing Company and County
Jan. 2, 2:00 p. m.	Joe Bettie, miner.....	Lifting coal.....	Back strained.....	Norwood-White Coal Co., No. 7, Dallas
Jan. 4, 2:00 p. m.	John Breakfield, topman.....	Unloading timber.....	Finger broken.....	Norwood-White Coal Co., No. 7, Dallas
Jan. 5, 7:00 a. m.	E. Enzer, miner.....	Fell into tank hot water.....	Right leg scalded.....	Norwood-White Coal Co., No. 3, Dallas
Jan. 9, 10:00 a. m.	E. F. Pixley, tallrope engineer.....	Fell off tallrope.....	Nose and collar bone broken.....	Bennett Bros. Coal Co., Polk
Jan. 9, 11:00 a. m.	N. Udrovick, miner.....	Mining shot.....	Coal flew in eye.....	Saylor Coal Co., Polk
Jan. 12, 9:30 a. m.	Rocco Toller, driver.....	Squeezed by mule.....	Bruised leg.....	Saylor Coal Co., Polk
Jan. 14, 3:00 p. m.	George Scott, Jr., miner.....	Pushing rail over timber.....	Right hand cut.....	Scandia Coal Co., No. 2, Dallas
Jan. 17, 2:00 p. m.	W. Michal, miner.....	Pushing car.....	Wrist sprained.....	Wright Coal Co., Polk
Jan. 18, 3:00 p. m.	Ezra Seely, timberman.....	Timber fell on hand.....	Hand bruised.....	Scandia Coal Co., No. 5, Dallas
Jan. 18, 11:30 a. m.	John Davis, timberman.....	Coupling cars.....	One finger cut off.....	Radiant Coal Co., Dallas
Jan. 24, 2:00 p. m.	Frank Riley, machine helper.....	Fall of slate.....	Two ribs and collar bone broken.....	Shuler Coal Co., Dallas
Jan. 26, 10:30 a. m.	Sam Southall, miner.....	Breaking coal.....	Coal flew in right eye.....	Saylor Coal Co., Polk
Jan. 28, 3:00 p. m.	Pellegrini Beyoni, miner.....	Mining bottom shot.....	Coal fell on hand.....	Saylor Coal Co., Polk
Jan. 30, 11:00 a. m.	Emil Battani, miner.....	Lifting coal.....	Back wrenched.....	Saylor Coal Co., Polk
Feb. 1,	Ed Brown, miner.....	Loading coal.....	Infected little finger.....	Scandia Coal Co., No. 5, Dallas
Feb. 2, 8:00 a. m.	Cal Rice, mine foreman.....	Lifting car on track.....	Back injured.....	Norwood-White Coal Co., No. 3, Polk
Feb. 2, 8:30 a. m.	Tony Simbolo, company man.....	Fall of ice down shaft.....	Back injured.....	Saylor Coal Co., Polk
Feb. 4, 7:15 a. m.	Virgil Walden, miner.....	Fell down on pick.....	Hand lacerated.....	Des Moines Coal Co., No. 5, Polk
Feb. 5,	James Payne, trip rider.....	Caught by cars.....	Bruised thumb and hand.....	Wright Coal Co., Polk
Feb. 6, 9:30 a. m.	John Wade, miner.....	Fall of slate.....	Back injured.....	Saylor Coal Co., Polk

NON-FATAL ACCIDENTS IN DISTRICT NO. 3, 1924—Continued

Date and Hour of Accident	Name and Occupation	Cause of Accident	Nature of Injury	Employing Company and County
Feb. 8, 11:00 a. m.	J. W. Hargis, miner	Fall of coal	Knee injured	Scandia Coal Co., No. 5, Dallas
Feb. 9, 10:00 a. m.	John Pearson, miner	Wedging top coal	Struck by coal on shin	Urbandale Coal Co., Polk
Feb. 14, 11:30 a. m.	John Geofroed, miner	Fall of coal	Leg bruised	Wright Coal Co., Polk
Feb. 14, 3:00 p. m.	Angelo Gintox, miner	Loading coal	Finger lacerated	Wright Coal Co., Polk
Feb. 14, 10:30 a. m.	Macom Walker, miner	Fall of slate	Back bruised	Norwood-White Coal Co., No. 7, Dallas
Feb. 15, 1:00 p. m.	Joe Lytle, miner	Mining coal	Piece of coal flew in eye	Norwood-White Coal Co., No. 7, Dallas
Feb. 16, 3:00 p. m.	Adam Biondi, miner	Fall of slate	Bruised foot	Scandia Coal Co., No. 3, Dallas
Feb. 18, 11:00 a. m.	David Warner, company man.	Dumping pit car	Strained back	Summit Coal Co., Story
Feb. 18, 11:00 a. m.	Chas. Berry, miner	Fall of coal	Foot bruised	Scandia Coal Co., No. 5, Dallas
Feb. 18, 10:00 a. m.	Ben Palmer, miner	Cutting coal	Piece of coal in eye	Scandia Coal Co., No. 2, Dallas
Feb. 20, 2:00 p. m.	L. Ashley, miner	Fall of slate	Piece of coal in eye	Scandia Coal Co., No. 2, Dallas
Feb. 20, 2:00 p. m.	Chas. Medie, miner	Fall of slate	Side of head cut	Saylor Coal Co., No. 5, Dallas
Feb. 21, 2:00 p. m.	Joe Bettl, miner	Fall of slate	Bruised knee	Scandia Coal Co., No. 2, Dallas
Feb. 21, 2:00 p. m.	Joe Pandolph, miner	Cutting coal	Piece of coal in eye	Scandia Coal Co., No. 5, Dallas
Feb. 23, 3:00 p. m.	T. L. Myer, trackman	Lifting rails	Hand bruised	Middle River Coal Co., Warren
Feb. 25, 9:45 a. m.	Jas. Stewart, miner	Cutting coal	Piece of coal struck eye	Scandia Coal Co., No. 3, Dallas
Feb. 26, 2:00 p. m.	Geo. H. Ball, driver	Kicked by mule	Leg bruised	Des Moines Coal Co., No. 5, Polk
Feb. 27, 2:00 p. m.	John Bakkeche, miner	Mining coal	Piece of coal in eye	Saylor Coal Co., No. 2, Dallas
Feb. 27, 10:15 a. m.	Pete Nicoletto, miner	Mining off shot	Piece of coal in eye	Wright Coal Co., Polk
Feb. 28, 11:30 a. m.	Tony Tomietich, miner	Fall of slate	Back bruised	Wright Coal Co., Polk
Mar. 1, 2:00 p. m.	Tony Raykovich, miner	Putting in cut	Coal flew in eye, infected	Norwood-White Coal Co., No. 7, Dallas
Mar. 3, 2:00 p. m.	B. C. Wilhite, miner	Lifting car on track	Back wrenched	Des Moines Coal Co., No. 4, Polk
Mar. 7, 2:00 p. m.	Emil Crnich, miner	Breaking slate	Foot broken	Norwood-White Coal Co., No. 7, Dallas
Mar. 11, 2:00 p. m.	Jas. Wharton, miner	Breaking slate	Piece of coal fell on foot	Scandia Coal Co., No. 2, Dallas
Mar. 12, 12:00 a. m.	Wm. Lloyd, miner	Putting in cut	Piece of coal flew in eye	Norwood-White Coal Co., No. 7, Dallas
Mar. 14, 2:30 p. m.	Bert Ferris, timberman	Fall of slate	Right side bruised	Scandia Coal Co., No. 2, Dallas
Mar. 17, 3:00 p. m.	Dan McKinley, miner	Cutting coal	Piece of coal in eye	Scandia Coal Co., No. 2, Dallas
Mar. 17, 2:00 p. m.	Eugene Barbes, miner	Squeezed by mule	Back and shoulder bruised	Norwood-White Coal Co., No. 7, Dallas
Mar. 17, 2:00 p. m.	Joe Jones, timberman	Placing timbers	Coal struck eye	Norwood-White Coal Co., No. 3, Polk
Mar. 19, 11:00 a. m.	E. Parker, driver	Coal flew down shaft	Leg bruised	Wright Coal Co., Polk
Mar. 19, 4:30 p. m.	Jas. Hutcheson, cager	On man train	Badly lacerated thumb	Wright Coal Co., Polk
Mar. 21, 2:00 p. m.	Tony Turk, timberman	Unloading props	Head bumped on timbers	Wright Coal Co., Polk
Mar. 21, 2:00 p. m.	John Kasonovich, miner	Fall of slate	Left wrist sprained	Norwood-White Coal Co., No. 7, Dallas
Mar. 25, 1:30 p. m.	Carl Jesnick, miner	Fall of slate	Back injured	Wright Coal Co., Polk
Mar. 27, 10:00 a. m.	Chas. Decio, miner	Mining coal	Struck in eye by coal	Urbandale Coal Co., Polk
Apr. 2, 2:00 p. m.	Ottulo Bianci, miner	Piece of coal flew in eye	Injured eye	Saylor Coal Co., Polk
Apr. 8, 10:00 a. m.	Cal Rice, miner	Caught by car wheel	Two fingers crushed	Saylor Coal Co., Polk
Apr. 7, 9:00 a. m.	Milt Wyant, driver	Caught bet. mule and car	Three ribs broken	Saylor Coal Co., Polk
Apr. 7, 2:30 p. m.	Jas. Timmons, miner	Fall of slate	Side and ankle bruised	Scandia Coal Co., No. 2, Dallas
Apr. 8, 2:00 p. m.	Dan Heimbauch, miner	Lifting coal	Rupture	Bennett Bros. Coal Co., Polk
Apr. 9, 2:00 p. m.	Ben Ferris, timberman	Fall of slate	Back bruised, ribs cracked	Scandia Coal Co., No. 2, Dallas
Apr. 9, 2:00 p. m.	Leo Ruminovick, timberman	Breaking slate	Piece fell on foot	Saylor Coal Co., Polk
Apr. 21, 5:30 a. m.	G. Borcht, coupler	Lifting car	Ruptured	Wright Coal Co., Polk
Apr. 23, 1:00 p. m.	James Jacobs, miner	Mining shot	Coal flew in eye	Norwood-White Coal Co., No. 7, Dallas
Apr. 29, 2:30 p. m.	C. Lanterio, pumpman	Fell off platform	Wrenched back and hips	Norwood-White Coal Co., No. 7, Dallas
May 2, 10:30 a. m.	Simo Tamburini, miner	Putting in cut	Right leg crushed	Radiant Coal Co., Dallas
May 9, 11:00 a. m.	Frank Krucze, miner	Cleaning coal	Sulphur in eye	Scandia Coal Co., No. 5, Dallas
May 15, 2:00 p. m.	W. P. Griffith, miner	Loading coal	Coal fell on knee	Norwood-White Coal Co., No. 7, Dallas
May 16, 10:00 a. m.	J. W. Jopling, tracklayer	Breaking rail	Piece fell on foot	Scandia Coal Co., No. 5, Dallas
May 21, 11:00 a. m.	Anton Rome, miner	Mining shot	Coal struck eye	Wright Coal Co., Polk
June 2, 2:00 p. m.	Emil Battani, miner	Putting in cut	Piece of sulphur in eye	Scandia Coal Co., No. 5, Dallas
June 23, 8:00 a. m.	Simo Tamburini, miner	Breaking slate	Struck by dirt in eye	Scandia Coal Co., No. 5, Dallas
June 24, 2:00 p. m.	Frank Leckner, miner	Shoveling coal	Wrenched back	Norwood-White Coal Co., No. 7, Dallas
June 24, 2:00 p. m.	Valli Tomich, timberman	Placing timbers	Struck by dirt in eye	Scandia Coal Co., No. 5, Dallas
June 27, 1:30 p. m.	Mike Campo, driver	Struck by car	Bruised knee	Scandia Coal Co., No. 5, Dallas
June 30, 9:00 a. m.	Jake Sekich, miner	Lifting car on track	Right hand bruised	Norwood-White Coal Co., No. 7, Dallas
July 14, 9:00 a. m.	Frank Krucze, miner	Lifting slate, piece broke	First cut	Scandia Coal Co., No. 5, Dallas
July 15, 8:30 a. m.	Charles Simonsen, driver	Switching car timbers	First and second fingers cut off	Shuler Coal Co., Dallas
July 19, 1:00 p. m.	Tony Maholovich, timberman	Lifting coal, foot slipped	Sprained right hip	Saylor Coal Co., Polk
July 22, 9:45 a. m.	A. Geofroed, miner	Cutting coal	Cut under eye by pick	Wright Coal Co., Polk
July 25, 1:30 p. m.	Harry Baies, driver	Caught bet. car and coal	Finger lacerated	Wright Coal Co., Polk
July 28, 2:15 p. m.	Joe Pandolph, miner	Fall of slate	Bruised ankle	Scandia Coal Co., No. 5, Dallas
Aug. 4, 2:15 p. m.	Elmer Cunstable, driver	Fall of rock	Jaw track, finger cut off	Manzy Coal Co., Webster
Aug. 11, 8:00 p. m.	Angelo Angaton, timberman	Fall of slate	Left hand bruised	Norwood-White Coal Co., No. 7, Dallas
Aug. 13, 2:00 p. m.	L. Rutland, miner	Fall of slate	Left elbow bruised	Scandia Coal Co., No. 2, Dallas
Aug. 19, 3:00 p. m.	Joe Lipovich, miner	Struck by falling timber	Stomach bruised	Norwood-White Coal Co., No. 7, Dallas
Aug. 30, 1:00 p. m.	Chas. Plie, timberman	Cutting, axe slipped	Left hand cut	Norwood-White Coal Co., No. 7, Dallas
Aug. 30, 2:00 p. m.	Riley Codler, miner	Fell down	Bruised elbow	Wright Coal Co., Polk
Aug. 27, 3:00 p. m.	Harry Kreiger, miner	Cutting coal, pick slipped	Privates injured	Summit Coal Co., Story
Sept. 2, 12:30 p. m.	George Chupchase, topman	Fall of timber	Finger mashed	Bennett Bros. Coal Co., Polk
Sept. 2, 3:45 p. m.	H. O. Burton, miner	Caught bet. cars	Left knee injured	Scandia Coal Co., No. 2, Dallas
Sept. 4, 2:00 p. m.	Jas. Wright, miner	Fall of slate	Bruised head and face	Saylor Coal Co., Polk
Sept. 5, 8:30 p. m.	Clark Campbell, driver	Caught bet. cars	Hips injured	Radiant Coal Co., Dallas
Sept. 6, 11:30 p. m.	A. Serowther, driver	Squeezed by mule	Right wrist broken	Scandia Coal Co., No. 2, Dallas
Sept. 9, 1:00 p. m.	Scott Reese, coupler	Spragging car	Right thumb mashed	Scandia Coal Co., No. 2, Dallas
Sept. 13, 11:00 a. m.	John Kasonovich, miner	Fall of coal	Right side bruised	Norwood-White Coal Co., No. 7, Dallas
Sept. 16, 2:00 p. m.	Vincenzo Decio, miner	Cutting coal	Coal flew in eye	Saylor Coal Co., Polk
Sept. 17, 2:00 p. m.	J. Richards, miner	Loading coal	Coal flew in eye	Saylor Coal Co., Polk
Sept. 19, 10:00 a. m.	B. Medie, miner	Fall of coal	Right hand bruised	Summit Coal Co., Story
Sept. 23, 2:00 p. m.	Tom McKinley, miner	Loading coal	Back sprained	Norwood-White Coal Co., No. 7, Dallas
Sept. 26, 2:00 p. m.	Frank Mattd, miner	Loading coal	Bruised hand	Saylor Coal Co., Polk
Sept. 27, 2:00 p. m.	Jas. Wright, miner	Fall of slate	Foot injured	Norwood-White Coal Co., No. 8, Polk
Sept. 29, 1:30 p. m.	Cal Rice, Sr., mine foreman	Struck knee against rock	Bruised knee	Saylor Coal Co., Polk
Oct. 4, 2:30 p. m.	Wm. Brooks, tracklayer	Laying track	Piece of steel in eye	Great Western Coal Co., Warren
Oct. 6, 3:00 p. m.	Wm. Lee, entryman	Fall of slate	Left side and arm injured	Great Western Coal Co., Warren
Oct. 6, 10:00 a. m.	J. A. Pearson, miner	Mining coal	Coal flew in eye	Great Western Coal Co., Warren
Oct. 7, 10:00 a. m.	Joe Ferguson, miner	Lifting coal	Back sprained	Great Western Coal Co., Warren
Oct. 8, 10:00 a. m.	Martin Skoff, miner	Fall of coal	Bruised right foot	Saylor Coal Co., Polk
Oct. 8, 3:00 p. m.	Miles Martin, miner	Kicked by mule	Left side bruised	Norwood-White Coal Co., No. 7, Dallas
Oct. 8, 10:00 a. m.	A. Tassie, miner	Lifting coal	Back sprained	Great Western Coal Co., Warren

NON-FATAL ACCIDENTS IN DISTRICT NO. 3, 1924—Continued

Date and Hour of Accident	Name and Occupation	Cause of Accident	Nature of Injury	Employing Company and County
Oct. 9, 2:00 p. m.	Chris Mickelson, chunker	Fall of coal down chute	Mashed thumb	Great Western Coal Co., Warren
Oct. 10, 3:30 p. m.	John Adams, miner	Loading coal	Finger mashed	Great Western Coal Co., Warren
Oct. 10, 10:00 a. m.	Roy May, miner	Breaking slate	Hand bruised	Des Moines Coal Co., Polk
Oct. 11, 3:00 p. m.	Morgan Thomas, entryman	Mining coal	Coal flew in eye	Great Western Coal Co., Warren
Oct. 11, 3:30 p. m.	David Utterson, miner	Fall of coal	Lacerated scalp	Norwood-White Coal Co., No. 8, Polk
Oct. 13, 2:00 a. m.	Mason Walker, miner	Caught bet. car and rib	Hips, chest and back bruised	Norwood-White Coal Co., No. 7, Dallas
Oct. 14, 11:00 a. m.	Joe Costins, entryman	Lifting coal	Back sprained	Great Western Coal Co., Warren
Oct. 14, 10:30 a. m.	Gomer Hughes, miner	Fall of coal	Second finger cut off	Radiant Coal Co., Dallas
Oct. 14, 2:30 p. m.	Ed Straight, pusher	Spragging car	Finger nail torn loose	W. C. Wine Coal Co., Guthrie
Oct. 16, 3:00 p. m.	Geo. Covacovich, miner	Fall of slate	Neck injured	Wright Coal Co., Polk
Oct. 16, 9:00 a. m.	Albert Sonneburg, miner	Setting drilling machine	Third finger bruised	Saylor Coal Co., Polk
Oct. 20, 9:30 a. m.	Lon Cooper, hoisting engineer	Fell off coal truck	Bruised head and sho'l'd's	Des Moines Coal Co., Polk
Oct. 22, 10:20 a. m.	A. Paintino, miner	Mining coal	Sulphur flew in eye	Summit Coal Co., Story
Oct. 23, 2:00 p. m.	Hugh Simpson, entryman	Cutting coal	Coal flew in eye	Great Western Coal Co., Warren
Oct. 24, 2:00 p. m.	Elmer Abbey, weigh boss	Coal fell from car	Hands broken	Great Western Coal Co., Warren
Oct. 24, 2:00 p. m.	Sam Tambureni, miner	Outting coal	Coal flew in eye	Scandia Coal Co., No. 5, Dallas
Oct. 28, 10:00 a. m.	Joe Mangor, entryman	Needle from carbide can	Finger poisoned	Great Western Coal Co., Warren
Oct. 29, 10:00 a. m.	Hi Gillespie, miner	Cleaning slate	Hand bruised	Saylor Coal Co., Polk
Oct. 31, 2:00 p. m.	J. H. Reese, entryman	Fall of coal	Knee bruised	Great Western Coal Co., Warren
Nov. 1, 12:10 p. m.	Wm. Chambers, timberman	Cutting caps	Leg cut by ax	Scandia Coal Co., No. 5, Dallas
Nov. 1, 1:00 p. m.	John Zanoni, miner	Fall of slate	Head and face cut	Norwood-White Coal Co., No. 7, Dallas
Nov. 3, 2:00 p. m.	Fred Mayall, miner	Mining coal	Sulphur flew in eye	Summit Coal Co., Story
Nov. 7, 2:30 p. m.	L. A. Howland, miner	Mining coal	Sulphur flew in eye	Summit Coal Co., Story
Nov. 15, 9:30 a. m.	L. Ayres, miner	Leg broken	Back and shoulders hurt	Norwood-White Coal Co., No. 8, Dallas
Nov. 17, 9:00 a. m.	Fred Koebnick, miner	Fall of coal	Leg broken	South Side Coal Co., Boone
Nov. 17, 9:00 a. m.	Paul Cherrino, miner	Loading coal	Finger bruised	Great Western Coal Co., Warren
Nov. 18, 2:00 p. m.	J. W. Jopling, tracklayer	Pushing car	Knee injured	Scandia Coal Co., No. 5, Dallas
Nov. 25, 10:30 a. m.	Ben Posa, miner	Struck by coal	Knee bruised	Great Western Coal Co., Dallas
Nov. 29, 10:30 a. m.	John Hartzler, miner	Fall of slate	Right leg and wrist brok.	Great Western Coal Co., Dallas
Nov. 29, 10:30 a. m.	Chas. Berry, miner	Cutting coal	Coal flew in eye	Scandia Coal Co., No. 5, Dallas
Nov. 29, 10:30 a. m.	Robert Watson, driver	Caught by car	Bruised leg	Madrid Coal Co., Dallas
Nov. 29, 4:25 p. m.	C. Brown, driver	Stepped on nail	Nail in foot	Scandia Coal Co., No. 2, Dallas
Nov. 29, 10:30 a. m.	M. Cozanovich, miner	Slipped pushing cars	Right leg injured	Norwood-White Coal Co., No. 8, Polk
Dec. 1, 12:30 p. m.	D. Cartogis, timberman	Cutting timber, ax slipped	Left wrist cut	Scandia Coal Co., No. 2, Dallas
Dec. 3, 9:30 a. m.	Frank Krusic, miner	Cutting coal	Arm penetrated by pick	Scandia Coal Co., No. 5, Dallas
Dec. 8, 2:00 a. m.	Jas. Smith, miner	Lifting coal	Thumb cut and bruised	Saylor Coal Co., Polk
Dec. 10, 10:00 a. m.	Frank Sarasio, miner	Fall of slate	Fractured vertebrae	Bennett Bros. Coal Co., Polk
Dec. 12, 10:00 a. m.	Mercio Biondi, miner	Loading coal	Finger cut, infection	Madrid Coal Co., Dallas
Dec. 12, 8:00 a. m.	Wesley Shelburg, coupler	Coupling cars	Fingers mashed	Shuler Coal Co., Dallas
Dec. 12, 3:00 p. m.	A. Santi, timberman	Fall of slate	Right leg bruised	Scandia Coal Co., No. 2, Dallas
Dec. 15, 9:00 a. m.	Jerri Betti, driver	Spragging car	Mashed finger	Scandia Coal Co., No. 5, Dallas

Dec. 16, 3:30 p. m.	Robert Astley, miner	Fall of slate	Scalp wound	Shuler Coal Co., Dallas
Dec. 17, 2:00 p. m.	Albert Holmes, miner	Mining off shot	Eye slightly bruised	Madrid Coal Co., Dallas
Dec. 20, 10:30 a. m.	Earl Morgan, miner	Fall of slate	Scalp wound, hand inj'd	Radiant Coal Co., Dallas
Dec. 20, 8:00 a. m.	Charles Scott, miner	Fall of slate	Compound fracture right arm	Shuler Coal Co., Dallas
Dec. 27, 10:15 a. m.	Sam James, miner	Piece of sulphur in eye	Bad injury to eye	Wright Coal Co., Polk
Dec. 27, 11:00 a. m.	W. C. Vernon, mechanic	Caught by car	Left ankle bruised	Great Western Coal Co., Dallas
Dec. 30, 2:45 p. m.	W. Manzani, driver	Car ran over foot	Foot badly sprained	Wright Coal Co., Polk
Dec. 30, 10:00 a. m.	L. Pinort, miner	Fall of slate	Left shoulder bruised	Saylor Coal Co., Polk
Dec. 31, 9:00 p. m.	Louis Luzet, miner	Fall of slate	Nose cut, body bruised	Scandia Coal Co., No. 5, Dallas
Dec. 1, 10:30 a. m.	Joe Costello, miner	Loading coal	Leg injured	Norwood-White Coal Co., No. 7, Dallas
Dec. 30, 10:30 a. m.	Steve Tashoff, miner	Fall of slate	Eye injured	Norwood-White Coal Co., No. 8, Polk
Dec. 30, 3:00 p. m.	Frank Norokitis, miner	Flying coal	Eye injured	Norwood-White Coal Co., No. 8, Polk
Dec. 29, 11:00 a. m.	Joe Costello, miner	Wedging coal	Coal in eye	Norwood-White Coal Co., No. 7, Dallas

NON-FATAL ACCIDENTS IN DISTRICT NO. 3, 1925

Date and Hour of Accident	Name and Occupation	Cause of Accident	Nature of Injury	Employing Company and County
Jan. 3, 2:00 p. m.	Arnold Robnett, miner	Fall of slate	Left shoulder bruised	Scandia Coal Co., No. 5, Dallas
Jan. 3, 2:00 p. m.	Emil Battine, miner	Fall of slate	Knee bruised	Scandia Coal Co., No. 5, Dallas
Jan. 8, 12:15 p. m.	Cescer Nebatti, miner	Caught by coal	Finger mashed	Scandia Coal Co., No. 5, Dallas
Jan. 8, 11:25 a. m.	Scott Reese, spragger	Spragging car	Finger mashed	Scandia Coal Co., No. 2, Dallas
Jan. 9, 10:00 p. m.	E. Brackett, night watchman	Flash from Elec. switch	Infected eye	Norwood-White Coal Co., No. 8, Polk
Jan. 10, 11:00 a. m.	Frank Poliek, miner	Cutting coal	Eye injured	Scandia Coal Co., No. 5, Dallas
Jan. 10, 9:00 a. m.	E. Iore, miner	Lifting coal	Strained right side	Saylor Coal Co., Polk
Jan. 12, 10:00 a. m.	Eugene Bart, chunker	Cutting coal	Left eye bruised	Saylor Coal Co., Polk
Jan. 12, 9:30 a. m.	A. Beanci, miner	Chunking coal	Hand injured	Scandia Coal Co., No. 5, Dallas
Jan. 13, 9:30 a. m.	Raymond Evans, dayman	Caught in shaker belt	Sulphur in eye	Radiant Coal Co., Dallas
Jan. 13, 1:00 p. m.	Frank Krusic, miner	Cutting coal	Hand and arm injured	Scandia Coal Co., No. 5, Dallas
Jan. 14, 2:09 p. m.	John Leverton, timberman	Fall of timbers	Body burned and bruised	Norwood-White Coal Co., No. 8, Polk
Jan. 14, 4:45 p. m.	E. Fontani, shot fire	Windy shot	Right leg bruised	Radiant Coal Co., Dallas
Jan. 15, 2:00 p. m.	Thos. Hogarth, miner	Fall of slate	Back sprained	Des Moines Coal Co., Dallas
Jan. 15, 2:30 p. m.	Tony Friska, company man	Unloading dirt	Back sprained	Norwood-White Coal Co., No. 3, Polk
Jan. 15, 1:00 p. m.	John Andrews, machine man	Unloading machine	Lacerated little finger	Norwood-White Coal Co., No. 3, Polk
Jan. 17, 11:25 a. m.	W. S. Miller, miner	Fall of coal	Two ribs broken	Scandia Coal Co., No. 2, Dallas
Jan. 22, 10:00 a. m.	Louis Dezardi, miner	Lifting car	Left side sprained	Norwood-White Coal Co., No. 7, Dallas
Jan. 22, 1:30 p. m.	D. L. Hughes, miner	Setting prop	Fall of slate on foot	Scandia Coal Co., No. 2, Dallas
Jan. 25, 10:00 a. m.	Antony Patrik, miner	Loading dirt	Right hand bruised	Bennett Bros. Coal Co., Polk
Jan. 26, 3:00 p. m.	George Ashby, miner	Building gab	Hand bruised	Madrid Coal Co., Boone
Jan. 26, 9:30 a. m.	Sam Bouketto, miner	Building gab	Hand bruised	Saylor Coal Co., Polk
Jan. 27, 8:00 a. m.	Valentini Coppi, minor	Coupling cars	Finger lacerated	Wright Coal Co., Polk
Jan. 27, 10:00 a. m.	Tony Turk, timberman	Struck by sulphur	Eye injured	Wright Coal Co., Polk
Jan. 30, 3:00 p. m.	Frank Burk, miner	Sulphur in eye	Right eye injured	Saylor Coal Co., Polk
Feb. 3, 9:00 a. m.	Baxter Allen, miner	Lifting car	Back strained	Norwood-White Coal Co., No. 7, Dallas

NON-FATAL ACCIDENTS IN DISTRICT NO. 3, 1925—Continued

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Date and Hour of Accident	Name and Occupation	Cause of Accident	Nature of Injury	Employing Company and County
Feb. 4, 8:30 a. m.	Angelo Lambert, miner	Fall of top coal	Back of head cut	Norwood-White Coal Co., No. 7, Dallas
Feb. 5, 9:00 a. m.	John Riley, miner	Cutting coal	Sulphur in eye	Scandia Coal Co., No. 2, Dallas
Feb. 5, 8:15 p. m.	Jake Radosovich, miner	Cleaning dirt shot	Back hurt	Scandia Coal Co., No. 2, Dallas
Feb. 9, 4:45 a. m.	Geo. Johnson, topman	Fell off railroad car	Broken wrist, rib fract'd	Norwood-White Coal Co., No. 8, Dallas
Feb. 9, 1:30 p. m.	Thos. McLeod, miner	Fall of slate	Right leg broken	Great Western Coal Co., Warren
Feb. 10, 2:00 p. m.	W. C. Vernon, mechanic	Caught in mining belt	Arm broken	Great Western Coal Co., Warren
Feb. 10, 8:00 a. m.	Hugh McGregor, entryman	Fall of slate	Hips broken	Great Western Coal Co., Warren
Feb. 11, 5:00 p. m.	Thomas Sullivan, shot firer	Premature explosion	Injured by after damp	Madrid Coal Co., Boone
Feb. 12, 7:00 a. m.	Albert Carroll, driver	Light went out	Squeezed legs and hips	Wright Coal Co., Polk
Feb. 12, 8:00 p. m.	Tony Turk, timberman	Struck by sulphur	Eye injured	Wright Coal Co., Polk
Feb. 13,	Frank Gregovich, miner	Working on knees	Knee bruised	Saylor Coal Co., Polk
Feb. 13, 8:00 a. m.	Joe Newton, dirtman	Dropped rail on foot	Right foot bruised	Scandia Coal Co., No. 2, Dallas
Feb. 14, 2:30 p. m.	Joe Ghent, miner	Pushing car of coal	Strained back	Saylor Coal Co., Polk
Feb. 16,	Martin Header, miner	Mining shot	Coal fell, leg broken	Norwood-White Coal Co., No. 7, Dallas
Feb. 16, 10:00 a. m.	Jerry Pangelis, miner	Fall of slate	Body badly bruised	Madrid Coal Co., Boone
Feb. 16, 8:00 a. m.	Andrew Zeta, miner	Lifting coal	Wrenched back	Wright Coal Co., Polk
Feb. 18, 10:00 a. m.	H. Holland, driver	Kicked by mule	Right leg bruised	Norwood-White Coal Co., No. 3, Polk
Feb. 20, 3:30 p. m.	Len Wright, driver	Flying sulphur	Eye injured	Wright Coal Co., Polk
Feb. 24, 10:00 a. m.	A. Swatts, miner	Mining shot	Sulphur in eye	Madrid Coal Co., Boone
Feb. 25, 10:00 a. m.	Joe Bartolotta, miner	Sulphur in eye	Eye injured	Madrid Coal Co., Boone
Mar. 3, 10:30 a. m.	Ray McClintock, miner	Loading coal	Left foot mashed	Scandia Coal Co., No. 2, Dallas
Mar. 5, 1:30 p. m.	A. Malone, cager	Pushing car of plank	Finger mashed	Saylor Coal Co., Polk
Mar. 6, 3:00 p. m.	James Joyce, driver	Kicked by mule	Eye inflamed	Wright Coal Co., Polk
Mar. 22, 2:00 p. m.	John Breakfield, topman	Coal dust in eye	Right hand mashed	Norwood-White Coal Co., No. 7, Dallas
Mar. 25, 1:30 p. m.	Harley Koontz, miner	Fall of slate	Back hurt	Radiant Coal Co., Dallas
Mar. 27, 1:00 p. m.	Martin Starkey, miner	Run over by car	Bruised foot	Norwood-White Coal Co., No. 8, Polk
Mar. 31, 12:45 p. m.	Roy Hagssette, driver	Caught bet. car and rib.	Hips and back hurt	Wright Coal Co., Polk
April 6, 5:00 p. m.	Ivan Whitehurst, driver	Car jumped track	Badly mashed thumb	Norwood-White Coal Co., No. 8, Polk
April 9, 10:30 a. m.	L. O. Evans, entryman	Cutting coal	Sulphur in eye	Great Western Coal Co., Warren
April 12, 10:00 a. m.	Jas. Watson, company man	Pull down shaft	Badly bruised	W. D. Johnson Coal Co., Boone
April 15, 7:00 p. m.	Lawrence Walmer, driver	Run over by car	Ankle badly bruised	Great Western Coal Co., Warren
April 20,	H. Holland, driver	Kicked by mule	Contusion of lower jaw	Norwood-White Coal Co., No. 3, Polk
May 5, 10:30 a. m.	Harley Koontz, miner	Slate from gab.	Left foot mashed	Radiant Coal Co., Dallas
May 11, 2:00 p. m.	John Manfredero, dirtman	Fall of slate	Left foot broken	Norwood-White Coal Co., No. 7, Dallas
May 13, 10:00 a. m.	F. A. Axson, miner	Fall of slate	Fractured back	Norwood-White Coal Co., No. 8, Polk
June 9, 8:00 a. m.	John Pillman, miner	Piece of coal flew in eye	Eye injured	Norwood-White Coal Co., No. 8, Polk
June 19, 9:00 a. m.	Pete Milosovich, miner	Mining off shot	Infection in pain of hand	Norwood-White Coal Co., No. 8, Polk
June 20, 10:00 a. m.	August Larson, miner	Fall of slate	Body bruised	Radiant Coal Co., Dallas
June 25, 8:30 a. m.	H. Norman, miner	Fall of rail	W. D. Johnson Coal Co.	Boone
June 30, 11:00 a. m.	August Starovech, timberman	Fall of slate	Left side bruised	Norwood-White Coal Co., No. 7, Dallas
July 15, 1:30 p. m.	A. Ronkey, miner	Cutting coal	Piece of coal in eye	Saylor Coal Co., Polk

REPORT IOWA MINE INSPECTORS

July 16, 4:45 p. m.	W. E. Moore, shot firer	Concussion from shot	Both legs broken	Saylor Coal Co., Polk
July 28, 7:00 a. m.	John Balducci, miner	Stepped in hole	Wrenched back	Saylor Coal Co., Polk
July 29, 3:00 p. m.	Carl Anderson, driver	Caught bet. car and rib.	Foot and leg bruised	Norwood-White Coal Co., No. 8, Polk
Aug. 7,	A. Malone, cager	Lifting loaded car	Strained back	Saylor Coal Co., Polk
Aug. 17,	Pellezone Berjone, miner	Loading coal	Wrenched back	Saylor Coal Co., Polk
Aug. 17, 10:30 a. m.	Lloyd Given, miner	Fall of coal	Foot and shoulder bruised	Radiant Coal Co., Dallas
Aug. 17, 11:20 a. m.	C. E. Johnson, miner	Fall of slate	Both legs bruised	Radiant Coal Co., Dallas
Aug. 25, 2:00 p. m.	Ernest Jeff, machine runner	Fall of slate	Left arm fractured	Shuler Coal Co., Dallas
Aug. 28, 9:00 a. m.	John Rhodes, dirtman	Struck by cable	Left arm cut	Norwood-White Coal Co., No. 7, Dallas
Aug. 21, 2:00 p. m.	E. Lee, miner	Loading coal	Bruised fingers	Saylor Coal Co., Polk
Sept. 1, 9:00 a. m.	Rico Battani, miner	Loading coal	Left hand bruised	Norwood-White Coal Co., No. 7, Dallas
Sept. 3, 10:00 a. m.	Steve Mamma, miner	Breaking slate	Struck in eye by slate	Norwood-White Coal Co., No. 8, Polk
Sept. 11, 2:30 p. m.	John Nelson, entryman	Run over by car	Leg broken	Great Western Coal Co., Dallas
Sept. 17, 10:30 a. m.	Matt Murray, miner	Fall of coal	Right leg bruised	Radiant Coal Co., Dallas
Sept. 21, 10:00 a. m.	Thos. Gyres, miner	Slipped and fell	Injured left knee	Norwood-White Coal Co., No. 8, Polk
Sept. 25, 8:00 a. m.	J. D. Johnson, miner	Fall of boulder	Contusion nose and lip	Saylor Coal Co., Polk
Sept. 25, 10:30 a. m.	Louis Firnot, miner	Fall of slate	Strained back	Saylor Coal Co., Polk
Oct. 1, 1:30 p. m.	Noah D. Wehite, entryman	Fall of slate	Back broken	Great Western Coal Co., Warren
Oct. 2, 10:00 a. m.	S. Galvani, timberman	Fall of slate	Ankle hurt	Scandia Coal Co., No. 2, Dallas
Oct. 18, 2:00 p. m.	Tom Brown, greaser	Caught by car	Right wrist injured	Norwood-White Coal Co., No. 3, Polk
Oct. 19, 3:45 p. m.	Ennis Jones, miner	Falling slate	Back and hips bruised	Radiant Coal Co., Dallas
Oct. 26, 8:00 a. m.	A. Wobland, miner	Fall of slate	Leg and side bruised	Scandia Coal Co., No. 2, Dallas
Oct. 29, 10:00 a. m.	Robt. Adamson, miner	Filling auger	Piece of steel in eye	Saylor Coal Co., Polk
Nov. 4, 2:30 p. m.	O. L. McClintock, miner	Run over by car	3 ribs, collar bone broken	Scandia Coal Co., No. 2, Dallas
Nov. 6, 11:00 a. m.	C. Genassi, miner	Pushing car	Back strained	Saylor Coal Co., Polk
Nov. 10, 11:00 a. m.	H. Little, miner	Fall of slate	Back bruised	Bennett Bros. Coal Co., Polk
Nov. 25, 8:00 p. m.	Francis O. Deay, sr., miner	Carrying tools, slipped	Right leg bruised	Norwood-White Coal Co., No. 7, Dallas
Nov. 28, 11:45 a. m.	E. F. Hicks, miner	Moving slate	Finger mashed	Saylor Coal Co., Polk
Nov. 28, 2:00 p. m.	T. Nordini, driver	Car jumped track	Right ankle bruised	Scandia Coal Co., No. 2, Dallas
Dec. 1, 11:00 a. m.	Ed. Cooley, driver	Kicked by mule	Left leg fractured	Norwood-White Coal Co., No. 8, Polk
Dec. 2, 11:15 a. m.	Pete Ronki, miner	Mining coal	Left hand bruised	Saylor Coal Co., Polk
Dec. 2, 2:00 p. m.	Dominick Esolini, miner	Filling auger	Hand cut	Saylor Coal Co., Polk
Dec. 5, 11:15 a. m.	John Mikalovich, miner	Fall of rock	Left leg fractured	Norwood-White Coal Co., No. 8, Polk
Dec. 11, 10:30 a. m.	Frank Powell, miner	Loading coal	Slightly ruptured	Radiant Coal Co., Dallas
Dec. 12, 11:00 a. m.	E. Maplin, driver	Run over by car	Right foot broken	Des Moines Coal Co., Polk
Dec. 14, 8:00 a. m.	B. Lenavi, timberman	Stepped in the hole	Back strained	Scandia Coal Co., No. 2, Dallas
Dec. 20, 7:00 a. m.	Joe Wellington, mule feeder	Shoeing a mule	Shoulder bruised, head cut	Scandia Coal Co., No. 2, Dallas
Dec. 22, 2:30 p. m.	R. O. French, miner	Fall of slate	Right arm bruised	Des Moines Coal Co., Polk
Dec. 29, 10:30 a. m.	Tom Walker, miner	Fall of coal	Left leg broken	Scandia Coal Co., No. 2, Dallas
Dec. 5,	Joe Marsiglio, miner	Breaking coal	Piece of coal in eye	Norwood-White Coal Co., No. 7, Dallas

STATISTICS OF IOWA MINING

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FATAL AND SERIOUS ACCIDENTS IN DISTRICT NO. 3
Classified by Cause of Accident and Occupation of Injured, 1925—Continued

CAUSES (U. S. Bureau of Mines Classification)	Fatal				Serious										Totals						
	Miners	Timberman	Entryman	Machine runner	Miners	Driver	Timberman	Entryman	Topman	Machine runner	Nightman	Spranger	Cager	Company man		Chucker	Mule feeder	Dittman	Circasser	Mechanic	Shot fires
8 Animals																					
Kicked by mule						4															4
Squeezed by mule						1															1
Shoing a mule																					1
9 Falls of timbers																					
Fall of person						1	1										1				3
10 Hand Tools: Axes, bars, picks, nails, shovels, spikes, etc.									1												1
Totals	2	1	1	1	5	64	12	6	4	2	2	1	2	3	1	1	3	1	1	3	107

LIST OF OPERATING COAL COMPANIES, SUPERINTENDENTS, ETC., IN DISTRICT NO. 1

Name of Company—Mine No.	Superintendent	Address	Shaft or Slope	Plan of Working	How Ventilated	Power Used	Shipping or Local
Acken Coal Co., No. 1	Geo. Porter	Mystic	Slope	Longwall	Fan	Steam	C., M. & St. P. R. R.
Appanoose Coal & Fuel Co., No. 22	J. L. Lodwick	Mystic	Shaft	Longwall	Fan	Steam	C., M. & St. P. R. R.
Ancor Coal Co., No. 2	J. W. Woods	Centerville	Shaft	Longwall	Fan	Steam	C., M. & St. P. R. R.
Armstrong Coal Co.	Geo. Harrison	Cincinnati	Shaft	Longwall	Fan	Steam	C., R. I. & P. R. R.
Barrett Coal Co.	John Barrett	Mystic	Slope	Longwall	Fan	Steam	C., B. & Q. R. R.
Beggs Coal Co.	Wm. Beggs	Mystic	Shaft	Longwall	Furnace	Electricity	C., M. & St. P. R. R.
Blackbird Coal Co.	C. A. Harsh	Centerville, Rt. 1	Shaft	Longwall	Fan	Electricity	C., M. & St. P. R. R.
Bradshaw Coal Co.	Dan Bradshaw	Dean, Rt. 1	Shaft	Longwall	Fan	Horse	Local
Brand Coal Co.	Frank Brand	Piano	Shaft	Longwall	Fan	Horse	Local
Caldwell Coal Co.	Lars Johnson	Exline	Shaft	Longwall	Furnace	Gasoline	C., B. & Q. R. R.
Campbell Coal Co.	R. D. Campbell	Mystic, Rt. 1	Slope	Longwall	Furnace	Horse	Local
Carbon Fuel Co.	J. Q. Adams	Centerville	Shaft	Longwall	Fan	Steam	C., R. I. & P. R. R.
Center Coal Co.	Louis Anderson	Centerville	Shaft	Longwall	Fan	Electricity	C., R. I. & P. R. R.
Centerville Block Coal Co., No. 2	Oliver Cree	Centerville	Shaft	Longwall	Fan	Steam	C., R. I. & P. R. R.
Centerville Block Coal Co., No. 3	Oliver Cree	Centerville	Shaft	Longwall	Fan	Steam	C., B. & Q. R. R.
Centerville Block Coal Co., No. 5	Oliver Cree	Centerville	Slope	Longwall	Fan	Electricity	C., B. & Q. R. R.
Centerville Block Coal Co., No. 10	Oliver Cree	Centerville	Shaft	Longwall	Fan	Steam	C., R. I. & P. R. R.
Citizens Coal Co.	W. H. Parker	Centerville	Shaft	Longwall	Fan	Electricity	So. Ia. Utilities Co.
Clark Coal Co.	Dan Clarke	Centerville	Shaft	Longwall	Fan	Steam	Local
Columbus Coal Co.	Frank Casale	Centerville	Slope	Longwall	Fan	Electricity	Local
Dennis Coal Co.	Ross Johnson	Centerville	Slope	Longwall	Fan	Horse	Local
Diamond Block Coal Co., No. 29	D. Lodwick	Mystic	Shaft	Longwall	Fan	Steam	C., M. & St. P. R. R.
Domestic Coal Co.	Nova Fowler	Cincinnati	Shaft	Room and Pillar	Fan	Steam	Local
Duff Coal Co.	G. R. Duff	Mystic, Rt. 2	Shaft	Longwall	Fan	Horse	Local
Egypt Coal Co.	A. Vinnall	Mystic	Slope	Longwall	Fan	Steam	C., M. & St. P. R. R.
Empire Coal Co.	A. W. Judy	Centerville	Shaft	Longwall	Fan	Electricity	So. Ia. Utilities Co.
Engie Coal Co.	Adam Engie	Centerville	Shaft	Longwall	Furnace	Horse	Local
Enterprise Coal Co.	J. R. Boyd	Numa	Shaft	Longwall	Fan	Horse	Local
Fairbank Coal Co.	T. Lundgren	Centerville	Shaft	Longwall	Fan	Electricity	Local
Fenton Coal Co.	Loft Fenton	Piano, Rt. 1	Slope	Longwall	Furnace	Horse	Local
Fowler & Wilson Coal Co., No. 1	Robt Hunter	Centerville	Shaft	Longwall	Fan	Steam	C., M. & St. P. R. R.
Fowler & Wilson Coal Co., No. 2	Robt Hunter	Centerville	Slope	Longwall	Fan	Steam	C., M. & St. P. R. R.
Friendship Coal Co.	D. Richardson	Cincinnati	Shaft	Room and Pillar	Fan	Horse	Local
Garfield Coal Co.	G. S. Lodwick	Centerville	Shaft	Longwall	Fan	Electricity	C., B. & Q. R. R.
Hall Coal Co.	Joe Hall	Piano, Rt. 1	Shaft	Longwall	Furnace	Horse	Local
Hart Coal Co.	Geo. Hart	Centerville	Slope	Longwall	Furnace	Horse	Local
Helman Coal Co.	Chas. Helman	Piano	Shaft	Longwall	Fan	Horse	Local
High Test Coal Co.	Tony Tomelich	Numa	Shaft	Longwall	Furnace	Horse	Local
Hollenbeck Coal Co.	A. Hollenbeck	Centerville, Rt. 1	Shaft	Longwall	Fan	Horse	Local
Hoswer Coal Co.	Frank Ranson	Jerome	Shaft	Longwall	Fan	Horse	Local
Ideal Coal Co.	W. B. Dunham	Piano, Rt. 1	Shaft	Longwall	Fan	Horse	Local
Iowa Block Coal Co.	Lars Johnson	Exline	Shaft	Room and Pillar	Fan	Steam	C., B. & Q. R. R.
Kinsade Coal Co.	Earnest Kinsade	Centerville, Rt. 3	Slope	Longwall	Fan	Horse	Local
Koontz Coal Co.	John Koontz	Centerville	Shaft	Longwall	Fan	Electricity	Local
Lee Coal Co.	John Lee	Mystic	Slope	Longwall	Furnace	Horse	Local
Lehill Coal Co.	Elijah Gorman	Mystic, Rt. 1	Slope	Longwall	Furnace	Horse	Local
Liberty Coal Co., No. 2	Jas. Colgan	Mystic	Slope	Longwall	Fan	Horse	C., M. & St. P. R. R.
Liberty Coal Co., No. 4	Jas. Colgan	Mystic	Slope	Longwall	Fan	Horse	C., M. & St. P. R. R.
Liberty Coal Co., No. 6	Jas. Colgan	Mystic	Slope	Longwall	Fan	Electricity	C., M. & St. P. R. R.
Liberty Coal Co., No. 23	Jas. Colgan	Mystic	Shaft	Longwall	Fan	Electricity	C., M. & St. P. R. R.
Little Walnut Coal Co.	John Ball	Mystic	Shaft	Longwall	Furnace	Horse	Local
Loug Coal Co.	Noah McDaniel	Centerville, Rt. 4	Shaft	Longwall	Fan	Horse	Local
Love Coal Co.	Willard Love	Brazil	Slope	Longwall	Furnace	Horse	Local
Maddalozza Coal Co.	V. Maddalozza	Mystic	Slope	Longwall	Furnace	Horse	Local
McConville & Sons Coal Co., No. 1	Ed McConville	Centerville	Shaft	Longwall	Fan	Electricity	So. Ia. Utilities Co.
McConville & Sons Coal Co., No. 2	Ed McConville	Centerville	Shaft	Longwall	Fan	Electricity	C., B. & Q. R. R.
McConville & Sons Coal Co., No. 3	Ed McConville	Centerville	Shaft	Longwall	Fan	Electricity	So. Ia. Utilities Co.
Monitor Coal Co.	Watt Hitebens	Centerville	Shaft	Longwall	Fan	Electricity	So. Ia. Utilities Co.
Mystic Coal Co.	J. Horridge	Mystic	Shaft	Longwall	Fan	Steam	C., M. & St. P. R. R.

LIST OF OPERATING COAL COMPANIES, SUPERINTENDENTS, ETC., IN DISTRICT NO. 1—Continued

Name of Company—Mine No.	Superintendent	Address	Shaft or Slope	Plan of Working	How Ventilated	Power Used	Shipping or Local
New Oriental Coal Co.	J. Ritter	Centerville	Slope	Longwall	Furnace	Electricity	C., B. & Q. R. R.
New Star Coal Co.	Sanford Pugh	Centerville, Rt. 1.	Slope	Room and Pillar	Fan	Horse	Local
Noah Smith Coal Co.	Noah Smith	Piano	Shaft	Longwall	Furnace	Horse	Local
North Hill Coal Co.	A. Goughnour	Centerville	Shaft	Longwall	Fan	Horse	Local
Numa Coal Co.	B. Arbogast	Numa	Shaft	Longwall	Fan	Horse	Local
Peacock Coal Co.	R. S. Lawton	Brazil	Slope	Longwall	Fan	Electricity	C., R. I. & P. R. R.
Prairie Coal Co., No. 1.	Robt Hunter	Centerville	Shaft	Longwall	Furnace	Horse	C., B. & Q. R. R.
Prairie Coal Co., No. 5.	Robt Hunter	Centerville	Shaft	Longwall	Fan	Steam	C., R. I. & P. R. R.
Prospect Coal Co.	M. F. Hughes	Exline, Rt. 1.	Slope	Longwall	Fan	Horse	C., R. I. & P. R. R.
Raney Coal Co.	Ira Lowe	Centerville	Shaft	Longwall	Fan	Horse	Local
Rathbun Coal Co.	Roy Harbour	Rathbun	Shaft	Longwall	Fan	Horse	Local
Rock Valley Coal Co.	Wm. Campbell	Centerville	Slope	Longwall	Fan	Electricity	C., M. & St. P. R. R.
Rosebrook Coal Co.	L. L. Lodwick	Mystic	Shaft	Longwall	Fan	Electricity	Local
Ryals Coal Co.	Sam Ryals	Coal City	Slope	Room and Pillar	Furnace	Horse	C., B. & Q. R. R.
Scratchfield Coal Co.	E. Scratchfield	Cincinnati, Rt. 1.	Shaft	Longwall	Furnace	Horse	Local
Service Coal Co.	Herbert Stolz	Mystic	Shaft	Longwall	Fan	Steam	Local
Sleeth Coal Co.	Isaac Sleeth	Coal City	Slope	Longwall	Fan	Steam	C., M. & St. P. R. R.
South Creek Coal Co.	Milton Fenton	Promise City, Rt. 1.	Shaft	Room and Pillar	Furnace	Horse	Local
South Side Coal Co.	Oscar Bergstrom	Centerville	Shaft	Room and Pillar	Fan	Horse	Local
Star Coal Co.	A. Horricks	Mystic	Slope	Longwall	Fan	Electricity	C., B. & Q. R. R.
Sterling Coal Co.	J. Q. Adams	Centerville	Shaft	Longwall	Fan	Horse	C., B. & Q. R. R.
Sunshine Coal Co.	J. R. Hamm	Centerville	Shaft	Longwall	Fan	Electricity	So. Ia. Utilities Co.
Swanson Coal Co.	S. E. Swanson	Centerville, Rt. 2.	Slope	Longwall	Fan	Electricity	C., B. & Q. R. R.
Thistle Coal Co., No. 4.	Geo. Dinning	Cincinnati	Shaft	Room and Pillar	Furnace	Horse	Local
Truby Coal Co.	J. A. Truby	Mystic, Rt. 1.	Shaft	Room and Pillar	Fan	Steam	C., B. & Q. R. R.
Wakfield Coal Co.	Earl Wakfield	Brazil	Slope	Longwall	Furnace	Horse	Local
White Oak Coal Co.	A. Hotchen	Exline	Shaft	Longwall	Furnace	Horse	Local
Winifred Coal Co.	L. L. Lodwick	Mystic	Shaft	Longwall	Fan	Steam	C., M. & St. P. R. R.

LUCAS COUNTY

Briggs Coal Co.	Walter Briggs	Purdy, Rt. 1.	Slope	Room and Pillar	Furnace	Horse	Local
Central Iowa Fuel Co., No. 2.	W. M. Malone	Chariton	Shaft	Room and Pillar	Fan	Steam	C., R. I. & P. R. R.
Central Iowa Fuel Co., No. 4.	W. M. Malone	Chariton	Shaft	Room and Pillar	Fan	Steam	C., R. I. & P. R. R.
Central Iowa Fuel Co., No. 5.	W. M. Malone	Chariton	Shaft	Room and Pillar	Fan	Electricity	C., R. I. & P. R. R.
Lucas Coal Co.	E. G. Daniels	Lucas	Shaft	Longwall	Fan	Horse	Local

MONROE COUNTY

Albia Coal Co., No. 3.	H. H. Harris	Albia	Shaft	Room and Pillar	Fan	Steam	M. & St. L. R. R.
Airline Coal Co.	Gus Larson	Albia	Shaft	Room and Pillar	Fan	Horse	Local
Fowler Coal Co.	W. S. Fowler	Albia	Shaft	Room and Pillar	Fan	Steam	Local
Graham Coal Co.	A. C. Bridges	Avery	Shaft	Room and Pillar	Fan	Steam	C., B. & Q. R. R.
Hooking Coal Co.	A. E. Hupton	Hooking	Shaft	Room and Pillar	Fan	Electricity	M. & St. L. R. R.

WAYNE COUNTY

Bennett Coal Co.	L. E. Bennett	Promise City, Rt. 2	Shaft	Longwall	Fan	Horse	Local
Guthrie Coal Co.	Ira Guthrie	Promise City, Rt. 2	Shaft	Longwall	Furnace	Horse	Local
Hayhurst Coal Co.	Alf Hayhurst	Promise City, Rt. 2	Shaft	Longwall	Fan	Horse	Local
Rissler Coal Co.	F. H. Rissler	Melrose, Rt. 3	Shaft	Longwall	Fan	Horse	Local
Seymour Coal Co.	Sidney Voyce	Seymour	Shaft	Longwall	Fan	Steam	C., R. I. & P. R. R.
Violet Valley Coal Co.	Wm. Steffy	Seymour	Shaft	Longwall	Fan	Gasoline	Local

ADAMS COUNTY

Ankeny Coal Co.	Joe Ankeny	Villisca	Shaft	Longwall	Furnace	Steam	Local
Buck Coal Co.	Wm. Buck	Carbon	Shaft	Longwall	Furnace	Horse	Local
Gail Coal Co.	J. W. Gail	Carbon	Shaft	Longwall	Fan	Horse	Local
Hathway Coal Co.	Robt Hathway	Nodaway	Shaft	Longwall	Fan	Horse	Local
Henton Coal Co.	John Henton	Carbon	Shaft	Longwall	Furnace	Horse	Local
Jones Coal Co.	Martin Jones	Carbon	Shaft	Longwall	Furnace	Horse	Local
McKee Coal Co.	Robt McKee	Carbon	Shaft	Longwall	Furnace	Horse	Local
Right Way Coal Co.	R. W. Hathway	Nodaway	Shaft	Longwall	Fan	Horse	Local
Ruth Coal Co.	J. F. Ruth	Carbon	Shaft	Longwall	Furnace	Horse	Local
Smith Coal Co.	Percy Smith	Carbon	Shaft	Longwall	Furnace	Horse	Local
Wilson Bro's Coal Co.	John Wilson	Villisca	Shaft	Longwall	Fan	Horse	Local

PAGE COUNTY

Evans Coal Co.	Geo. Evans	Clarinda	Shaft	Longwall	Fan	Electricity	Local
Pearson Coal Co., No. 1.	Harley Pearson	Clarinda	Shaft	Longwall	Fan	Electricity	Local
Pearson Coal Co., No. 2.	Harley Pearson	Clarinda	Shaft	Longwall	Fan	Electricity	C., B. & Q. R. R.

TAYLOR COUNTY

Bean Coal Co.	John Bean	New Market	Shaft	Longwall	Fan	Horse	Local
Black Diamond Coal Co.	E. D. Morris	Clarinda	Shaft	Longwall	Fan	Steam	Local
Clean Coal Co.	Wm. Drake	Gravity	Shaft	Longwall	Fan	Electricity	Local
New Market Coal Co.	Jas. Pullen Sr.	New Market	Shaft	Longwall	Fan	Electricity	C., B. & Q. R. R.

LIST OF COAL COMPANIES, SUPERINTENDENTS, ETC., IN DISTRICT NO. 2

WAPELLO COUNTY

Name of Company—Mine No.	Superintendent	Address	Shaft or Slope	Plan of Working	How Ventilated	Power Used	Shipping or Local
Ottumwa Coal Co.	Roger Griffiths	Ottumwa	Shaft	Room and Pillar	Fan	Horse and Gin	Local
Matt Miers Coal Co.	Matt Miers	Ottumwa	Shaft	Room and Pillar	Fan	Horse and Gin	Local
Wm. Miers Coal Co.	William Miers	Ottumwa	Shaft	Room and Pillar	Fan	Horse and Gin	Local
Simpson Bros. Coal Co.	Wm. Simpson	Ottumwa	Shaft	Room and Pillar	Fan	Horse and Gin	Local
Reese Coal Co.	Richard Reese	Ottumwa	Shaft	Room and Pillar	Fan	Horse and Gin	Local
Akers Coal Co., No. 1	Charles Akers	Ottumwa	Slope	Longwall	Natural	Horse and Gin	Local
Akers Coal Company, No. 2	Charles Akers	Ottumwa	Shaft	Longwall	Natural	Horse and Gin	Local
R. E. Cooper Coal Co.	R. E. Cooper	Ottumwa	Shaft	Longwall	Natural	Horse and Gin	Local
Roy Monahan Coal Co.	Roy Monahan	Ottumwa	Shaft	Longwall	Natural	Horse and Gin	Local
Glendale Coal Co.	John Whitham	Ottumwa	Shaft	Room and Pillar	Fan	Steam	Local
Union Coal Co.	Wm. J. Sullivan	Ottumwa	Shaft	Longwall	Fan	Steam	Local
Rutledge Coal Co.	John Howard	Ottumwa	Shaft	Room and Pillar	Fan	Steam	Local
Best Coal Co.	Wm. Rogers	Ottumwa, R.F.D.	Shaft	Room and Pillar	Fan	Steam	Local
Gibbs Bros. Coal Co.	Thos. Gibbs	No. 8 Ottumwa, R.F.D.	Shaft	Room and Pillar	Fan	Horse and Gin	Local
W. E. Brooks Coal Co.	W. E. Brooks	No. 8 Ottumwa, R.F.D.	Shaft	Room and Pillar	Fan	Horse and Gin	Local
Glenn Bros. Coal Co.	Elmer Glenn	No. 8 Ottumwa, R.F.D.	Slope	Room and Pillar	Natural	Horse and Gin	Local
Howell Price Coal Co.	Howell Price	Ottumwa	Shaft	Room and Pillar	Fan	Horse and Gin	Local
Jesse Shalley Coal Co.	Jesse Shalley	Ottumwa	Shaft	Room and Pillar	Natural	Horse and Gin	Local
E. Carder Coal Co.	E. Carder	Ottumwa	Slope	Room and Pillar	Natural	Horse and Gin	Local
Thorn & Son Coal Co.	Dave Thorn	No. 4 Ottumwa, R.F.D.	Shaft	Room and Pillar	Fan	Horse and Gin	Local
Larkin Coal Co.	P. F. Larkin	No. 4 Ottumwa, R.F.D.	Shaft	Room and Pillar	Natural	Horse and Gin	Local
Rowley Coal Co.	Ed. Rowley	No. 4 Blakesburgh, E. F. D.	Shaft	Room and Pillar	Fan	Horse and Gin	Local

Slinsky & Johnson Coal Co.	John Slinsky	Blakesburgh, R. F. D.	Shaft	Room and Pillar	Fan	Gin	Local
J. W. Dawson Coal Co.	J. W. Dawson	Kirkville	Shaft	Room and Pillar	Fan	Horse and Gin	Local
Hartwig Bros. Coal Co., No. 2	Harley Hartwig	Floris	Slope	Room and Pillar	Natural	Horse and Gin	Local
Hartwig Bros. Coal Co., No. 3	Harley Hartwig	Floris	Slope	Room and Pillar	Natural	Horse and Gin	C. R. I. & P. R. R.
Gene Brooks Coal Co.	Gene Brooks	Eldon	Slope	Room and Pillar	Natural	Horse and Gin	C. R. I. & P. R. R.
Star Coal Co., No. 1	Wm. McIntosh, Jr.	Eldon	Shaft	Room and Pillar	Fan	Horse and Gin	Local
Star Coal Co., No. 2	Wm. McIntosh, Jr.	Eldon	Shaft	Room and Pillar	Fan	Horse and Gin	Local
Moore Coal Co.	Chas. Moore	Eldon	Shaft	Room and Pillar	Natural	Horse and Gin	Local
M. Stribling Coal Co.	M. Stribling	Eldon	Shaft	Room and Pillar	Natural	Horse and Gin	Local
Wignall Bros. Coal Co.	Wm. Wignall	Blakesburgh, No. 3	Shaft	Room and Pillar	Natural	Horse and Gin	Local
Happy Hollow Coal Co.	Phillip Miers	Chillicothe	Slope	Room and Pillar	Natural	Horse and Gin	Local
Homer Weist Coal Co.	Homer Weist	Eldon	Shaft	Room and Pillar	Fan	Horse and Gin	Local

MAHASKA COUNTY

W. T. Thatcher Coal Co.	W. T. Thatcher	Oskaloosa, R.F.D.	Slope	Room and Pillar	Natural	Horse and Gin	Local
Chas. Ahweller Coal Co.	Chas. Ahweller	Oskaloosa, R.F.D.	Shaft	Room and Pillar	Natural	Horse and Gin	Local
J. D. Rogers Coal Co.	J. D. Rogers	Oskaloosa, R.F.D.	Slope	Room and Pillar	Natural	Horse and Gin	Local
J. M. Matrisson Coal Co.	J. M. Matrisson	Oskaloosa, R.F.D.	Slope	Room and Pillar	Natural	Horse and Gin	Local
Williams Bros. Coal Co.	John Williams	Oskaloosa, R.F.D.	Slope	Room and Pillar	Natural	Horse and Gin	Local
Herling Coal Co.	George Herling	Oskaloosa, R.F.D.	Slope	Room and Pillar	Natural	Horse and Gin	Local
B. H. Furnald Coal Co.	R. H. Furnald	Oskaloosa, R.F.D.	Slope	Room and Pillar	Natural	Horse and Gin	Local
Swanson & Hohn Coal Co.	Martin Hohn	Oskaloosa	Slope	Room and Pillar	Natural	Horse and Gin	Local
Roberts Bros. Coal Co.	Richard Roberts	Oskaloosa	Shaft	Room and Pillar	Fan	Steam	Local
Lanning Coal Co.	F. D. Lanning	Oskaloosa	Slope	Room and Pillar	Fan	Electricity	Local
Boggs & Woodward Coal Co.	Albert Woodward	Oskaloosa	Slope	Room and Pillar	Fan	Horse and Gin	Local
Edwards Bros. Coal Co.	Matt Edwards	Oskaloosa	Slope	Room and Pillar	Furnace	Horse and Gin	Local
Geo. Matrisson Coal Co.	Geo. Matrisson	Oskaloosa, R.F.D.	Slope	Room and Pillar	Natural	Horse and Gin	Local
Adams Coal Co.	C. Adams	Oskaloosa, R.F.D.	Shaft	Room and Pillar	Fan	Horse and Gin	Local

LIST OF COAL COMPANIES, SUPERINTENDENTS, ETC., IN DISTRICT NO. 2—Continued

MAHASKA COUNTY—Continued

Name of Company—Mine No.	Superintendent	Address	Shaft or Slope	Plan of Working	How Ventilated	Power Used	Shipping or Local
DeFrehn & Coons Coal Co.	Wm. DeFrehn	Oskaloosa	Slope	Room and Pillar	Natural	Gin	Local
Dixon Coal Co.	G. E. Dixon	Oskaloosa	Slope	Room and Pillar	Jet	Horse and Gin	Local
Wilford Andrews Coal Co.	Wilford Andrews	Oskaloosa, R.F.D.	Shaft	Room and Pillar	Natural	Steam	Local
Hyniek Coal Co.	John Hyniek	Given, R.F.D.	Shaft	Room and Pillar	Fan	Horse and Gin	Local
Tohren Coal Co.	Elmer Tohren	Given, R.F.D.	Shaft	Room and Pillar	Fan	Horse and Gin	Local
Snook & Sons Coal Co.	J. Snook	Oskaloosa	Slope	Room and Pillar	Fan	Horse and Gin	Local
Nelson Coal Co.	W. T. Nelson	Rose Hill	Shaft	Room and Pillar	Fan	Horse and Gin	Local
Given Coal Co.	Roy Ellis	Given	Slope	Room and Pillar	Natural	Horse and Gin	Local
Switzer & Son Coal Co.	Charles Switzer	Eddyville	Shaft	Room and Pillar	Fan	Horse and Gin	Local
Gasper & Gergely Coal Co.	Steve Gasper	Lakota	Slope	Room and Pillar	Fan	Steam	Local
Wm. Kramer Coal Co.	Wm. Kramer	Beacon	Slope	Room and Pillar	Natural	Gasoline	Local
Canyon Coal Co.	Robert White	Bussey	Shaft	Room and Pillar	Natural	Horse	Local
Williams Coal Co.	E. F. Williams	New Sharon	Slope	Room and Pillar	Natural	Gin	Local
Equality Coal Co.	W. C. Flynn	Albia	Slope	Room and Pillar	Fan	Gasoline	Local
Ellis Coal Co.	A. M. Ellis	Given	Slope	Room and Pillar	Natural	Steam	C. N. W. Ry.
O'Brien & Allen Coal Co.	Ed. Allen	Evans	Slope	Room and Pillar	Natural	Horse and Gin	Local
Jones & Mathes Coal Co.	Thos. B. Jones	Given	Slope	Room and Pillar	Natural	Horse and Gin	Local
Evans & Hasselman Coal Co.	Thos. A. Evans	Evans	Slope	Room and Pillar	Natural	Horse and Gin	Local
J. H. Whitson Coal Co.	J. H. Whitson	Evans	Slope	Room and Pillar	Fan	Horse and Gin	Local
Farrell Coal Co.	Doad Toy	Beacon	Slope	Room and Pillar	Natural	Horse and Gin	Local
Evans Bros. Coal Co.	Dave Evans	Eddyville	Slope	Room and Pillar	Furnace	Horse and Gin	Local
Himes & Veldhuzen Coal Co.	J. J. Himes	Oskaloosa	Shaft	Room and Pillar	Natural	Horse	Local
Lee Coal Co.	James Lee	What Cheer	Slope	Room and Pillar	Fan	Horse and Gin	Local
Nevison & White Bros.	Geo. H. White	Rose Hill	Shaft	Room and Pillar	Natural	Horse and Gin	Local
O. R. Thompson Coal Co.	O. R. Thompson	Given, R.F.D.	Slope	Room and Pillar	Natural	Horse	Local
Tom Lewis Coal Co.	Tom Lewis	Given, R.F.D.	Slope	Room and Pillar	Natural	Horse and Gin	Local

MARION COUNTY

Pershing Coal Co., No. 12	J. E. Williams	Tracey	Shaft	Room and Pillar	Fan	Steam	Wabash Ry.
Pershing Coal Co., No. 14	J. E. Williams	Tracey	Shaft	Room and Pillar	Fan	Steam	Wabash Ry.
Red Rock Coal Co.	Chas. Anderson	Chariton	Shaft	Room and Pillar	Fan	Steam	C. & R. I. Ry.
Cons. Indiana Coal Co.	John Hall	Meicher	Shaft	Room and Pillar	Fan	Electricity	C. & R. I. Ry.
Vanceensbrook Bros.	K. Vanceensbrook	Knoxville, R.F.D.	Slope	Room and Pillar	Natural	Horse	Local
Hays Bros. Coal Co.	C. H. Hays	Knoxville, R.F.D.	Slope	Room and Pillar	Natural	Horse	Local
Horse Shoe Coal Co.	O. Vilont	Bussey	Shaft	Room and Pillar	Fan	Horse and Gin	Local
McKenzie & Crook Coal Co.	Jas. A. McKenzie	Harvey	Slope	Room and Pillar	Natural	Horse	Local
Greenhof Coal Co.	Jas. Greenhof	Bussey	Slope	Room and Pillar	Natural	Horse	Local
J. Stevens Coal Co.	J. Stevens	Knoxville, R.F.D.	Slope	Room and Pillar	Natural	Horse	Local
John W. Newton Coal Co.	J. W. Newton	Dallas	Shaft	Room and Pillar	Natural	Horse and Gin	Local
Everett Miller Coal Co.	Everett Miller	Knoxville	Slope	Room and Pillar	Natural	Horse	Local
W. S. Brodless	W. S. Brodless	Harvey	Shaft	Room and Pillar	Natural	Horse and Gin	Local
Geo. L. Burt Coal Co.	Geo. L. Burt	Knoxville	Slope	Room and Pillar	Furnace	Horse and Gin	Local
Kendall Coal Co.	C. C. Kendall	Marysville	Slope	Room and Pillar	Natural	Horse	Local
Kline Coal Co.	Thos. Kline	Bussey	Shaft	Room and Pillar	Natural	Horse and Gin	Local
Knox Coal Co.	Alex Knox	Knoxville	Shaft	Room and Pillar	Fan	Gasoline	Local
Andy Oldham Coal Co.	Andy Oldham	Knoxville, R.F.D.	Slope	Room and Pillar	Natural	Horse	Local
Regina Coal Co.	Chas. Regan	Harvey	Slope	Room and Pillar	Natural	Horse	Local
Wallace Coal Co.	Abn Wallace	Lovilia	Slope	Room and Pillar	Natural	Horse	Local
Chas. Fortner Coal Co.	Chas. Fortner	Knoxville	Slope	Room and Pillar	Natural	Horse	Local
Walter McElrea Coal Co.	Walter McElrea	Dallas	Slope	Room and Pillar	Natural	Horse	Local
Honey Creek Coal Co.	Phil Bishop	Knoxville, R.F.D.	Slope	Room and Pillar	Fan	Gasoline	Local
Dunreath Coal Co.	J. A. A. Power	Knoxville	Shaft	Room and Pillar	Natural	Horse	Wabash Ry.
Barnes Coal Co.	John Barnes	Percy	Slope	Room and Pillar	Natural	Horse	Local
Success Coal Co.	John Lundgen	Oley	Slope	Room and Pillar	Fan	Steam	Local
Agen Bros. Coal Co., No. 1	Earl Agen	Dallas	Slope	Room and Pillar	Natural	Horse	Local
Agen Bros. Coal Co., No. 2	Earl Agen	Dallas	Slope	Room and Pillar	Natural	Horse	Local
Sant Willis & Son	Sant Willis	Dallas	Slope	Room and Pillar	Natural	Horse	Local
Bearl & Buckler Coal Co.	M. M. Bearl	Knoxville	Slope	Room and Pillar	Natural	Horse	Local
Pearson Coal Co.	J. E. Pearson	Attica	Slope	Room and Pillar	Natural	Horse	Local
Crouch & Gidding Coal Co.	L. Gidding	Knoxville	Slope	Room and Pillar	Natural	Horse	Local
Gold Goose Coal & Mining Co.	W. C. Flynn	Albia	Shaft	Room and Pillar	Fan	Steam	C., B. & Q. R. R.
McKinnon & Dupueh Coal Co.	Wm. McKinnon	Pleasantville	Shaft	Room and Pillar	Fan	Horse and Gin	Local

LIST OF COAL COMPANIES, SUPERINTENDENTS, ETC., IN DISTRICT NO. 2—Continued

VAN BUREN COUNTY

Name of Company—Mine No.	Superintendent	Address	Shaft or Slope	Plan of Working	How Ventilated	Power Used	Shipping or Local
Daniels Coal Co.	John Daniels	Douds	Shaft	Room and Pillar	Fan	Steam	Local
Batchiff Coal Co.	R. A. Batchiff	Douds	Shaft	Room and Pillar	Natural	Horse and Gin	Local
Findley Coal Co.	Hugh Findley	Douds	Shaft	Room and Pillar	Natural	Horse and Gin	Local
Oliver Coal Co.	H. Oliver	Selma	Shaft	Room and Pillar	Natural	Horse and Gin	Local
Albright Coal Co.	Frank Albright	Birmingham	Shaft	Room and Pillar	Natural	Horse and Gin	Local
Herman Carter Coal Co.	Herman Carter	Farmington	Shaft	Room and Pillar	Fan	Horse and Gin	Local
Albert Gardner Coal Co.	Albert Gardner	Bonaparte	Slope	Room and Pillar	Natural	Horse	Local
Clarence Fletcher Coal Co.	Clarence Fletcher	Stockport	Slope	Room and Pillar	Natural	Horse	Local
B. F. Downrad Coal Co.	B. F. Downrad	Mt. Zion	Slope	Room and Pillar	Natural	Horse	Local
James Tweedy Coal Co.	James Tweedy	Douds	Shaft	Room and Pillar	Natural	Horse and Gin	Local
C. C. Tweedy Coal Co.	C. C. Tweedy	Douds	Shaft	Room and Pillar	Natural	Horse and Gin	Local

KEOKUK COUNTY

Olive Coal Co.	O. W. Olive	Delta	Shaft	Room and Pillar	Fan	Gasoline	Local
Rholoff & McNabb Coal Co.	J. Rholoff	Delta	Shaft	Room and Pillar	Natural	Horse and Gin	Local
Big Four Coal Co.	Edward Bell	What Cheer	Shaft	Room and Pillar	Fan	Steam	Local
Carson Bros. Coal Co.	Thos. Carson	What Cheer	Slope	Room and Pillar	Fan	Horse	Local
Newcomb Bros. Coal Co.	E. Newcomb	What Cheer	Shaft	Room and Pillar	Natural	Horse and Gin	Local

DAVIS COUNTY

Riley Eakins Coal Co.	Riley Eakins	Belknap	Slope	Room and Pillar	Natural	Horse	Local
Lunford & Hardy Coal Co.	J. D. Lunford	Bloomfield	Shaft	Room and Pillar	Fan	Gasoline	Local
T. E. Dooley Coal Co.	T. E. Dooley	Belknap	Slope	Room and Pillar	Natural	Horse	Local

JASPER COUNTY

Colfax Cons. Coal Co., No. 9	John Pearson	Colfax	Shaft	Room and Pillar	Fan	Steam	Colfax & N. Ry.
Sunnybrook Coal Co.	Steve J. Smith	Colfax	Shaft	Room and Pillar	Fan	Steam	Local
Star Coal Co.	John Varrick	Colfax	Shaft	Room and Pillar	Fan	Steam	Local
Sam Bolan Coal Co.	Sam Bolan	Colfax	Slope	Room and Pillar	Natural	Horse	Local
Diamond Coal Co.	Elw. Grossvenor	Colfax	Shaft	Room and Pillar	Fan	Steam	Local
Bianford Coal Co.	C. A. Bianford	Colfax	Shaft	Room and Pillar	Natural	Horse	Local
Bear's Grove Coal Co., No. 2	John Stotkoska	Colfax	Slope	Room and Pillar	Natural	Horse	Local
McSeel Coal Co.	J. M. McKeever	Colfax	Shaft	Room and Pillar	Fan	Horse and Gin	Local
Prairie City Coal Co.	Chas. Conway	Colfax	Shaft	Room and Pillar	Fan	Steam	Local
Jeffrey Coal Co.	John E. Jeffreys	Newton	Shaft	Room and Pillar	Fan	Steam	Local
Morris Coal Co.	T. J. Morris	Newton	Shaft	Room and Pillar	Fan	Steam	Local
Wm. White & Son Coal Co.	Wm. White	Prairie City	Slope	Room and Pillar	Natural	Horse	Local
Norris Coal Co.	D. C. Norris	Prairie City	Shaft	Room and Pillar	Fan	Gasoline	Local
Valentine Coal Co.	Geo. Valentine	Monroe	Shaft	Room and Pillar	Natural	Horse	Local
Marshall Coal Co.	Jas. B. Marshall	Monroe	Slope	Room and Pillar	Natural	Horse	Local
Lust & Son Coal Co.	Geo. Lust	Monroe	Shaft	Room and Pillar	Fan	Horse	Local
Williams Coal Co.	William Pollard	Colfax	Shaft	Room and Pillar	Fan	Horse and Gin	Local

MONROE COUNTY

Superior Coal Co., No. 18	John Day	Bucknell	Shaft	Room and Pillar	Fan	Steam	C. & N. W. Ry.
Superior Coal Co., No. 19	John Day	Bucknell	Shaft	Room and Pillar	Fan	Electricity	C. & N. W. Ry.
Central Coal Co., No. 3	Wm. Scott	Albia	Slope	Room and Pillar	Fan	Steam	M. & St. J. Ry.
Lockman Coal Co., No. 6	John Evans	Lockman	Shaft	Room and Pillar	Fan	Steam	M. & St. J. Ry.
Smoky Hollow Coal Co., No. 19	Wm. Jones	Hiteman	Shaft	Room and Pillar	Fan	Steam	C. B. & Q. Ry.
Ankor Coal Co.	Roy Backman	Albia	Slope	Room and Pillar	Natural	Horse	Local
Lovilia Coal Co.	Jas. Smith	Lovilia	Shaft	Room and Pillar	Fan	Steam	C. & N. W. Ry.
Black Diamond Coal Co.	Lloyd Smith	Eddyville	Shaft	Room and Pillar	Fan	Horse	Local
Bickford Coal Co.	Ed. Bickford	Eddyville	Slope	Room and Pillar	Natural	Horse	Local
Rex Fuel Co., No. 4	Char. Williams	Oskaloosa	Shaft	Room and Pillar	Fan	Steam	C. & N. W. Ry.
Rex Fuel Co., No. 5	John Canty	Hiteman, R.F.D.	Shaft	Room and Pillar	Fan	Electricity	C. & N. W. Ry.
Maple Coal Co., No. 1	Clarence Chapman	Eddyville, R.F.D.	Shaft	Room and Pillar	Fan	Steam	C. & N. W. Ry.
Maple Coal Co., No. 2	Joseph Thomas	Lovilia, R.F.D.	Shaft	Room and Pillar	Fan	Electricity	C. & N. W. Ry.

JEFFERSON COUNTY

Henne Coal Co.	C. S. Hennes	Fairfield	Shaft	Room and Pillar	Fan	Gasoline	Local
Fairfield Coal Co.	Walter Barron	Fairfield	Shaft	Room and Pillar	Fan	Gasoline	Local
R. B. Cross Coal Co.	R. B. Cross	Birmingham	Slope	Room and Pillar	Natural	Horse	Local
Bonnett Coal Co.	Ed. Bonnett	Fairfield, No. 7.	Slope	Room and Pillar	Natural	Horse	Local

LIST OF COAL COMPANIES, SUPERINTENDENTS, ETC., IN DISTRICT NO. 3

POLK COUNTY

Name of Company—Mine No.	Superintendent	Address	Shaft or Slope	Plan of Working	How Ventilated	Power Used	Shipping or Local
Aeme Coal Mining Co.	C. K. Hutchings	1139 Park Ave., Des Moines	Shaft	Room and Pillar	Fan	Steam	Local
Bennett Bros. Coal Co.	A. A. Bennett	427 W. Grand Ave., Des Moines	Shaft	Room and Pillar	Fan	Steam	Local
Bloomfield Coal & Mining Co.	George Yarn	Rt. 4, Des Moines	Shaft	Room and Pillar	Fan	Electricity	Local
Beck Coal & Mining Co.	John T. Beck	Des Moines	Shaft	Room and Pillar	Fan	Electricity	C. & N. W. Ry.
Des Moines Coal Co., No. 2	Fred Norwood	910 W. Grand Ave., Des Moines	Shaft	Room and Pillar	Fan	Steam	Local
Des Moines Coal Co., No. 4	Fred Norwood	910 W. Grand Ave., Des Moines	Shaft	Room and Pillar	Fan	Electricity	Local
Diamond Joe Coal Co.	David Jopling	Runnells	Shaft	Room and Pillar	Fan	Electricity	Local
Des Moines Ice & Fuel Co., Inter- Urban	S. Blount	Des Moines	Shaft	Room and Pillar	Fan	Steam	Local
Economy Coal Co.	John H. Ramsay	1015 19th St., Des Moines	Shaft	Room and Pillar	Fan	Steam	Local
Liberty Coal Mining Co.	W. R. Gibson	2412 University Ave., Des Moines	Shaft	Room and Pillar	Fan	Steam	C., R. I. & P. Ry.
Norwood-White Coal Co., No. 2	Andy Buntz	Des Moines	Shaft	Room and Pillar	Fan	Steam	Inter Urban
Norwood-White Coal Co., No. 6	J. D. Phillips	Des Moines	Shaft	Room and Pillar	Fan	Steam	Inter Urban
Norwood-White Coal Co., No. 8	J. W. Smith	Des Moines	Shaft	Room and Pillar	Fan	Electricity	C. & N. W. Ry.
Saylor Coal Co., No. 2	E. F. Roberts	R. F. D., Ankeny	Shaft	Room and Pillar	Fan	Electricity	Local
Urbansdale Coal Co.	Leroy Twining	Des Moines	Shaft	Room and Pillar	Fan	Steam	C. & N. W. R. R.
Sayre Coal & Mining Co.	Wm. Griffiths	Des Moines	Shaft	Room and Pillar	Fan	Steam	Inter Urban
Diamond Block Coal Co.	Frank Burris	Des Moines	Shaft	Room and Pillar	Fan	Steam	Local
Chover Leaf Coal Co.	G. L. Faulk	Des Moines	Shaft	Room and Pillar	Fan	Electricity	Inter Urban Ry.
J. E. Gross Coal Co.	O. E. Heggem	Des Moines	Shaft	Room and Pillar	Fan	Electricity	Local
Adelphi Coal Co.	J. R. Gross	Des Moines	Shaft	Room and Pillar	Fan	Horse	Local
Commerce Coal Co.	C. B. Hulsman	Adelphi	Shaft	Room and Pillar	Natural	Gasoline	Local
Spring Valley Coal Co.	G. Harwood	Commerce	Shaft	Room and Pillar	Natural	Gasoline	Local
Shultz Coal Co.	Jas. Hutcheson	Adelphi	Shaft	Room and Pillar	Natural	Horse	Local
	T. R. Shultz	Des Moines	Slope	Longwall	Natural	Steam	Local

BOONE COUNTY

W. D. Johnson Coal Co.	Jas. Watson	Boone	Shaft	Longwall	Fan	Steam	Local
Boone Coal Co.	S. Smiley, Jr.	Boone	Shaft	Longwall	Fan	Steam	Ft. D., D. M. & S. Ry.
Boone Coal Co.	S. Smiley, Jr.	Boone	Shaft	Longwall	Fan	Steam	C. & N. W. Ry.
McCaskey Coal Co.	J. S. McCaskey	Pilot Mound	Shaft	Room and Pillar	Fan	Horse	Ft. D., D. M. & S. Ry.
Ogden Coal Co.	Robert Kennedy	Ogden	Shaft	Longwall	Fan	Steam	Ft. D., D. M. & S. Ry.
Madrid Coal Co.		Madrid	Shaft	Room and Pillar	Fan	Steam	C., M. & St. P. R. R.
Currier Coal Co.	S. O. Currier	Pilot Mound	Shaft	Longwall	Natural	Horse	Local
Chas. Otis Coal Co.	Chas. Otis	Boone	Shaft	Longwall	Natural	Horse	Local
Richard May Coal Co.	Richard May	Boone	Shaft	Room and Pillar	Natural	Horse	Local
Scandia Coal Co., No. 4	Owen Reese	Madrid	Shaft	Room and Pillar	Fan	Steam	C., M. & St. P. Ry.

DALLAS COUNTY

Dallas Products Co.	Hugh Shuler	304 Crocker Bldg., Des Moines	Shaft	Room and Pillar	Fan	Steam	C., M. & St. P. Ry.
Norwood-White Coal Co., No. 7	Thomas Hayes	907 Bankers Trust Bldg., Des Moines	Shaft	Room and Pillar	Fan	Electricity	Inter Urban
Radiant Coal Mining Co.	Wm. T. Ramsay	Adel	Shaft	Room and Pillar	Fan	Electricity	C., M. & St. P. Ry.
Scandia Coal Co., No. 2	Owen Reese	Madrid	Shaft	Room and Pillar	Fan	Steam	C., M. & St. P. Ry.
Scandia Coal Co., No. 5	Owen Reese	Madrid	Shaft	Room and Pillar	Fan	Steam	C., M. & St. P. Ry.
Shuler Coal Co.	Chas. Shuler, Jr.	302 Hippee Bldg., Des Moines	Shaft	Room and Pillar	Fan	Electricity	C., M. & St. P. Ry.

GREENE COUNTY

Buckeye Coal Co.		Rippey	Shaft	Room and Pillar	Furnace	Horse	Local
Keystones Coal Co.		Rippey	Shaft	Room and Pillar	Furnace	Horse	Local
Riverside Coal Co.	M. Feith	Rippey	Shaft	Room and Pillar	Natural	Horse	Local

LIST OF COAL COMPANIES, SUPERINTENDENTS, ETC., IN DISTRICT NO. 3—Continued

WARREN COUNTY

Name of Company—Mine No.	Superintendent	Address	Shaft or Slope	Plan of Working	How Ventilated	Power Used	Shipping or Local
Edison Valley Glass Coal Co.	V. McCall	Hartford	Shaft	Room and Pillar	Fan	Steam	Shipping
Dow Maines & Fuel Co.	Harry Bloom	Strick Hill	Shaft	Longwall	Fan	Steam	Shipping
Great Western Coal Co.	W. L. Jones	Orellia	Slope	Room and Pillar	Fan	Steam	Shipping
King Brothers Coal Co.	Elmer King	Caroline	Slope	Longwall	Natural	Horse	Local
Edison Bros. Coal Co.	Heinen Bros.	Lacona	Shaft	Room and Pillar	Natural	Horse	Local
Prairie Creek Coal Co.	W. T. Messelber	Beech	Shaft	Room and Pillar	Natural	Horse	Local
Edison Bros. Coal Co.	Harold King	Swan	Shaft	Room and Pillar	Natural	Horse	Local
T. E. King Coal Co.	T. E. King	Swan	Shaft	Room and Pillar	Natural	Horse	Local
GUTHRIE COUNTY							
Thomas Coal Co.	W. H. Thomas	Guthrie Center	Shaft	Longwall	Furnace	Horse	Local
Butler Coal Co.	Jas. G. Butler	Guthrie Center	Shaft	Longwall	Furnace	Horse	Local
Sipe Coal Co.	H. M. Sipe	Guthrie Center	Shaft	Longwall	Furnace	Horse	Local
Edison Bros. Coal Co.	John Massey	Guthrie Center	Shaft	Longwall	Furnace	Horse	Local
John Massey Coal Co.	John Massey	Guthrie Center	Shaft	Longwall	Furnace	Horse	Local
Matt Mallon Coal Co.	Matt Mallon	Guthrie Center	Shaft	Longwall	Furnace	Horse	Local
STORY COUNTY							
Summit Coal Co.	Frank Ellis	Ames	Shaft	Room and Pillar	Steam	Steam	Local
WEBSTER COUNTY							
Lehigh Coal Co.	Ed. Hilger	Lehigh	Shaft	Room and Pillar	Fan	Steam	P. D. D. M. & S. Ry.
A. J. McGovern Coal Co.	A. J. McGovern	P. C. Dodge	Slope	Room and Pillar	Natural	Horse	Local
George Marcy Coal Co.	Geo. Marcy	Lehigh	Slope	Longwall	Natural	Horse	Local
Paul & Williams Coal Co.	Homer V. Williams	Lehigh	Slope	Longwall	Natural	Horse	Local

IOWA COAL

By W. E. HOLLAND, Inspector First District

In view of the present crisis in the coal situation the mine inspection department of the State of Iowa, decided that instead of giving the usual comments on each coal producing county as heretofore; that it would be more expedient and profitable to give the following prepared article on Iowa coal, its constitution, qualities, how to store, together with the proper method of firing to obtain the best results.

The information contained in the following papers is based upon facts gathered from actual tests, experiments and analyses made by the Iowa State College at Ames, and also the Bureau of Mines and are authentic, and absolutely reliable in every particular.

THE CONSTITUTION OF COAL

All naturally occurring solid fuels are modifications of cellulose or woody fiber brought about by great pressure and heat in the strata of the earth's crust. Cellulose, which may be regarded as the raw material of coal contains Carbon, Hydrogen and Oxygen. It contains about 44 per cent of Carbon by weight. From a scientific standpoint some of the constituents that are most important factors in the buying of coal are (1) moisture (2) ash, (3) the combustible matter. The moisture in coal varies from 3 to 15 per cent. As delivered in coal it is worthless to the consumer, and is often the cause of absolute loss, hence, its percentage is a very important factor in the valuation of a ton of coal. The ash varies from 5 to 20 per cent and is made up of silica, calcium, and iron, in combination with sulphur and certain other impurities of the coal that will not burn. So that coal with a low percentage of ash is desirable and more valuable, because it not only yields a greater amount of heat, but there is less blocking of the air passages through the grates in the furnace by this incombustible matter and a more complete combustion is therefore attained. The combustible matter in coal is made up of volatile hydrocarbon gases, which are distilled by heat; and of fixed carbon which burns away more slowly on the bars of the grate. Considered singly this element (fixed carbon) is of vastly more importance than any of the others, for coal having a high percentage of fixed carbon (and especially when there is a low percentage of volatile matter at

the same time) is more easily burned so as to yield its maximum efficiency. Coal on the other hand having a high percentage of volatile matter, and a correspondingly low percentage of fixed carbon is apt to lead to the escape of the partly consumed hydrocarbon gases through the stack or chimney, thus not only causing a positive loss of heat; but at the same time it will allow the formation of a greater amount of soot, and smoke, both of which are a hindrance to complete combustion, and thus cause more coal to be consumed for the amount of work performed.

All of these constituent parts can be definitely determined by laboratory examination of the samples submitted if they are taken by men who have been properly trained for this particular class of work. Every producer, and every dealer should have available the analysis, and approximate percentage of the moisture, ash and thermal value of the different coals he has for sale, then the intelligent consumer can by careful comparison easily determine the kind of coal that will be the most practical and economical for his purpose.

DEFINITION OF UNITS

In the metric system of measurement, which is generally used by chemists, the heat units are the gram calorie, and the kilogram calorie. The gram calorie is the amount of heat required to raise the temperature of one gram of water 1 degree, C, at 15 degrees C. The kilogram calorie is the amount of heat required to raise the temperature of one kilogram of water 1 degree C. at 15 degrees C. In the English system of measurement, which is generally used by engineers the heat unit is the "British thermal unit" or, B.t.u. The British thermal unit is the quantity of heat required to raise the temperature of one pound of water 1 degree F. at 60 degrees F. Calorific values given in calories per gram may be converted into British thermal units per pound by multiplying by 1.8 the ratio between the Centigrade and Fahrenheit degree.

The following list taken from Part 1, of Bulletin No. 22 "Analyses of Coals" in the United States, by the Bureau of Mines; gives the highest rating found by the analysis made from the coal submitted in the States mentioned.

	Hydrogen	Carbon	Nitrogen	Oxygen	Calories	B.t.u.'s
Iowa	5.50	84.56	1.33	8.61	8,502	15,304
Illinois	5.45	82.75	1.77	10.03	8,405	15,129
Indiana	5.82	84.18	1.42	8.53	8,474	15,253
Kentucky	7.13	82.59	1.33	7.57	8,778	15,800
Tennessee	5.55	87.42	1.58	5.45	8,776	15,797

By consulting the above table you will see that *Iowa Coal* has more carbon than any of the states compared except Tennessee, and a higher calorific value and more B. t. u.'s per pound than either Illinois or Indiana. As the analyses was made by the Bureau of Mines without fear or favor of any particular state or its coal, it should have more weight and be given more consideration than a mere passing glance or thought; because properly cleaned *Iowa Coal* will give just as much heat pound for pound whether used for steam or domestic use as any bituminous coal shipped into the state, and can be bought for less money thus making a great saving to the home consumer.

STORING IOWA COAL

The bugaboos that have been so fluently elaborated upon by dealers having other coals for sale (and that have caused the Iowa consumer to have untold but unnecessary hallucinations in the past), are *deterioration* and *spontaneous combustion*. These have been proven by actual experiment, and by testimony from reliable dealers to exist more often in the fanciful imagination of the individual than in reality. As positive proof of this statement we desire to say that a number of the Insurance Companies of the State of Iowa have stated that they will accept the risk (from storing Iowa coal) along with the articles classed as household furniture and supplies, without making any added charge for this protection.

The causes of deterioration are chemical and physical. In regard to the chemical changes it has been shown conclusively by the Bureau of Mines that the chemical deterioration (in stored coal) has been greatly overestimated and that with most coals in the United States this is an almost entirely negligible quantity. The physical state of the coal in storage is changed by surface oxidation causing fissures which sometimes extend through the coal causing the size of the large lumps to decrease. As the majority of Illinois coal is far more friable than Iowa coal there would of necessity be more physical deterioration in storing it than Iowa coal.

Spontaneous combustion is brought about by oxidation in an air supply that will support it, but insufficient to carry away all the heat thus formed. The area of surface exposed to oxidation by a mass of coal determines largely the amount of oxidation that takes place in the mass; it depends upon the size of the particles, and

increases rapidly as the fineness approaches that of dust. Spontaneous combustion will not take place if the coal is stored in large lumps, or in layers of mixed coal not exceeding certain heights depending upon the nature of the coal and the degree to which it is broken up. The Fuel Administration of the State of Iowa has issued the following instructions for storing Iowa coal now for the coming winter.

NO TROUBLE TO STORE IOWA COAL! OBSERVE THESE PRECAUTIONS.

1. Store only screened lump coal if possible.
2. Store on a dry concrete floor if possible.
3. Coal for storage should be put in only when dry.
4. Handle carefully to avoid breakage.
5. Do not pile over four or five feet high.
6. If there is much fine coal or dust keep this separate and use it first.
7. See that the windows are shut tight, so it cannot rain on the coal, as alternate wetting and drying causes slacking.

If these directions are faithfully carried out sufficient coal for one year's use can be stored with absolute safety in cellars or outside bins without loss or danger from deterioration, or spontaneous combustion.

INSTRUCTIONS FOR FIRING SOFT COAL—COMBUSTION OF COAL

It will be necessary first of all, to give some of the chemical changes that take place when coal is being consumed so as to lay an intelligent foundation for what follows.

Combustion of coal is a chemical process, in which the combustible substances unites with the oxygen of the atmospheric air. The combustible part of coal consists mainly of carbon and hydrogen. Air is a mixture of gases, the two most important being nitrogen and oxygen. Only the oxygen, which forms about a fifth part of the volume of any given quantity of air takes part in the combustion; the nitrogen is inactive. Carbon and hydrogen are not destroyed by burning, but are merely changed. The carbon forms carbon dioxide (or black damp), and the hydrogen forms water vapor, which like carbon dioxide is a colorless and invisible gas. The weight of carbon in the carbon dioxide formed by burning coal is exactly equal to the weight of carbon in the coal burned; also, the weight of hydrogen in the water vapor is exactly equal to the weight of the hydrogen in the coal. The fact that carbon

dioxide and hydrogen are invisible has made people think that combustion is complete destruction.

The coal and wood disappear as they burn and the resulting gases, the invisible products of combustion pass away unnoticed.

When carbon burns completely, 12 pounds of carbon unites with 32 pounds of oxygen to form 44 pounds of carbon dioxide. When hydrogen burns completely 2 pounds of hydrogen combine with 16 pounds of oxygen to form 18 pounds of water vapor. As the oxygen of the air is mixed with four times its weight of nitrogen (5 pounds of air containing only 1 pound of oxygen) to burn 12 pounds of carbon completely, requires 5 times 32, or 160 pounds of air. Similarly, to burn 2 pounds of hydrogen takes 5 times 16 or 80 pounds of air. In reality, for the complete combustion of carbon and hydrogen in coal it is necessary to supply somewhat more air than the above figures show. When a pound of carbon combines with oxygen and is completely burned to carbon dioxide the amount of heat produced is 14,500 heat units, called British thermal units (B.t.u), but if there is not enough air supplied the carbon burns to carbon monoxide (or white damp) and the amount of heat generated is only 4,500 heat units per pound of carbon, or a total loss of exactly 10,000 heat units.

These figures will show conclusively the paramount importance of a sufficient supply of fresh air at all times so as produce complete combustion. For any substance to burn two things are necessary: (1) the substance must be in contact with free oxygen, (2) while thus in contact the substance must be at least as hot as its ignition temperature. When a charge of fresh bituminous coal is spread over the fuel bed in a furnace the coal is heated to about 2,400 degrees F. in from two to five minutes. This heating distills from the coal the combustible matter which the coal contains, and continues whether sufficient air is supplied or not; but to burn volatile matter completely air must be intimately mixed with it and the mixture kept above the ignition temperature, which is about 1,200 degrees F., or a dark red. The residue left after the distillation is ended is what is known as fixed carbon. It is mostly in the form of coke and is the chief constituent of the fuel bed. This coke burns completely, or partly, as it comes in contact with the air supplied through the bars of the grate. The more rapidly the air is supplied the faster the coke burns,

therefore, for a complete or high rate of combustion a larger quantity of air must pass through the fuel bed.

FIRING SOFT COAL

When bituminous coal is burned the best results are obtained if the fires are kept level and rather thin. The best thickness of the fires has been found to be from 5 to 10 inches, depending on the character of the coal used and the strength of the draft. The coal should be fired in small quantities and at short intervals. In firing endeavor to place the coal over any thin spots that may be in the fuel bed, as the rate of combustion is much faster in these places than in places where the flow of air through the fuel bed is less. The cause of these thin places in different parts of the fuel bed may be the difference in the size of the coal, the fusing of the coal to a hard crust, or the accumulation of clinker on the grates. With small and frequent firings the fuel supply is at all times more nearly in proportion to the air supply, so that better and more complete combustion is thus obtained, and at the same time considerable fuel is saved.

If the coal that is being used has a tendency to fuse and form a crust at the surface of the fuel bed, this must be broken up and the coke thus formed leveled over the fuel bed. This is often the result when slack or large quantities of small coal is used, and more skill is required in such cases to get the proper mixture of air for complete combustion. Where slack or small coal is used in large quantities a much stronger draft is required.

CLINKERING

Anything that causes the ash in the coal to be heated to its fusion temperature causes clinker, and *any coal* will form clinker if the ash in it is so heated. The exact effect of each constituent on the melting point of ash is not yet definitely known, but it is certain that the nature of the atmosphere in which the ash is heated has a marked effect on the melting point.

For instance, if the ash be heated in an oxidizing atmosphere (an atmosphere that supplies oxygen) its melting point is higher than if the ash is heated in a reducing atmosphere (an atmosphere that removes oxygen) such as hydrogen or carbon monoxide. The difference between the melting point in an oxidizing atmosphere, and a reducing one is for some coals over 140 degrees C. or 261

degrees F. The ash of some coals is so fusible that it is difficult to burn it without heating it to its fusion temperature. However, with most of the coals mined in the United States this can be avoided by proper firing and care of the fire.

The most common cause of clinker are thick fire, excessive stirring of the fires, too much slack in the coal, burning coal in the ash pit, and the preheating of the air admitted under the grates.

REMEDIES FOR CLINKERING

To prevent trouble from clinker the first and most important step should be to find if possible which of the above mentioned causes are responsible for the formation of it, then it will be a much easier matter to avoid or remove the cause.

The following general suggestions are given for the prevention of clinker troubles from ordinary causes.

Use thin fires and keep the fuel bed level by placing the fresh coal on the thin spots in the fire.

Avoid disturbing the fuel bed more than is absolutely necessary with the rake or poker.

Fire in small charges, thus reducing the formation of a crust on the surface of the fuel bed.

Be specially careful to use small charges if the coal contains much slack.

Avoid burning coal in the ash pit.

Keep the ash pit doors open at all times; regulate the draft with a damper.

If possible, keep water in the ash pit at all times.

If not possible use any steam (either exhaust or live steam) that may be available, introducing it under the grates.

If the above rules are carefully observed, and carried out, there will be very little trouble from clinker with coal of average quality under ordinary circumstances.

State of Iowa

1926

REPORT OF THE

BUREAU OF LABOR

FOR THE

Biennial Period Ending June 30, 1926

A. L. URICK, Commissioner

Published by
THE STATE OF IOWA
Des Moines

State of Iowa
1926

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A. L. URICK, Commissioner

THE STATE OF IOWA
DES MOINES

LETTER OF TRANSMITTAL

HON. JOHN HAMMILL, *Governor.*

SIR—In compliance with Section 246, Chapter 16, Title II, Code of 1924, I have the honor herewith to transmit to you the Twenty-second Biennial Report of this department.

Very respectfully,

A. L. URICK,
Commissioner.

Des Moines, May 16, 1927.

BUREAU OF LABOR ADMINISTRATION

A. L. URICK.....	Commissioner
J. D. SEAMAN.....	Deputy Commissioner
H. H. BYE.....	Factory Inspector
F. T. CROCKETT.....	Factory Inspector
ELLEN M. ROURKE.....	Factory Inspector
HARLEY RHOADS.....	Statistician
ESTHER MARTENS.....	Department Clerk
MARJORIE SHELLBORN, succeeded by	
BEATRICE STEVENS.....	Stenographer
GEO. B. ALBERT.....	Free Employment Clerk
J. W. HOLMES.....	Sioux City Employment Office

REPORT OF BUREAU OF LABOR

In this Twenty-second Biennial Report of the Bureau of Labor is given merely a resume of the activities as provided by broad and comprehensive statutes, the wisdom of which will become more understood and valued in the years to come than they now are, or have been in the past. The past statistics of the bureau are more generally called for than ever before by educational institutions, business bureaus and institutions making investigations of wage movements, stability and regularization of employment, changes of hours of labor, environments of employes, wage rate levels and other features relating to industrial and economic conditions.

These are studied as a means of showing basic trends of standards affecting business activity and economic life. Thus, for instance, one of our bulletins on "Statistics of Manufactures" in which great pains were taken in compilation, apparently fell flat and was a source of considerable discouragement to us, suddenly came into demand by colleges and universities asking for additional copies to be used by classes in special studies. The facts are: our country in the rapidity of industrial and economic changes is confronted by enormous problems that can only be solved by the closest and most studious application of principle and methods. No solution can be found without a precise knowledge and diagnosis of, not only existing conditions but, causes that led to same.

It is in this feature that the wisdom of the sponsors for the law creating the Bureau of Labor is becoming more evident each year. Originally created solely as a statistical department to investigate conditions, not only of labor but industrial opportunities in particular, the law in its content was indicative that out of such investigations should come other laws, usages and practices leading to the permanent prosperity of the mechanical, manufacturing and productive industries of the state. Keeping in the foreground, as a result of such prosperity, the greater employment of labor under conditions safe, sanitary, profitable; all conducive to a high standard of citizenship.

General credit is now given that the total pay roll, either weekly or per capita, not only reflects the economic condition of wage-earner but that it is the broad index of market purchasing power, and therefor has a most important relation to community prosperity. So also is it becoming a general realization that a high

wage rate or a high temporary pay roll is meaningless to describe the actual economic condition of the wage earner or of his value as a regular asset of the community in purchasing power. His value in these particulars, even with a high wage rate is largely regulated by regularity and stability of employment, or again by the purchasing value of his wage in the market. His earning powers may also be affected by excessive application for extremely long hours, or by environments unsanitary or hazardous.

Society, and industry in particular, is learning more and more the close interdependence of all classes and of all communities even though remotely separated. Thus, the industrial establishments of different localities are interested in the general wage level because of the competition made possible by continuing improvement in methods of transportation and intercourse; they are likewise concerned in plant environment as affecting out-put; in accident hazards now recognized as costly, not only from the compensation viewpoint but from that of shop morale.

How nicely the sponsors for the creating of the Bureau of Labor saw future needs and requirements is set forth in Section 1513 of the present code, which remains practically as in the original act of 1884. Subsection 2 of this section provides as follows:

"To collect, assort, and systematize statistical details relating to all departments of labor in the state, especially in its relation to the commercial, social, educational and sanitary conditions surrounding the laboring classes, the means of escape from and the protection of life and health in factories, the employment of children, the number of hours of labor exacted from them and from women, and to the permanent prosperity of the mechanical, manufacturing, and productive industries of the state."

Subsection 3 provides for reports on amount, condition, value and location of mechanical and manufacturing interests, including sites offering natural or acquired advantages for profitable location of the different branches of industry, with the admonition that the commissioner shall, to interested parties in other parts of the United States, "impart to them such information as may tend to induce the location of mechanical and producing plants within the state, together with such other information as shall tend to increase the productions and consequent employment of producers."

The further instructions then are that the commissioner shall report age, sex and number of wage-earners, nativity, conjugal

condition, apprentices, home owners, renters, with annual rentals paid, number and character of accidents, sanitary conditions in places of employment, and lastly on schools in operation for instruction of students in mechanic arts, and systems found most practical.

During our fourteen years of service we have tried to keep in mind the thought conveyed in these statutes, i. e., the progressive enlargement of existing industries and the addition of new ones as a means of greater employment under safe, sanitary and profitable conditions.

One of the first problems was that not even the people of Iowa had any knowledge of the extent of our manufacturing industries or of the immensity of variety of products coming from them. It was certain that so long as our own people were not informed, there was no chance of the outside world having any conception of our productions.

To impart such information a Manufacturing Directory was compiled in 1919, a revision issued in 1921, and a later revision in 1925.

These directories in the introductory, give a resume of our natural resources, with location, the extent of our agricultural productiveness, the characteristics of the people, school activities, climatic conditions, transportation facilities, and other data of interest.

The directory proper lists each city in which manufacturing is carried on, with population, county and railroad facilities, and each manufacturing establishment with its major products.

There is finally given a classified list by products, establishments and locations of same.

These directories are distributed among business organizations and all important libraries throughout the state and nation, in fact copies are mailed to the larger libraries of all continental countries.

Calls from interested concerns are many. A number of schools and higher educational institutions are using them in their class studies, which must in the end mean a greater interest and knowledge of Iowa industries and opportunities.

From 1913 to 1921, both inclusive, a biennial census of manufactures was made by the bureau. Owing to the Federal Census Department adopting the same plan, with the latter issue this work was discontinued. In its stead a monthly employment sur-

vey was undertaken as a means of supplying a safe and accurate status of employment and general industrial conditions.

A few over 400 industrial establishments of various sizes and classifications, and from all sections of the state, co-operate in this work by furnishing data on employment and industrial outlook. The activities of the several State-Federal Employment Services are given, also building permits issued by cities having such records. These reports combined furnish an excellent means of visualizing actual prevailing conditions and comparisons can now be made covering a five-year period.

The value of these surveys is growing in importance, judging from the class of establishments and institutions requesting to be placed on mailing list.

To comply with that part of the law which provides for the report of the bureau, "to include in such report what progress has been made with schools now in operation for the instruction of students in the mechanic arts, and what systems have been found most practical with details thereof," a special investigation was made of 175 boys and 210 girls attending part-time schools of the state. This for the purpose of finding the real status of these children with relation to all their environments and conditions as a means of determining the actual type of school needed to fit them to their full possibility of valued citizenship. The results of this investigation and analysis are contained in Bulletin No. 17 published during 1926.

FACTORY INSPECTION

One of the earliest laws resulting from investigations of the bureau was that providing for guarding machinery. From time to time these provisions were expanded into the present Health and Safety Laws, including safety appliances and guards for machinery; blowers and pipes for certain kinds of dust; seats for female employes; washing facilities for employes; separate water closets for the sexes; fire escape laws, including exits, specifications and regulations; child labor laws; and elevator law providing for safe construction, equipment, maintenance and operation.

During the biennium 2,586 original inspections were made of establishments. With reinspections, and approvals of installments of fire escapes, etc., more than 4,000 inspections were made. The establishments inspected employed 97,196 employes. This number of persons receiving greater safety protection does not include

patrons of theaters, schools, office buildings, hospitals and other public and private buildings coming under the fire escape and elevator laws.

3,254 recommendations for safeguarding and protection of life, limb and health were made. This shows a decided improvement in conditions when compared with the two-year period ending December 31, 1915 when 5,814 recommendations were made.

The improvement is not only insofar as number of recommendations is concerned, but more in the greatly lessened number of recommendations found necessary on the more hazardous machines and point of contact. For instance in the very hazardous exposure of gears, in 1913, 1,026 orders were made as against 85 for the 1926 period; in exposed set screws 856 orders for 1913 and 104 for 1926; unguarded saws, jointers, etc., 560 orders for 1913, and 108 for 1926; guard rails and screening of machinery, 642 orders for 1913 and 373 for 1926.

The orders complete for the biennial period beginning July 1, 1924, to June 30, 1926, were as follows:

Guard gears	85
Remove or cover set screws	104
Guard saws, jointers, etc.	108
Cover extractors	7
Guard rail or screen machinery	373
Guard or rail openings	78
Repair or build new stairways	21
Erect fire escapes	69
Repair fire escapes	28
Provide drop or extension ladders	3
Signs to fire escapes	106
Swing doors outward	57
Provide ventilators for fumes	14
Repair elevators and gates	33
Better passageways	27
Belt shifters	2
Smoke jacks	2
New closets for men	2
New closets for women	4
Repair closets for men	31
Repair closets for women	24
Separate closets for sexes	1

Remove obscene writing.....	4
Provide washing facilities.....	5
Provide good drinking water.....	2
Provide dressing room.....	1
Provide seats for female employes.....	23
Secure work permits for children.....	4
Remove children under 14 years.....	3
Miscellaneous	126

That the work of safeguarding against accident has had its effect is plainly shown in a reduction of the number and severity as shown by reports.

The first year of compulsory industrial accident reports showed 19,768 accidents. For the fiscal year ending June 30, 1917, the reports numbered 21,676 with 194 deaths. During these years accidents lasting one day or more required a report. At the latter date the law was changed to require report of accidents of more than two days duration only. This change made some difference in number of reports coming to the bureau, so that comparison to indicate improved conditions, must be made with the first fiscal year, that of 1918, following the change, when 13,743 accidents were reported. For the fiscal year ending June 30, 1926, only 8,910 reports were received, 40 of these were deaths.

The Bureau of Labor does not receive reports from mines or railway train service which accounts for the greater number reported to the Compensation Commissioner, who receives all industrial accidents.

The following shows nature, origin and number of accidents:

INDUSTRIAL ACCIDENTS OCCURRING FROM JULY 1, 1925,
TO JUNE 30, 1926

Origin of Accidents	Total	Origin of Accidents													
		Bruises, contusions, abrasions	Burns, scalds	Concussions	Cuts, punctures, lacerations	Dislocations	Electric flash, shock	Fractures, breaks	Foreign substance in eye	Gas fumes	Hernia	Infected wounds	Sprains, strains	Amputations	Internal injuries
Total	8,910	1,802	507	25	2,803	66	23	978	441	14	131	682	1,229	131	18
Belts, pulleys and shafting	88	14	6		41	1		14							
Button machinery	44	1	1		25			1	2			5	1	1	
Calenders	2				1										
Centrifugal machinery	1														
Conveyors	29	6			17	1		2							
Cranes, derricks	51	17			17			15					1	1	
Crushers	4				1							1	1		
Cutter knives	34				29			2							15
Die	18	1			8										9
Drills	45	6	1		25			3	3			1	2		
Electricity	61		37		2	1	23	1						1	
Elevators	71	22		2	22	1		12				3	6	1	1
Emery wheels	23	2			27			9	16			1			2
Engines, cars	54	22	8		8			3						4	
Explosions	75		58	4	9	1		3							
Falling objects	1,158	583	10	1	208	8		215			2	21	39	9	
Falls	1,288	419	9	10	129	29		294			26	12	462	1	9
Flying missiles	613	18	58	2	124			4	417			18			
Gears, cogs, sprockets	43	4			26										
Grinding wheels	2				2										
Hammers (mech.)	18	6			8			3							1
Hand tools	656	194			471	3		16				55	4	3	1
Jammed between articles	64	175			151	6		56				15	17	13	1
Jointers	13				10										2
Lathes	14	1			8							2	1	1	
Lifting, pulling, shoving	500	5			2	7		5			95		386		
Machinery connections	1				1			1							
Milling machinery	1				1										
Molders ladles	81		80		1										
Nails	203				275							18			
Planers	9				5										4
Presses	63	12	2		23	1		4				3		6	
Punches	5	1			2			1							1
Rolls	24	38			18			7				1		1	
Saws (mech.)	130	2			99			2				2		21	
Shears (mech.)	12				10										2
Trucking	117	35			27	1		14			1	8	35		
Other machinery	216	29	1		126			21	1	2		9	8	14	
Miscellaneous	1,473	370	228	2	755	9		273	2	12	7	505	242	6	6

Not classified: Fainted 9; Overcome by heat 25; Drowned 1; Pneumonia 2; Ruptured blood vessel 1; Train struck auto, instantly killed 2; Ringworm 1; Gas poison 1; Frozen feet 1; Swallowed bin 1; Froze fingers 1; lost voice due to sulphur 1; Ruptured ear blowing dust from nose 1; Sickness from dust while cleaning grain bins 1; Suffocation 1; Gasoline in ear caused deafness 1; Stood in water and caught cold 1; Working in water caused cholera morbus 1.

As before noted 40 of these resulted in deaths, while 131 persons suffered some form of amputation. These latter resulted in the loss of 140 fingers, 12 thumbs, 1 hand, 3 legs, 1 head, and 8 toes.

Of the total number of persons injured in industry, 220 were women, who received their injury from the following causes: belts, 1, button machine 4, cutter knives 1, dies 1, electricity 3, elevator 1 (death), falling objects 12, falls 44, flying missiles 9, hand tools 31, jammed between articles 3, presses 1, other machines 24, miscellaneous 85.

It will be noted that both among males and females, falls, falling objects, hand tools and flying missiles lead in number of causes, and that nails stand high. The latter in infected wounds, being exceeded by hand tools alone of any one source of injury. The miscellaneous classification shows 21 per cent of all reports with infections. Many of these reports are incident to trivial injuries, neglected at the time, and many not reported until infection had set in.

These major causes can be attributed almost wholly to carelessness. Many times on the part of employes, but may be traced in too large a number of cases to lack of care, supervision and instruction on the part of foremen and those in job authority.

That the number of accidents in industrial establishments of Iowa has been reduced is creditable, and is contrary to the experience of most states. For some time following the war our Iowa experience was similar to that of other states. The cause for the rather large increase was incident to disruption of forces during and incident to the war which necessitated many changes in employment personnel, in fact in many cases wholly new personnel. Because of inexperience of these new employes and the time required to build up a new factory morale and supervision, accidents were bound to increase.

During the last two years a decided progress has been made with safety committees, and general safety programs resulting in eliminating many of the former hazards, also in bringing employes to realize that "it is the worker who suffers, and suffers to a degree for which the benefits of Workers' Compensation Laws do not at all compensate."

The employer from his own, and the experience of other progressive and up-to-date concerns, is now appreciative of the cost of accidents exclusive of the actual monetary amounts paid either directly or through accident insurance.

Since 1923 Iowa has stood practically stationary in total number of industrial employes, this incident to our severe agricultural deflation and the travails of readjustment. As this readjustment

must run its cycle within a short time, Iowa will then be in shape, with a proper attitude and co-operation of its people, to make decided industrial, especially manufacturing gains. The state will also be in position to make progress in accident prevention. The attitude of employers quite generally will make such campaign possible.

ELEVATOR INSPECTION

The Forty-first General Assembly in part repealed the elevator law enacted by its predecessor. Retaining, however, the provision that elevators of every type shall be safely constructed, equipped, maintained and operated. It was further provided that all passenger elevators shall be equipped with an "approved interlock."

For the reason that the original law contained a section which definitely fixed the enforcement of the law as a duty of the Labor Commissioner, and that this section was repealed there was a great doubt as to proper enforcement officials after July 4, 1925.

The question as to the duties of the Labor Commissioner in relation to elevator inspection was submitted to the attorney general, who being very busy at the time with taxation and other extremely important matters, somewhat delayed his opinion. However, when the opinion came it was to the effect that it was the special duty of the commissioner to enforce the provisions, and steps were immediately taken to perfect the necessary machinery. Several conferences were held with the elevator inspectors of casualty insurance companies doing business in the state. All of the companies generously donating the services of their inspectors in perfecting our plans, and in the making of reports on location, type and use of elevators coming under their coverage.

The law providing for all elevators to be made safe for the purposes used, to comply with this a certain standard had to be set, and as the code of the American Society of Mechanical Engineers was the one code generally accepted by other states, or at least made the foundation of their codes, it was declared to be the standard to which Iowa efforts should be directed.

In new installations approval is given only to such as conform to this standard, and previous installations are brought into conformity as rapidly as possible.

In the matter of interlocks, since these were under the law required to be "approved interlocks," it was deemed prudent not only in the interest of the greatest possible safety, but also for

the protection of the buyer to set a high and generally accepted standard.

Iowa having no apparatus for the testing of devices, arrangements were made with the United States Bureau of Standards upon a plan under which any manufacturer of an interlock can have a test made without cost for the test, the one requirement being that the manufacturer must make his own installation at the testing station so as to be sure that it is properly and fairly done.

The bureau tests include life of operation; operation without lubricant; operation under conditions of air saturated with moisture; and operation under conditions of air saturated with dust. With this test the purchaser of an approved interlock is assured of safe operation under the most trying conditions of moisture and dust, and including even the functioning of the lock for a considerable period when lubrication is neglected.

The severity of the test can be best indicated by actual experience. Of the sixteen interlocks thus far passing, only one met the test without some change of either materials or parts of the apparatus

We are proud to report that notwithstanding the difficulties experienced in getting a start of enforcing the approved interlock law, more than 80 per cent of the passenger elevators of the state are now either equipped or under process of equipment, and that within a short time Iowa's passenger elevators will be on a par with those of any other state of the Union.

CHILD LABOR

Child labor statistics of the state, in regulated occupations, show a continued decrease of children in employment. The permits issued for each biennial period since the inauguration of the system are as follows:

July 4, 1915, to June 30, 1916.....	1,522
July 1, 1916, to June 30, 1918.....	4,913
July 1, 1918, to June 30, 1920.....	7,469
July 1, 1920, to June 30, 1922.....	3,825
July 1, 1922, to June 30, 1924.....	3,132
July 1, 1924, to June 30, 1926.....	1,757

From the above it will be seen that during the first year of the

permit system almost as many children entered employment as during the entire last biennium.

The figures for the periods ending with the fiscal terms of 1918 and 1920 were of course incident to the war and immediate post war influences when great numbers of adults were withdrawn from industry, and when at the same time extreme industrial demands were the rule.

Conditions of industry resulting in an easier adult labor supply is partly responsible for the decrease of child employment, but all indications point to a rather complete change in employer consciousness. This in the discovery that immature children are more subject to accident, which is now realized as costly, also that the labor of children while low in dollars and cents is in the main high in comparison to production value.

Another evidence that the tide is turning against the employment of young children is conveyed by the fact that for the biennial period ending June 30, 1918, over 50.6 per cent of the children securing work permits were between 14 and 15 years of age, while for the last biennium this age of employment had decreased to 34.1 per cent.

STATE-FEDERAL EMPLOYMENT SERVICE

The above title covers the State Free Employment Bureau cooperating with the United States Employment Service, neither of which departments could carry on a real service on available funds without the aid of the other, in fact the combined efforts would fall far short of even present efficiency were it not for help rendered in the Des Moines office by the Polk county board of supervisors donating free office quarters in the county court house, and at Sioux City where office quarters are generously donated by the city council.

The purpose of the service is well outlined in the State Statutes as follows:

1. "Adopt all means * * * to bring together those desiring to employ labor and those desiring employment.
2. "Supply information as to opportunities for securing employment and the character and conditions of work to be performed in the various industries of the state including agricultural pursuits.
3. "Adopt all available means for steadying employment and avoiding unemployment."

The U. S. Service aims at the same general purposes, except that its scope is nation-wide, and the service is between states and districts, and therefore is exceptionally serviceable in special employments where a great number of employes are necessary in more or less casual employment, emergency needs, or of a migratory order. Possibly the best example of this is the labor for the so-called harvest belt, extending from Texas to Canada, and requiring many thousands of men at a given time, which by reason of the nature of crop cannot be delayed, nor can the place where needed be changed. This is a highly important service that cannot be carried on by one locality, or even by a state. The work needs a recruiting of labor from the entire nation. The food of a nation depends on the recruiting and distribution of labor well and efficiently done and therefore calls for co-operation the most perfect. Sioux City being the great point of entry into the belt of the north-west brings Iowa into the closest possible co-ordination with the harvest belt problem.

During the biennial period ending June 30, 1926, the combined Iowa State-Federal service has records of 61,411 jobs filled, of these 42,024 were filled by men and 19,387 by women.

The following table sets forth the number of employes registering for jobs, the number of jobs offered, the number of applicants referred to jobs, and the number actually reported placed.

The tables give the classified industries served, and by which sex:

MEN

Industry and Occupation	Registrations	Help Wanted	Referred	Reported Placed
Agriculture	40,835	19,199	16,946	16,727
Building and construction	2,210	795	792	763
Casual workers	9,389	9,170	9,190	9,175
Clerical, professional, technical	507	24	27	24
Clothing and textiles	3	1	1	1
Common labor	50,508	11,359	11,369	11,073
Domestic and personal service	45	22	27	29
Food, beverages and tobacco	1,022	674	631	612
Hotel and restaurant	2,466	769	853	793
Leather, rubber and allied products	3	2	2	2
Lumber	463	295	274	247
Metals and machinery	890	309	299	295
Men and quarry workers	34	16	12	12
Paper and printing	11	4	5	3
Ship building	1	1	1	1
Theaters and amusements	489	486	489	486
Transportation and public utilities	2,947	1,069	1,617	1,574
Wholesale and retail trade	244	82	87	73
Woodworking and furniture	19	12	14	11
Miscellaneous	364	252	278	250
Total	121,048	45,077	42,823	42,024

WOMEN

Industry and Occupation	Registrations	Help Wanted	Referred	Reported Placed
Agriculture	300	307	565	504
Casual workers	21,137	16,922	16,923	16,922
Chemicals, oils, paints, etc.	10	10	10	10
Clerical, professional and Tech.	4,568	266	332	214
Clothing and textiles	104	32	33	32
Domestic and personal service	2,787	2,746	1,178	731
Food, beverages and tobacco	604	54	53	49
Hotel and restaurant	3,897	1,207	1,093	778
Leather, rubber and allied products	27	14	14	9
Metals and machinery	8	7	7	7
Paper and printing	45	32	30	30
Theaters and amusements	5	1	1	1
Transportation and public utilities	1	1	1	1
Wholesale and retail trade	121	63	50	52
Woodworking and furniture	1	1	1	1
Miscellaneous	200	48	49	46
Total	36,074	21,942	20,189	19,387

The cost to the state was for the salaries of two men for two years, \$7,200; telephone service, \$420, with an approximate printing expense and other incidentals of \$250, or a total of \$7,620, or 12.6 cents expense for each person placed in a job.

The U. S. Employment expense, including franking privilege of all mail of the service would approximate an equal amount. These figures do not include rentals generously donated as before noted.

CO-OPERATIVE AGENCIES

The Bureau of Labor has been fortunate during recent years in the many agencies co-operating in the work. The splendid assistance rendered by casualty insurance companies in developing the records and the work itself of elevator inspection has already been mentioned. Superintendents of schools and attendance officers are very helpful in child labor regulations. A great majority of architects submit plans, even tentative plans, of buildings with relation to exits and fire escape regulations, thus saving inconvenience and dissatisfaction after erection of building, and fire escape companies all submit drawings as to type, location, and other matters relating to erection. Many fire chiefs are consistent in working with the bureau; and practically all manufacturers and those in control of other industries and buildings are ever ready to help in the bringing about of better and safer conditions surrounding employes, and of all persons covered by the provisions of the law. In many cases the bureau is invited to make recommendations beyond those contemplated under a strict interpretation of the statutes.

INDUSTRIAL HAZARDS NOT NOW COVERED

The tendency of the times is towards greater safeguarding and protecting life, limb and health of industrial employes. This tendency is in that uniform and increasing concern of society as represented in enlightened statehood to promote a happier, healthier and more prosperous citizenship. Many employers, and representatives of employers, are in full accord with this tendency. If all were of this type no directive legislation would be needed. Unfortunately there still are those who have small concern for others, and who in their selfish attitude make it difficult, and in many cases because of unfair competition, prohibitive for the well disposed employer to act in accord with his just desires. Then again, the many changes in industrial methods of effecting economies in production bring into the work new and dangerous ingredients, the effects of which for the time is unknown, and which consequently create unexpected hazards. For instance, many of the derivatives of coal tar, now largely used commercially, and which are becoming so very necessary in economic production in many lines, are at the same time dangerous, and unless the utmost care and system in handling is used, are bound to exact their toll in the lives and health of those coming in contact. The necessary use of lead, phosphorous, arsenic, mercury and their compounds should have the most careful supervision.

The U. S. Department of Labor in a bulletin reports an incomplete list of 132 occupations exposed to lead poison hazard. The problems incident to carbon monoxide poisoning are but indefinitely known, and the places of its possible presence little understood. Its insidious seizure upon victims is almost inconceivable, and in first aid treatment in severe cases, because of lack of knowledge, the result is often disastrous.

Iowa has thus far paid very little attention to occupational disease. The Industrial Commissioner recommends that these be included in compensable cases, and while such action may be somewhat in the distance, yet is bound to come, therefore preparatory action should be taken to avoid alarming and exaggerated statements as to fact when the time comes for action by the legislature.

Some states require medical practitioners to report all cases of poisonings and other occupational diseases plainly arising out of the patients employment to some central authority as a means of arriving at a correct final solution of the problem. This course

inflicts no hardship upon any one, and in the end may lead to fair determination without the fear and alarm usually incident to new industrial legislation.

BOILER INSPECTION

Since 1897 the Commissioners of Labor, in practically every biennial report, called attention to the need of boiler inspection, and the present commissioner has called attention to this in his 16th, 17th, 18th, 19th, 20th and 21st biennial reports. The only provision now on statute books is that steam boilers must be equipped with safety valve, steam and water gauges, maintained in good repair. As to high pressure vessels, other than steam boilers, there is no mention made in the code, notwithstanding the fact that use of such vessels has become as great, if not a greater, source of danger than that arising from steam boilers. Except as to the three appliances above noted, the state inspection force has no authority. The only inspection now being made is that by casualty insurance companies, and when a boiler or high pressure tank is of such hazard that these companies refuse to cover the risk, the owner of such boiler may operate at his own sweet will and regardless of the danger to employes and other persons in, or immediately surrounding the plant, or of adjoining property.

Within a two-year period there were 13 cases of ammonia gas leaks, requiring the fire department with gas masks, in the city of Des Moines alone. In one of these cases occurring August 28, 1924, and to which attention was called in our former report, an explosion occurred, wrecking the building, destroying 11 lives, seriously crippling and injuring several others, besides a number that received lesser injury. In a case occurring at Sioux City in 1918, where the evidence all tended to indicate that the origin of disaster came from an ammonia tank explosion, a building was wrecked, killing 39 persons.

We have upon several occasions called attention to the fact that a great number of our sister states are enacting codes providing for greater safety in the construction, installation and maintenance of boilers and high pressure tanks, and as these codes are going into effect, Iowa and a few of the states like her that have no safety provision are gradually becoming the dumping ground of boilers and tanks that cannot stand the test required under standard codes of other states. There are today steam boilers in the

state in daily use that casualty companies have refused to carry for the last two or three years. That these hold is a miracle, and when they no longer hold let us hope that no lives will be lost.

In the case cited above of the ammonia tank explosion that killed 11 persons, the coroner's jury, consisting of experts in high pressure tank construction and operation, in their verdict mentioned the fact that the machine that cost the loss of these lives was of poor design in construction, faulty in installation, that certain repairs were attempted and that these repairs were not done in a workmanlike manner and the report concluded with: "Because of the fact that any machine whose function is the generating of gas under pressure has within it an element of danger, we, the jury feel we have not performed our full duty to the public without making the following recommendations: The passage of a law by the state legislature and an ordinance by the Des Moines city council governing the installation and operation of refrigerating machines under a permit and with adequate inspection service such as in force in other states."

The American Society of Mechanical Engineers, co-operating with the Federal Bureau of Standards, has devised a code that is very generally accepted by all states governing boilers and high pressure tanks. All of the better class of boiler manufacturers are anxious to follow these standards, except only in such cases and in such localities where they have to meet a competition of manufacturers of articles that in no way meet the commonly accepted standards of safety. The state of Iowa is of sufficient industrial importance and the value of the lives of its citizens is as important as that of any other state so that there should no longer be excuse made for not surrounding both life and property with the same standards of safety that are provided elsewhere.

BUILDING CODE

Under general powers granted to cities and towns the state authorizes these to "establish reasonable rules, and regulations for the erection, reconstruction, and inspection of buildings of all kinds within their limits." A number of cities have enacted ordinances providing for safety of the building and to protect against fire hazards, but in few, if any, such ordinances are the hazard of employes doing construction work taken into consideration. Contractors of financial responsibility usually afford necessary protection, but we have many who take chances on cheap

constructed and unprotected staging, both stationary and hanging, and who through recklessness, carelessness and the willingness to take the "gambler's chance," create an all too heavy toll, in accidents to workmen, that could be easily avoided.

The state cannot afford to have this unnecessary hazard to continue indefinitely, especially when new methods in work and changes in building types are considered.

In our opinion the state not only needs a safety code to protect the workers in construction and repair work on buildings, but it needs a building code of minimum requirements to protect people and property in those cities and towns that have no safety provisions established. Such code should be of ordinary minimum requirements only, with provision for those cities with greater hazards to provide for more stringent and safe requirements.

LIGHTING

Iowa as yet has made no provisions for proper lighting of industrial establishments. Insurance company statistics are emphatic that the accident rate is greatly influenced by poor lighting. Whether Iowa is higher or lower than the claim that fully 10 per cent of all accidents are due to poor lighting is not known because there is no data, considering, however, that many buildings are used for purposes other than those for which originally constructed, and that proper lighting was the least of thoughts even for the industry of first use, the chances are greatly in favor that we are higher rather than lower in our accident rate due to faulty light.

Our newer factory and industrial buildings generally are modern in every sense, but construction does not answer for artificial lighting where not alone sufficient light is necessary but good distribution as well.

A reasonable code should be adopted that would relieve eye strain, prevent accidents and compensation costs, save spoilage of materials, and be productive of an increased efficiency and economy for all concerned.